VI. Required Appendices
Appendix A

Course Descriptions

*It should be noted that all of following courses have been previously approved by Graduate Council and have been taught for a number of years.*
Appendix A

Course Descriptions

*It should be noted that all of following courses have been previously approved by Graduate Council and have been taught for a number of years.*
Curriculum

Required Courses
Seminar: Current Issues in Science
BIMS 5190

CLASS SESSION(S)
Fall and Spring Semester- Thursday – 5:00- 6:00 PM Room 400, Blanton Library

INSTRUCTOR
Faculty

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
Current Issues in Science is organized into weekly guest lectures, workshop lectures and discussions. Topics include any subject of current interest to program faculty and students and of general interest in the development of proficiency to becoming a successful academic with proficiency in biomedical sciences research.

PREREQUISITES
All students must be registered for an M.S. or Ph.D. degree in Biomedical Sciences

COURSE REQUIREMENTS
All reading assignments must be completed before each scheduled class, in preparation for in-class discussion.

COURSE LEARNING OBJECTIVES
The Learning Objectives are determined by the faculty.

COURSE STRUCTURE
Each of the specific topic themes are maintained for an entire semester. Topics are organized as a combination presentation/discussion format. All students are expected to participate through discussions, questions, and critical review of reading material and overall subject matter.

Course Format:
Seminar

Assessment and Grading Policy
Homework will be given in class periodically, and will be graded. Journal discussion class/reading assignment for BMS graduate students will be graded by the course director and/or by their thesis supervisors.

Grades will be assigned for each course individually.
**Grade Scale**
A letter grade will be assigned based on the numerical distribution listed in the Baylor College of Dentistry Bulletin:

- **A** = 93-100
- **B+** = 90-92
- **B** = 84-89
- **C+** = 81-83
- **C** = 75-80
- **D** = 70-74
- **F** = 00-69

**Required Text:** None

**Other Required Readings:**
Readings will be assigned from journals and books available on reserve in the BCD Library or online as necessary.

**Additional Recommended, but NOT required texts/materials:**
Lead participants may indicate additional sources of information (articles, books, videos, internet sites, etc.) that will provide the interested student with additional information about the topic.

**Required Policy Statements**

**FEDERAL EDUCATION RIGHTS & PRIVACY ACT (FERPA):** The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy.

**ACADEMIC INTEGRITY STATEMENT:** Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, HSC, and the Graduate School policies regarding academic integrity and classroom conduct. Academic integrity is the pursuit of scholarly activity free from fraud and deception. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student’s responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of academic dishonesty.

**THE AMERICANS WITH DISABILITIES ACT STATEMENT:** The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room 126 of Koldus Building, or call 845-1637.
EQUAL OPPORTUNITY STATEMENT: The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 458-7280 or by mail at 301 Tarrow, 6th Floor, College Station, TX 77840.

COURSE SCHEDULE
Every Thursday in the semester from 5-6.
CLASS SESSION(S)
Tuesdays and Thursdays from 1:00-2:00; Room 211.
Two of the sessions will take place in the computer lab located in the library.

INSTRUCTOR
Course Director, Peter H. Buschang, Ph.D.,
214-828-8122, phbuschang@bcd.tamhsc.edu
Room 720; Office hours: Monday and Wednesday 4:00-5:00 PM

COURSE DESCRIPTION
This course is the first part of a sequence designed to introduce the student to the research process. In order for graduate students to become successful – both academically and professionally – they must understand basic scientific methodology. We live in an era of evidence-based dentistry, which requires an understanding of research design for evaluating the literature. Such knowledge also provides an essential background for understanding statistics.

PREREQUISITES
None

COURSE REQUIREMENTS
It is expected that students attend all sessions. All work should be the original work of the student. There will be no remediation of this course; failure will require the course to be retaken at a future date.

COURSE LEARNING OBJECTIVES
1) Understand the elements of research methodology necessary to critically read and evaluate the scientific literature.
2) Have sufficient methodological background to assist in the development of a research proposal.
3) Be aware of the rules and regulations for conducting research with human subjects and experimental animals.

Course Format:
The course will follow a lecture format with some discussion. Several sessions will be devoted to evaluating and discussing articles. Students are expected to prepare their evaluations prior to class. Quizzes will be graded in class on the day of the quiz.

Assessment and Grading Policy
Student grades will be based on:
Four quizzes .........................(50%)
Final comprehensive exam.....(50%)

Required Text:
None

Recommended, but NOT required texts/materials:

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<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Topic</th>
<th>Instructor</th>
<th>Pages</th>
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</thead>
<tbody>
<tr>
<td>Aug 20th</td>
<td>Tue</td>
<td>Course Introduction</td>
<td>Buschang/211</td>
<td>pp 1-32</td>
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<tr>
<td>Aug 22nd</td>
<td>Thu</td>
<td>Basics for literature review I</td>
<td>Buschang/211</td>
<td>pp 1-32</td>
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<tr>
<td>Aug 27th</td>
<td>Tue</td>
<td>Basics for literature review I</td>
<td>Buschang/211</td>
<td>pp 1-32</td>
</tr>
<tr>
<td>Aug 29th</td>
<td>Thu</td>
<td>PICO</td>
<td>Buschang/211</td>
<td>Handouts</td>
</tr>
<tr>
<td>Sept 3rd</td>
<td>Tue</td>
<td>Introduction to PubMed</td>
<td>McFadden/library</td>
<td>N/A</td>
</tr>
<tr>
<td>Sept 5th</td>
<td>Thu</td>
<td>Sampling methods; terms and basics</td>
<td>Schneiderman/211</td>
<td>pp 33-51</td>
</tr>
<tr>
<td>Sept 10th</td>
<td>Tue</td>
<td>Probability vs nonprobability sampling</td>
<td>Schneiderman/211</td>
<td>pp 33-51</td>
</tr>
<tr>
<td>Sept 12th</td>
<td>Thu</td>
<td>Sampling methods; sampling strategies</td>
<td>Schneiderman/211</td>
<td>pp 33-51</td>
</tr>
<tr>
<td>Sept 17th</td>
<td>Tue</td>
<td>Quiz/Review</td>
<td></td>
<td></td>
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<tr>
<td>Sept 19th</td>
<td>Thu</td>
<td>Construct Validity</td>
<td>Buschang/211</td>
<td>pp 55-80</td>
</tr>
<tr>
<td>Sept 24th</td>
<td>Tue</td>
<td>Level of Measurements</td>
<td>Buschang/211</td>
<td>pp 80-97</td>
</tr>
<tr>
<td>Sept 26th</td>
<td>Thu</td>
<td>Measurement Reliability</td>
<td>Buschang/211</td>
<td>pp 80-97</td>
</tr>
<tr>
<td>Oct 1st</td>
<td>Tue</td>
<td>Hypothesis Testing</td>
<td>Buschang/211</td>
<td>pp 191-235</td>
</tr>
<tr>
<td>Oct 3rd</td>
<td>Thu</td>
<td>Intro to Internal Validity</td>
<td>Buschang/211</td>
<td>pp 157-175</td>
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<tr>
<td>Oct 8th</td>
<td>Tue</td>
<td>Introduction to Experimental Design</td>
<td>Buschang/211</td>
<td>pp 185-247</td>
</tr>
<tr>
<td>Oct 10th</td>
<td>Thu</td>
<td>Quiz/Review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct 15th</td>
<td>Tue</td>
<td>Experimental Designs I</td>
<td>Buschang/211</td>
<td>pp 185-247</td>
</tr>
<tr>
<td>Oct 17th</td>
<td>Thu</td>
<td>Experimental Designs II</td>
<td>Buschang/211</td>
<td>pp 185-247</td>
</tr>
<tr>
<td>Oct 22nd</td>
<td>Tue</td>
<td>Survey Design/ survey construction</td>
<td>McCann/211</td>
<td>pp 99-140</td>
</tr>
<tr>
<td>Oct 24th</td>
<td>Thu</td>
<td>Scales and scaling</td>
<td>McCann/211</td>
<td>pp 99-140</td>
</tr>
<tr>
<td>Oct 29th</td>
<td>Tue</td>
<td>Regulation for Animals in Research</td>
<td>Bellinger /211</td>
<td>NA</td>
</tr>
<tr>
<td>Oct 31st</td>
<td>Thu</td>
<td>Quiz/Review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov 5th</td>
<td>Tue</td>
<td>Presentation of survey projects</td>
<td>McCann/211</td>
<td>pp 99-140</td>
</tr>
<tr>
<td>Nov 7th</td>
<td>Thu</td>
<td>Statistical Significance</td>
<td>Buschang/211</td>
<td>pp 185-247</td>
</tr>
<tr>
<td>Nov 12th</td>
<td>Tue</td>
<td>Statistical Inference</td>
<td>Buschang/211</td>
<td>pp 251-281</td>
</tr>
<tr>
<td>Nov 14th</td>
<td>Thu</td>
<td>Regulation for Humans in Research (IRB)</td>
<td>Schneiderman /211</td>
<td>N/A</td>
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<tr>
<td>Nov 19th</td>
<td>Tue</td>
<td>Conclusion Validity</td>
<td>Buschang/211</td>
<td>pp 251-281</td>
</tr>
<tr>
<td>Nov 21st</td>
<td>Thu</td>
<td>Introduction to EndNote (in the computer lab)</td>
<td>McFadden/library</td>
<td>N/A</td>
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<tr>
<td>Dec 3rd</td>
<td>Tue</td>
<td>Conclusion Validity</td>
<td>Buschang/211</td>
<td>pp 251-281</td>
</tr>
<tr>
<td>Dec 5th</td>
<td>Thu</td>
<td>Sensitivity and Specificity</td>
<td>Buschang/211</td>
<td>Handouts</td>
</tr>
<tr>
<td>Dec 10th</td>
<td>Tue</td>
<td>Quiz/Review</td>
<td>Buschang/211</td>
<td>N/A</td>
</tr>
<tr>
<td>Dec 12th</td>
<td>Thu</td>
<td>Power</td>
<td>Schneiderman/211</td>
<td>pp 256-260</td>
</tr>
<tr>
<td>Dec 17</td>
<td>Tue</td>
<td>Review for final Exam</td>
<td>Buschang/211</td>
<td>N/A</td>
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<tr>
<td>Dec 19</td>
<td>Thu</td>
<td>Final Exam (comprehensive)</td>
<td>Buschang/211</td>
<td>N/A</td>
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</table>
TEXAS A&M UNIVERSITY BAYLOR COLLEGE OF DENTISTRY
Applied Biostatistics
BIMS 5222

CLASS SESSION(S)
Spring Term, Tuesdays, 2:00 – 4:00 PM, Instructional Computer Laboratory (ICL),
Baylor College of Dentistry

COURSE DIRECTOR
Emet Schneiderman, PhD
214-828-8377, emet@bcd.tamhsc.edu
Rm. 499, Office Hours: Wed. & Fri. 2-4:00 PM

INSTRUCTOR(S)
Peter Buschang, PhD
Ann McCann, PhD

TEACHING ASSISTANT(S)
Afsaneh Rangiani, PhD
ARangiani@bcd.tamhsc.edu

COURSE DESCRIPTION
This is an applied biostatistics course to prepare graduate students to understand and
perform basic statistics for use in dental and biomedical research. It also is intended to
promote understanding the statistical methodologies used in publications in students’
fields, especially the dental specialties.

PREREQUISITES
BMS 5221, Research Methodology or similar

COURSE REQUIREMENTS
Students are expected to attend all sessions and actively participate in the computer
laboratory assignments, whether they are for credit, or not. Course performance is based
on three didactic quizzes, three written assignments (homework problems and projects)
and two practical exams using SPSS in a timed testing situation.

Students are expected to communicate via HSC email and keep track of course materials,
grades, changes in schedule, etc., using Blackboard. Each student will do his/her own
work on the quizzes and exams with no assistance of any kind. Students are encouraged to
work together on the homework assignments and project, however must turn in their own
work. For assignments turned in late, points will be deducted.

Remediation policy: Students who fail the course will need to successfully repeat the
course the next time it is offered to receive credit.
COURSE LEARNING OBJECTIVES
Students are expected…

- to understand the rationale for choosing appropriate statistical methods for common dental research designs,
- to understand and be able to explain the basic features and assumptions of the methods covered (see schedule below).
- to be able to explain normality and related issues connected with choosing parametric vs nonparametric methods,
- to set up, input and manipulate data, and then perform appropriate statistical procedures on the laboratory computers using SPSS but perform some basic computations by hand,
- interpret, explain and write up results of statistical analyses, and
- critically evaluate the application and interpretation of statistical results in the literature.

COURSE STRUCTURE
This is a combination lecture and laboratory courses. Sessions include approximately one-hour presentation by the faculty member with SPSS examples, followed by students working problems on computers with the assistance of the instructor(s) and TA. All of the course contents are cumulative so later sessions build upon skills gained earlier in semester.

Course Format:

Assessment and Grading Policy
Student grades will be based on:
3 didactic quizzes ………………………………………10 points each = 30% of grade
3 written assignments/projects …………………….10 points each = 30% of grade
2 practical exams …………………………………….20 points each = 40% of grade
Total number of points = 100

Grades will be assigned on the standard scale (e.g. 80-89 = B, 90-100 = A, etc., and adjusted to Baylor scale (e.g. 84-92=B, 93-100=A) when submitted for transcript. All graduate programs require their students to pass at least at the “C” level; some programs require at least a “B”. Please check with your program director to clarify expectations.

Quiz #1 (didactic background material) must be passed (≥ 75%) in order to proceed in the course. Practical exams are done in-class in the ICL using SPSS. If warranted by high enrollment, these exams will be given in two sections, 2:00-4:00 & 4:00-6:00 (rather than one section).

Required Text: None

Other Required Readings: None
Strongly Recommended, but NOT required texts/materials:
2. SPSS Student Version

Required Policy Statements
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<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Lecturer</th>
<th>Reading</th>
<th>Assignments &amp; Quizzes</th>
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<tbody>
<tr>
<td>1</td>
<td>Jan 15</td>
<td>1. Introduction; SPSS; descriptive statistics; fundamentals</td>
<td>Schneiderman</td>
<td>Ch. 1 &amp; 2</td>
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<tr>
<td>2</td>
<td>Jan 22</td>
<td>2. Confidence intervals</td>
<td>Buschang</td>
<td>Ch. 7</td>
<td>Quiz 1 – Didactic Rm. 134</td>
</tr>
<tr>
<td>3</td>
<td>Jan 29</td>
<td>3. Data exploration, cleanup, characterization</td>
<td>Schneiderman</td>
<td>Ch. 2 &amp; 7</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Feb 5</td>
<td>4. Using Flow Charts; t-tests Difference between two means</td>
<td>Schneiderman</td>
<td>Ch. 3-6</td>
<td></td>
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<tr>
<td>5</td>
<td>Feb 12</td>
<td>5. Linear regression &amp; correlation, Part 1</td>
<td>Buschang</td>
<td>Ch. 8</td>
<td>Assignment #1 due</td>
</tr>
<tr>
<td>6</td>
<td>Feb 19</td>
<td>6. Linear regression &amp; correlation, Part 2</td>
<td>Buschang</td>
<td>Ch. 8</td>
<td>Quiz 2 – Didactic Rm. 134.</td>
</tr>
<tr>
<td>7</td>
<td>Feb 26</td>
<td>7. Survival Analysis</td>
<td>Rangiani</td>
<td>Ch. 11</td>
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<tr>
<td>8</td>
<td>Mar 5</td>
<td><strong>8. Midterm</strong></td>
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<td>Midterm - Practical</td>
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<tr>
<td>9</td>
<td>Mar 12</td>
<td>9. Multivariate regression &amp; partial correlation</td>
<td>Buschang</td>
<td>TBA</td>
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<tr>
<td>10</td>
<td>Mar 19</td>
<td>SPRING BREAK – NO CLASS</td>
<td></td>
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<tr>
<td>11</td>
<td>Mar 26</td>
<td>10. Analysis of variance (ANOVA); post-hoc tests &amp; control of experiment-wise error</td>
<td>Schneiderman</td>
<td>Ch. 3</td>
<td>Assignment #2 given out</td>
</tr>
<tr>
<td>12</td>
<td>Apr 2</td>
<td>Class Cancelled</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>13</td>
<td>Apr 9</td>
<td>11. Nonparametric statistics for nominal &amp; ordinal data – Chi-Square &amp; Fishers Exact Test</td>
<td>Rangiani</td>
<td>Ch. 10; Ch. 8: pp. 296-302</td>
<td>Assignment #2 due</td>
</tr>
<tr>
<td>14</td>
<td>Apr 16</td>
<td>12. Nonparametric methods, Part 2</td>
<td>Schneiderman</td>
<td>Ch. 10 Ch. 8: pp. 296-302</td>
<td>Quiz 3 – Didactic Rm. 134</td>
</tr>
<tr>
<td>15</td>
<td>Apr 23</td>
<td>13. Statistical methods in epidemiology (RR and OR)</td>
<td>Schneiderman</td>
<td>Ch. 5: pp. 163-170</td>
<td></td>
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<tr>
<td>16</td>
<td>Apr 30</td>
<td>14. Power analysis; Sample size computations using G*Power</td>
<td>Schneiderman</td>
<td>Ch. 6</td>
<td></td>
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<tr>
<td>17</td>
<td>May 7</td>
<td>15. Analysis of qualitative data</td>
<td>McCann</td>
<td>TBA</td>
<td>Assignment #3 due (group project)</td>
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<tr>
<td>18</td>
<td>May 14</td>
<td><strong>16. Final Exam - Practical</strong></td>
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<td>Final – Practical</td>
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TEXAS A&M UNIVERSITY BAYLOR COLLEGE OF DENTISTRY
Cell and Molecular Biology of Oral and Craniofacial Tissues
5V40

CLASS SESSION(S)
Spring Semester
Lecture: Tuesdays from 2:00-4:00pm, Room 736
Journal Discussion: TBD, Blanton Library, Room 400A

COURSE DIRECTOR
Chunlin Qin, PhD
214-828-8292, cqin@bcd.tamhsc.edu
Room 452, By appointment

INSTRUCTORS
Jay Groppe, PhD
Phillip Kramer, PhD
Yongbo Lu, PhD
Robert Spears, PhD

COURSE DESCRIPTION
Cell and molecular biology (BMS 5V40) covers the fundamentals of modern cell biology. This course provides graduate students with an overview of foundational information concerning cell and molecular biology and how these principles are being applied in clinical practice. Throughout the course, the emphasis is on an integration of traditional and structural/functional approaches with newer concepts from cell and molecular biology research.

PREREQUISITES
It is expected that all students have a fundamental knowledge of the anatomy of the head, especially of the craniofacial skeleton, and the principals of cartilage and bone growth.

COURSE REQUIREMENTS
Textbooks and/or required reading will be assigned for the course. Additional readings will be assigned from journals and books available on reserve in the BCD Library. Reading assignments must be completed before each scheduled class, in preparation for in-class discussion.

COURSE LEARNING OBJECTIVES
At the completion of the course, the student should be able to:
1. Know the difference between prokaryotic and eukaryotic cells
2. Understand molecular evolution
3. Understand differences between molecule sizes
4. Understand the plasma membrane
5. Understand the cell cycle
6. Understand the relationship between cells and tissues
7. Understand the different types of microscopy
8. Understand basic cell biology techniques
9. Understand the cellular organelles
   9.1.1. Mitochondria
   9.1.2. Lysosomes
9.1.3. Nucleus
9.1.4. Endoplasmic Reticulum
9.1.5. Golgi
9.1.6. Peroxisomes
10. Know the difference between growth factors, receptors, and signaling molecules
11. Understand receptor conformation and how they interact with the plasma membrane.
12. Understand differences between molecule sizes
13. Understand the receptor/ligand interactions
14. Understand the cellular responses to receptors
15. Know the difference between growth factors, receptors, and intracellular signaling molecules.
16. Understand the differences between different types of receptors.
17. Understand second messengers.
18. Understand how messages from the outside change cellular behavior including movement and gene expression such as transcription factors
19. Understand the difference between growth factors and transcription factors.
20. Understand the cellular responses to receptors
21. Know the three major cytoskeletal structures
22. Understand how cells move.
23. Understand how the cytoskeleton is involved in cell division.
24. Understand the role of intermediate filaments.
25. Understand how the cytoskeleton is visualized and studied.
26. Understand the structure of the nucleus and it’s surrounding membrane
27. Understand how the nuclear pore works.
28. Know what the NLS is and how it works.
29. Understand DNA and modern uses of DNA for testing and diagnosis
30. Understand RNA Structure and use in gene control
31. Understand RNA translation into proteins
32. Understand basic protein structure, antibodies and their uses

COURSE STRUCTURE
The CMBOCT Track is comprised of two separate modules arranged in linear fashion over the spring semester. Students register for two courses: BMS 5V40 and BMS 5V42. Clinical graduate students register for 1 credit hour and BMS graduate students who have a one-hour journal discussion class/reading assignment will register for 2 credit hours.

1. Cell and molecular biology (BMS 5V40) covers the fundamentals of modern cell biology. This section of the course will start on January 8th through March 1st, 2013.

2. Histology of craniofacial tissues (BMS 5V42) provides an overview the biology of specific craniofacial tissues including bone, cartilage, oral mucosa, teeth, tongue and salivary glands. This section of the course will take place from March 5th through May 17th, 2013.

Each of the specific courses within the CMBOCT Track is organized as a combination lecture/discussion format. All students are expected to participate through discussions, questions, and critical review of reading material and overall subject matter.

Course Format:

Assessment and Grading Policy
Homework will be given in class periodically (2 are scheduled but small assignments can be given at the instructor’s discretion). Exams will be short answer/essay that will be completed as take-home exercises. Journal discussion class/reading assignment for BMS graduate students will be graded by the course director and/or by their thesis supervisors.
Please see schedules for quiz and exam dates.

**GRADE SCALE**
A letter grade will be assigned based on the numerical distribution listed in the Baylor College of Dentistry Bulletin:

- A = 93-100
- B+ = 90-92
- B = 84-89
- C+ = 81-83
- C = 75-80
- D = 70-74
- F = 00-69

**Required Text:**

**Other Required Readings:**
Additional readings will be assigned from journals and books available on reserve in the BCD Library as necessary. All reading assignments must be completed before each scheduled class, in preparation for in-class discussion.

**Additional Recommended Information:**
Lecturers may indicate additional sources of information (articles, books, videos, internet sites, etc.) that will provide the interested student with additional information about the topic. Effort will be made to provide interested students with examples of both the classical literature and new "cutting edge" research articles, whenever possible.

**Required Policy Statements**

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COURSE SCHEDULE

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>LECTURER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8/13</td>
<td>1. Introduction to the course, how cells are studied</td>
<td>C. Qin</td>
</tr>
<tr>
<td></td>
<td>2. Foundation molecules of organisms, property of water, amino acids, protein and enzymes</td>
<td>C. Qin</td>
</tr>
<tr>
<td>1/11/13</td>
<td>Journal club/Reading assignment (for BMS graduate only)</td>
<td>C. Qin</td>
</tr>
<tr>
<td></td>
<td>Coordinator/Instructor: C. Qin</td>
<td></td>
</tr>
<tr>
<td>1/15/13</td>
<td>3. DNA structure</td>
<td>P. Kramer</td>
</tr>
<tr>
<td></td>
<td>4. DNA replication and repair</td>
<td></td>
</tr>
<tr>
<td>1/18/13</td>
<td>Journal club/Reading assignment (for BMS graduate only)</td>
<td>P. Kramer</td>
</tr>
<tr>
<td></td>
<td>Coordinator/Instructor: P. Kramer</td>
<td></td>
</tr>
<tr>
<td>1/22/13</td>
<td>5. RNA structure and transcription</td>
<td>P. Kramer</td>
</tr>
<tr>
<td></td>
<td>6. RNA translation to proteins</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Homework 1 for lectures 1-6 (Qin and Kramer)</strong></td>
<td></td>
</tr>
<tr>
<td>1/25/13</td>
<td>Journal club/Reading assignment (for BMS graduate only)</td>
<td>P. Kramer</td>
</tr>
<tr>
<td></td>
<td>Coordinator/Instructor: P. Kramer</td>
<td></td>
</tr>
<tr>
<td>1/29/13</td>
<td>7. Gene regulation</td>
<td>P. Kramer</td>
</tr>
<tr>
<td></td>
<td>8. Plasma membrane and cell organelles</td>
<td>J. Groppe</td>
</tr>
<tr>
<td>2/1/13</td>
<td>Journal club/Reading assignment (for BMS graduate only)</td>
<td>J. Groppe</td>
</tr>
<tr>
<td></td>
<td>Coordinator/Instructor: J. Groppe</td>
<td></td>
</tr>
<tr>
<td>2/5/13</td>
<td>9. Inside changes: Signal transduction overview</td>
<td>J. Groppe</td>
</tr>
<tr>
<td></td>
<td>10. Cytoskeleton I</td>
<td>Y. Lu</td>
</tr>
<tr>
<td>2/8/13</td>
<td>Journal club/Reading assignment (for BMS graduate only)</td>
<td>Y. Lu</td>
</tr>
<tr>
<td></td>
<td>Coordinator/Instructor: Y. Lu</td>
<td></td>
</tr>
<tr>
<td>2/12/13</td>
<td>11. Cytoskeleton II</td>
<td>Y. Lu</td>
</tr>
<tr>
<td></td>
<td>12. Intracellular compartments I (Nucleus)</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
<td>Instructor</td>
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</tr>
<tr>
<td>2/15/13</td>
<td>Journal club/Reading assignment (for BMS graduate only)Coordinator/Instructor: Y. Lu</td>
<td>Y. Lu</td>
</tr>
<tr>
<td>2/19/13</td>
<td>13. Intracellular compartments II (RER and Golgi) 14. Endocytosis, Exocytosis and Transport</td>
<td>C. Qin</td>
</tr>
<tr>
<td>2/22/13</td>
<td>Journal club/Reading assignment (for BMS graduate only)Coordinator/Instructor: C. Qin</td>
<td></td>
</tr>
<tr>
<td>3/1/13</td>
<td>Journal club/Reading assignment (for BMS graduate only)Coordinator/Instructor: R. Spears</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Take home exam (All Instructors)</td>
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</tr>
</tbody>
</table>
TEXAS A&M UNIVERSITY BAYLOR COLLEGE OF DENTISTRY
Bioengineering of Craniofacial Tissues
BIMS 5V42

CLASS SESSION(S)
Tuesdays – 2:00- 4:00 Room 736

COURSE DIRECTORS
Lynne Opperman, PhD                                    Xiaohua Liu, PhD
Course Director                                          Co-Course Director
214-828-8134,                                             214-370-7007
LOpperman@bcd.tamhsc.edu                                 XLiu@bcd.tamhsc.edu
Room 498, By Appointment                                 Sciences Building, By appointment

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
Cellular and molecular mechanisms related to periodontal ligament, bone and cartilage
formation, odontogenesis, amelogenesis; extracellular matrix formation; pathology and
abnormalities in development and growth; plaque and calculus; and soft and hard tissue healing
and repair.  Bioengineering of tissues using regenerative techniques and scaffolding materials is
introduced.  Clinical correlations are also developed.

PREREQUISITES
It is expected that all students have a fundamental knowledge of the anatomy of the head,
especially of the craniofacial skeleton, and the principals of tooth, cartilage and bone growth.

COURSE REQUIREMENTS
All students are expected to participate through discussions, questions, and critical review of
reading material and overall subject matter. All reading assignments must be completed before
each scheduled class, in preparation for in-class discussion.

COURSE LEARNING OBJECTIVES
By the end of this course, students should have an in-depth knowledge of the cells and tissues
involved in bone, cartilage, enamel, dentine, periodontal ligament and pulp development and
repair.  They should be able to identify the various cell and tissue types, and describe how the
cells interact with one another and their environment, and how they interact with bioengineered
scaffolds. Students should be able to discuss regeneration and repair of oral tissues. Students
should be able to name the different techniques used for bone and cartilage repair and
augmentation, and describe in general terms the methodologies involved in these procedures.
Students should be able to describe how genetic mutations affect bone, cartilage and tooth tissue
characteristic. Students should be able to describe the major ECM components of dentin, and
discuss the characteristics of dentin sialophosphoprotein (DSPP) and dentin matrix protein 1
(DMP1). Students should be able to describe the clinical use of materials used to repair and
regenerate dental and craniofacial tissues.

COURSE STRUCTURE
The course is organized as a combination lecture/discussion format.
COURSE FORMAT
Assessment and Grading Policy
Student grades will be based on:
Take Home Exam 1 ........................................ [30] points
Take Home Exam 2 ........................................ [30] points
Take Home Exam 3 ........................................ [40] points

Required Text:

Other Required Readings:
Additional readings will be assigned from journals and books available on reserve in the BCD Library as necessary.

Additional Recommended, but NOT required texts/materials:
Lecturers may indicate additional sources of information (articles, books, videos, internet sites, etc.) that will provide the interested student with additional information about the topic.
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COURSE SCHEDULE

Lectures will take place from 2-4 PM in room 736. All lectures will be recorded with Camtasia and posted onto Blackboard. Graduate Journal Club will take place from noon to 1 PM in room 496.

<table>
<thead>
<tr>
<th>Date</th>
<th>TOPIC</th>
<th>LECTURER</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/05/13</td>
<td>1. Development and Diseases of the Periodontal Ligament (PDL)-Alveolar Bone Complex</td>
<td>B. Lu</td>
</tr>
<tr>
<td></td>
<td>2. Damage and Repair of the (PDL)-Alveolar Bone Complex</td>
<td>J. He</td>
</tr>
<tr>
<td>03/08/13</td>
<td>BMS Graduate Journal Club*</td>
<td></td>
</tr>
<tr>
<td>03/12/13</td>
<td>3. Scaffolds and Bioengineering of the PDL-Alveolar Bone Complex</td>
<td>X. Liu</td>
</tr>
<tr>
<td></td>
<td>4. Placing Implants for Prostheses</td>
<td>S. Verma</td>
</tr>
<tr>
<td>03/15/13</td>
<td>BMS Graduate Journal Club*</td>
<td></td>
</tr>
<tr>
<td>03/18/13-</td>
<td>SPRING BREAK</td>
<td></td>
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<tr>
<td>03/22/13</td>
<td></td>
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</tr>
<tr>
<td>03/26/13</td>
<td>5. Placing Implants in Regenerated Bone</td>
<td>E. Kontogiorgos</td>
</tr>
<tr>
<td></td>
<td>6. Surgical Use of Exogenous Factors in Bone Repair <strong>Hand out take home Exam 1</strong></td>
<td>R.G. Triplett</td>
</tr>
<tr>
<td>03/29/13</td>
<td>BMS Graduate Journal Club*</td>
<td></td>
</tr>
<tr>
<td>04/02/13</td>
<td>7. Biology of Fracture Healing</td>
<td>M. Gonzalez</td>
</tr>
<tr>
<td></td>
<td>8. Bone Transport and Distraction Osteogenesis;</td>
<td>M. Gonzalez</td>
</tr>
<tr>
<td>04/05/13</td>
<td>BMS Graduate Journal Club*</td>
<td></td>
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<tr>
<td>04/09/13</td>
<td>9. Cartilage Development, Damage and Disease</td>
<td>X. Liu</td>
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<tr>
<td>No.</td>
<td>Title</td>
<td>Presenter</td>
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</tr>
<tr>
<td>10</td>
<td>Bioengineering Cartilage</td>
<td>X. Liu</td>
</tr>
<tr>
<td>04/12/13</td>
<td>BMS Graduate Journal Club*</td>
<td></td>
</tr>
<tr>
<td>04/16/13</td>
<td>11. Gingival and Mucosal Development, Damage and Disease</td>
<td>B. Lu</td>
</tr>
<tr>
<td>04/19/13</td>
<td>12. Gingival and Mucosal Repair and Regeneration; Hand out take home Exam 2</td>
<td>K. Svoboda</td>
</tr>
<tr>
<td>04/23/13</td>
<td>BMS Graduate Journal Club*</td>
<td></td>
</tr>
<tr>
<td>04/26/13</td>
<td>13. Development and Anomalies of the Dentin-Pulp Complex I</td>
<td>C. Qin</td>
</tr>
<tr>
<td>04/30/13</td>
<td>14. Development and Anomalies of the Dentin-Pulp Complex II; Hand out take home Exam 3</td>
<td>C. Qin</td>
</tr>
<tr>
<td>05/03/13</td>
<td>BMS Graduate Journal Club*</td>
<td></td>
</tr>
<tr>
<td>05/07/13</td>
<td>15. Regeneration of the Dentin-Pulp Complex</td>
<td>X. Liu</td>
</tr>
<tr>
<td>05/10/13</td>
<td>16. Innovative Endodontic Pulp-Capping Materials and Methods</td>
<td>K. Woodmansey</td>
</tr>
<tr>
<td>05/14/13</td>
<td>BMS Graduate Journal Club*</td>
<td></td>
</tr>
<tr>
<td>05/17/13</td>
<td>17. Enamel Development and Anomalies</td>
<td>R. Spears</td>
</tr>
<tr>
<td>05/17/13</td>
<td>18. Bioengineering Enamel</td>
<td>V. Varanasi</td>
</tr>
<tr>
<td>05/14/13</td>
<td>BMS Graduate Journal Club*</td>
<td></td>
</tr>
<tr>
<td>05/17/13</td>
<td>19. Cementum, Root Formation and Anomalies</td>
<td>R. Spears</td>
</tr>
<tr>
<td>05/17/13</td>
<td>20. Bioengineering Tooth Roots; Hand out take home Exam 3</td>
<td>V. Varanasi</td>
</tr>
<tr>
<td>05/17/13</td>
<td>BMS Graduate Journal Club*</td>
<td></td>
</tr>
</tbody>
</table>

*Required for all BMS graduate students registered for this course
CLASS SESSION(S)
Summer 2013

INSTRUCTOR
Ernie S. Lacy, D.D.S.
214-828-8374, eslacy@bcd.tamhsc.edu
Room 365 B; 7:30am – 4:30pm

TEACHING ASSISTANT(S)
Mrs. Lisa Harper-Mallonee
Dr. Lavern Holyfield
Dr. Brent Hutson
Dr. Ernie Lacy
Dr. Ann McCann
Dr. Barbara Miller
Dr. Rosemarie Zartman
Online Office Hours determined by each instructor (during week of lesson and/or assignment)

COURSE DESCRIPTION
Overview of teaching principles and methods geared toward the special needs of the health professions educator. Students are presented with materials and are actively involved in exercises concerned with all aspects of the teaching/learning process.

PREREQUISITES
None

COURSE REQUIREMENTS
Students are expected to complete all course assignments based on the schedule given.

Attendance Policy: One classroom session (on August 6) is required. (See schedule at end of syllabus.) Attendance for all other sessions is not applicable.

COURSE LEARNING OBJECTIVES
Upon completion of this course, participants will be able to:
- State their philosophy of teaching
- Develop sound lesson plans
- Use effective strategies to engage students in interactive learning
- Use their dominant teaching style to promote efficient learning among their students
- Teach in a culturally competent manner
- Make an effective oral presentation

COURSE STRUCTURE

Course Format:
Online course with one (1) mandatory classroom session (August, 6, 2013)

**Assessment and Grading Policy**
Resident/graduate students will be assigned a letter grade based on the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of a Teaching Philosophy</td>
<td>10%</td>
</tr>
<tr>
<td>Instructional Planning &amp; Test Construction</td>
<td></td>
</tr>
<tr>
<td>Assignment</td>
<td>10%</td>
</tr>
<tr>
<td>Student-Centered Teaching</td>
<td>10%</td>
</tr>
<tr>
<td>Pre-Clinical/Clinical Teaching Assignment</td>
<td>10%</td>
</tr>
<tr>
<td>Teaching &amp; Learning Process Assignment</td>
<td>10%</td>
</tr>
<tr>
<td>Cultural Competence Seminar Participation/Assignment</td>
<td>10%</td>
</tr>
<tr>
<td>Microteaching Presentation:</td>
<td></td>
</tr>
<tr>
<td>Written Preparation</td>
<td>10%</td>
</tr>
<tr>
<td>Oral Presentation</td>
<td>20%</td>
</tr>
<tr>
<td>Self- and Peer- Evaluation of Teaching</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Total 100%**

**Required Text:**
None

**Other Required Readings:**
All course materials are available online.

**Additional Recommended, but NOT required texts/materials:**


**REQUIRED POLICY STATEMENTS**

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COURSE SCHEDULE

EDHP 5225 Teaching Skills for Health Professions Educators
Summer Session, 2013

<table>
<thead>
<tr>
<th>Date</th>
<th>Dates</th>
<th>Topic</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Jul 1-7</td>
<td>Overview of Course</td>
<td>Dr. Ernie Lacy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Panel on Dental Academia</td>
<td>Dr. Gerald Glickman, Dr. Kathy Svoboda, Dr. Reginald Taylor, Dr. Kavitha Viswanathan, Dr. John Wright</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teaching Philosophy</td>
<td>Mrs. Lisa Harper-Mallonee</td>
</tr>
<tr>
<td>Week 2</td>
<td>Jul 8-14</td>
<td>Instructional Planning (Lesson Planning) Assessment/Test Construction</td>
<td>Dr. Ann McCann</td>
</tr>
<tr>
<td>Week 3</td>
<td>Jul 15-21</td>
<td>Student-Centered Teaching</td>
<td>Dr. Lavern Holyfield</td>
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<tr>
<td></td>
<td></td>
<td>Pre-Clinical/Clinical Teaching and Evaluation: Tools and Techniques</td>
<td>Dr. Rosemarie Zartman</td>
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<tr>
<td>Week 4</td>
<td>Jul 22-28</td>
<td>The Teaching/Learning Process</td>
<td>Dr. Ernie Lacy</td>
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<tr>
<td></td>
<td></td>
<td>Making Effective Presentations</td>
<td>Dr. Brent Hutson</td>
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<tr>
<td></td>
<td></td>
<td>Designing Visual Aids and Handouts</td>
<td></td>
</tr>
<tr>
<td>Week 5</td>
<td>Jul 29-Aug 4</td>
<td>Cultural Competence Seminar</td>
<td>Dr. Lavern Holyfield and Dr. Barbara Miller</td>
</tr>
<tr>
<td>Week 6</td>
<td>Aug 5-11</td>
<td>Microteaching Presentations</td>
<td>Dr. Ernie Lacy &amp; other faculty</td>
</tr>
<tr>
<td>Week 7</td>
<td>Aug 12-18</td>
<td>Self- and Peer-Evaluations</td>
<td>Dr. Ernie Lacy</td>
</tr>
</tbody>
</table>
# Microteaching Presentations Schedule

**Mandatory Classroom Session**  
Tuesday August 6, 2013

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Department</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUP I</td>
<td>Pediatric Dentistry</td>
<td>8:00 am – 9:00 am</td>
<td>605</td>
</tr>
<tr>
<td>GROUP II</td>
<td>Pediatric Dentistry</td>
<td>9:00 am – 10:00 am</td>
<td>605</td>
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<tr>
<td>GROUP III</td>
<td>Pediatric Dentistry</td>
<td>10:00 am – 11:00 am</td>
<td>605</td>
</tr>
<tr>
<td>GROUP IV</td>
<td>Endodontics</td>
<td>1:00 pm – 2:00 pm</td>
<td>605</td>
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<tr>
<td>GROUP V</td>
<td>Prosthodontics Dentistry</td>
<td>2:00 pm – 3:00 pm</td>
<td>605</td>
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<tr>
<td>GROUP VI</td>
<td>Biomedical Sciences</td>
<td>3:00 pm – 4:00 pm</td>
<td>605</td>
</tr>
</tbody>
</table>
CLASS SESSION(S)
Fall Semester; Monday(s), noon-1:00 p.m.
BCD: BCD, Rm. 618  IBT: ALKB, Rm. 810
BCS: Reynolds, Rm. 162  Temple: MEC, Rm. 206

INSTRUCTOR(S)
M. Douglas Benson, PhD
214-828-8190, mdbenson@bcd.tamhsc.edu
BCD Rm. 514; Before or after class as requested

Dr. Robert Nobles
Dr. Emily Wilson
The instructors will be available to meet with students immediately before or after class (upon request).

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
Responsible Conduct of Research (RCR) is defined by NIH as the practice of scientific investigation with integrity. It involves the awareness and application of established professional norms and ethical principles in the performance of all activities related to scientific research. Responsible conduct of research is an essential component of research training. This course is designed as a survey of basic topics that trainees will need to understand as they enter into the practice of research. The course will utilize outside reading assignments, online modules, class presentation and discussion of cases associated with each topic.

PREREQUISITES
None

COURSE REQUIREMENTS
Students need to attend class and participate. They will be given homework assignments and will produce a group oral presentation. In addition, a term paper will be required.

COURSE LEARNING OBJECTIVES
The objective of this course is to provide awareness and application of professional norms and ethical principles in the performance of all activities related to scientific research, including mechanisms to promote honesty, accuracy, efficiency and objectivity in research.

COURSE STRUCTURE
This is a lecture based course, but the students will also participate in discussions, case studies and produce and present a PowerPoint based presentation.
Course Format:
Assessment and Grading Policy
Student grades will be based on:
Class Participation ........................................... 25%
Homework........................................................... 25%
Oral Presentation................................................... 25%
Term Paper........................................................... 25%

Grades:
100-90%: A
80-89%: B
70-79%: C
60-69%: D
0-59%: F

Required Text:
There is no required text book for this course.

Other Required Readings:
Individual lecturers may provide handouts or reading material for the course.

Additional Recommended, but NOT required texts/materials:

Required Policy Statements
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<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Instructors</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 27</td>
<td>Introduction/ Choosing a lab:</td>
<td>V. Wilson/ P. Dechow</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mentor/Mentee Responsibilities</td>
</tr>
</tbody>
</table>

Objective: Describes the process of selecting a laboratory, the role and responsibilities of both the mentor and mentee, and mechanisms for ensuring success with the relationship.

September 3  Labor Day Holiday                  No Class
Class will be made up at an agreed upon time

September 10 Data Acquisition/Keeping a Notebook David Bridges

Objective: Describes how researchers should collect, store, protect, and share data, while maintaining its integrity, validity, and accuracy.

September 17 Introduction to Research Compliance D. Carlson/ R. Nobles

Objective: Describes research compliance activities, including information related to an investigator’s institutional responsibilities, informal codes of conduct and common practices.

September 24 Human (Compliance IRB)           R. Nobles

Objective: Describes the history, ethical principles, regulations, and institutional responsibilities related to the use of humans in research.

October 1  Human: Faculty Discussion           J. Bolin, E. Schneiderman, C. Meininger

Objective: Describes the activities related to conducting human subjects research from researchers, including mechanisms for initiating, implementing, and concluding research activities.

October 8  Animal Use (AUP)                    J. Elliot

Objective: Describes the history, ethical principles, regulations, and institutional responsibilities related to the use of animals in research.

October 15 Animal Use: Faculty Discussion      L. Bellinger, J. Chang
H. Andrews-Polymenis, F. Sohrabji

Objective: Describes the activities related to conducting research with animals from researchers, including mechanisms for initiating, implementing, and concluding research activities. Special emphasis will be focused on large animal models and survival surgeries.
October 22  Biosafety  V. Tesh
Objective:  Describes common safety practices within a laboratory, biological risk groups and biosafety levels, and safeguards related to working with recombinant DNA.

October 29  Conflict of Interest  J. Joyce
Objective:  Describes research conflicts of interests, including the regulations, investigator reporting obligations, and institutional responsibilities to assess and then manage, reduce, or eliminate identified conflicts.

November 5  Collaborative Research  P. Davies
Objective:  Describes the responsibilities that arise when researchers work with colleagues, including issues related to collaborating across disciplines, institutions, or international borders.

November 12  Publication/Authorship/Peer Review  E. Wilson
Objective:  Describes investigator responsibilities related to reviewing the work of other researchers; and sharing results with others through informal communications, oral presentations, scholarly publications, and public statements.

November 19  Scientific Misconduct  Carlson
* BCD students that are out this week will be required to watch the recorded lecture
Objective:  Describe research practices that must be avoided, the role of the Vice President for Research, and the obligation researchers and institutions have to report research misconduct.

November 26  Scientist as responsible member of society  J. Brender
Objective:  Describes the ultimate responsibility of research as it relates to serving and enhancing the good of society, including issues related to selecting research projects, seeking funding, reporting unbiased observations, and communicating their work with sensitivity to its context and anticipated impact.

December 3  Assessment Reports
Objective:  Provides trainees the opportunity to synthesize course material, analyze a research case with noncompliance, and develop a corrective action plan from both the investigator and institution’s perspective.

December 10  Assessment Reports
Objective:  Provides trainees the opportunity to synthesize course material, analyze a research case with noncompliance, and develop a corrective action plan from both the investigator and institution’s perspective.
Curriculum

Prescribed Elective Courses
TEXAS A&M UNIVERSITY BAYLOR COLLEGE OF DENTISTRY
Microbiology
BIMS 5208

CLASS SESSION(S)
Summer: Monday, Tuesday, Wednesday, Thursday, Friday; 8:00 am - 10:00 am; BCD Room 6

INSTRUCTOR
Allen L. Honeyman, Ph.D.
214.828.8323, AHoneyman@bcd.tamhsc.edu
BCD Rm. 451; By appointment

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
Microbiology/Immunology 5208 will provide students with an understanding of basic microbiology and immunology. An understanding of the interactions between human beings and microorganisms, which includes viruses, bacteria, fungi, and animal parasites, is important to all health care professionals and influences the care that their patients receive. The physiologic, biochemical, and genetic properties of microorganisms are the basis for our ability to distinguish these microbes from each other and to describe their abilities to invade and proliferate in human tissues. The activities of the microorganisms contribute to the pathogenesis of the resulting disease and, therefore, to its clinical manifestations. The other contributor to pathogenesis is the reaction by the infected host to the microorganism. The major effect of the human response to infection is the development of immunity. Immunity is evoked to protect against microbial infection and prevent the occurrence of disease. However, the immune response is complex and some aspects of it become part of the disease process. In addition, stimulation of immune mechanisms by allergens or self-antigens results in the occurrence of immunologic diseases such as allergy or autoimmunity.

PREREQUISITES
Permission of instructor

COURSE REQUIREMENTS
Students are required to attend all lectures and take all examinations at the required times. Graduate students take all dental tests and quizzes. In addition, the students will be given additional short answer tests on assigned reading and will give a 30 minute PowerPoint presentation on a topic selected by the course director.

COURSE LEARNING OBJECTIVES
1.) Understand the founding principles of basic microbiology and immunology. The students will build upon this knowledge base to expand their understanding of both infectious and immunologic diseases and their pathogenesis.
2.) Have an understanding of infectious diseases having oro-facial manifestations or implications and to become acquainted with diseases of microbial etiology that do not have an oro-facial manifestations or implications.
3.) Understand the basic principles of the infectious and immunologic processes and be able
to apply them to understand the mechanisms of interactions that occur between microorganisms and human beings. Students should be able to recognize the signs and symptoms of diseases, disease epidemiology, risk factors that increase disease incidence or severity, and mechanisms of pathogenesis (including the contributions of host responses to disease progression) of diseases associated with particular microorganisms.

4.) Know how the physiologic and biochemical properties of microorganisms relate to the pathogenesis of infectious diseases and their treatments. Students should learn the common properties of each class of microbes (e.g. bacteria vs. viruses) as well as properties that distinguish genus and species. The students should have an understanding of mechanisms of virulence and pathogenesis of clinically important microbes.

5.) Be able to differentiate microorganisms from each other and begin to understand how the identity and characteristics of an infectious agent determines its pathogenesis. Students need to learn the properties that distinguish genus and species and allow for the microbes' detection and identification.

6.) Appreciate how protective immunity against infection develops, from knowledge of the cellular and biochemical interactions that are the basis of the immune response. Students need to learn the various components of the immune system, how they are generated, how they function, and in what normal or pathologic processes they participate in.

7.) Understand how functions and/or dysfunctions of the immune system provide clearer understanding of immunologic diseases, such as allergy and autoimmunity, and how infectious agents modulate immunity. Students should know normal immune functions and how components of the immune system contribute to immune mediated host functions.

8.) Appreciate the importance of life-long continuing education.

**COURSE STRUCTURE**

**Course Format**
Course material will be presented in a lecture format. Students are required to attend all lectures.

**Assessment and Grading Policy**
Grades for this course will be based entirely on examination scores. Examinations will cover material presented in lecture, textbooks, and the manual. All examinations will require the selection of preprinted answers (multiple choice or multiple true-false questions). There will be five block exams that will cover only the indicated material for that block (see course schedule). In addition, there will be a final exam that will be comprehensive over all of the material covered in the course. All block exams will be weighted evenly relative to the number of class periods. The first exam will count for 20% of the final grade. The remaining block exams will each be worth 15% of the final grade. The final exam will be worth 20% of the final grade. All exams may be adjusted to a normalized distribution, if necessary. There will be no additional points or adjustments to grades for extra credit, written reports, or other material. All grades will be determined from regular exam scores.

**Required Text:**
Each student will be provided the course manual, which includes the class syllabus and outline. This manual contains objectives and outlines for each class session. The manual will be considered as a major reference source.

The faculty uses numerous textbooks to formulate their lectures because of the diverse nature of microbiology, particularly oral microbiology. Therefore, the selection of a single textbook is problematic. Many students do not purchase any textbook and only use the course manual and
their lecture notes to study from. However, many students prefer a designated textbook.

Other Required Readings:
Additional material may be distributed throughout the course.

Additional Recommended, but NOT required texts/materials:
Main text book: the choice of the main text book used for this class will be dependent upon each student’s previous experience and previous classes in microbiology. If an individual has not had a previous course in microbiology or has had only a lower level course, the recommended text is Foundations in Microbiology by Talaro (McGraw-Hill, sixth edition). If an individual has had previous microbiology courses, then the recommended text is Medical Microbiology & Immunology by Levinson (Lange, ninth edition). Both texts will provide the necessary information; however, the Talaro book has more detail and background information for individuals with no previous experience in microbiology.

The previous textbooks will be considered as primary source materials for the course. However, these texts are not comprehensive microbiology and immunology texts. Additional material will be taken from other texts. The following are examples of texts that students might find beneficial: Clinical Microbiology Made Ridiculously Simple by Gladwin and Trattler (Medmaster, 2003); Immunobiology by Janeway et al. (Garland Science) (much of the immunology section will come from this text book); and The Immune System by Parham (Garland Science, 2nd edition). Several of these texts are on reserve in the BCD library.

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COURSE SCHEDULE
Note: In 2013 this course will be taught in the summer. All material will be scheduled for 2hr/day for 6 weeks. This is an example of the topics that will be included:

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<thead>
<tr>
<th>TOPIC IN LECTURE</th>
<th>PRESENTER</th>
<th>PAGE</th>
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</thead>
<tbody>
<tr>
<td>History of Microbiology</td>
<td>Honeyman</td>
<td>300</td>
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<tr>
<td>Introduction to Bacteriology</td>
<td>Berry</td>
<td>309</td>
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<tr>
<td>Physiology/Biochemistry</td>
<td>Honeyman</td>
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<td>Bacterial Genetics</td>
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<td>Sterilization</td>
<td>Berry</td>
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<tr>
<td>Antimicrobials I</td>
<td>Ezzo</td>
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<tr>
<td>Antimicrobials II</td>
<td>Ezzo</td>
<td>355</td>
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<tr>
<td>Normal Flora</td>
<td>Honeyman</td>
<td>364</td>
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<tr>
<td>Exam 2 - Block Section Exam</td>
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<tr>
<td>Staphylococci</td>
<td>Honeyman</td>
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<tr>
<td>Streptococci</td>
<td>Honeyman</td>
<td>380</td>
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<tr>
<td>Gram-positive Rods</td>
<td>Honeyman</td>
<td>397</td>
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<tr>
<td>Gram-negative Rods I</td>
<td>Honeyman</td>
<td>413</td>
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<tr>
<td>Lab – Biochemical Identification</td>
<td>Honeyman</td>
<td>436</td>
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<tr>
<td>Gram-negative rods II</td>
<td>Honeyman</td>
<td>413</td>
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<tr>
<td>Respiratory Pathogens and STD’s</td>
<td>Honeyman</td>
<td>441</td>
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<tr>
<td>Strep correlations</td>
<td>Ezzo</td>
<td>459</td>
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<tr>
<td>Zoonosis</td>
<td>Honeyman</td>
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<tr>
<td>Review</td>
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<tr>
<td>Exam 3 - Block Section Exam</td>
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<td>373-470</td>
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<tr>
<td>Rickettsiae, Chlamydiae, Mycoplasmas</td>
<td>Berry</td>
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<td>Mycology</td>
<td>Berry</td>
<td>475</td>
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<tr>
<td>Parasitology</td>
<td>Berry</td>
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<tr>
<td>Mycobacteria I</td>
<td>Honeyman</td>
<td>481</td>
</tr>
<tr>
<td>Mycobacteria II</td>
<td>Honeyman</td>
<td>481</td>
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<tr>
<td>Normal Oral Flora, Room 605</td>
<td>Honeyman</td>
<td>500</td>
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<tr>
<td>Periodontal Infections I</td>
<td>Ezzo</td>
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<tr>
<td>Periodontal Infections II</td>
<td>Ezzo</td>
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<td>Dental Caries</td>
<td>Honeyman</td>
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<td>Review</td>
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<td>Exam 4 - Block Section Exam</td>
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<td>Infection Control I</td>
<td>Berry</td>
<td>529</td>
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<td>Infection Control II</td>
<td>Berry</td>
<td>534</td>
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<tr>
<td>Infection Control III</td>
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<tr>
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<td>Introduction to Virology</td>
<td>Honeyman</td>
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<td>Virology I</td>
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<tr>
<td>Virology II</td>
<td>Newman</td>
<td>550</td>
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<tr>
<td>Oral Pathogens</td>
<td>Honeyman</td>
<td>572</td>
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<tr>
<td>Virology III</td>
<td>Newman</td>
<td>550</td>
</tr>
<tr>
<td>Virology IV</td>
<td>Newman</td>
<td>550</td>
</tr>
<tr>
<td>Endodontic Infections I</td>
<td>Regan</td>
<td>585</td>
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<tr>
<td>Review</td>
<td></td>
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<tr>
<td>Exam 5 - Block Section Exam</td>
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<td>529-584</td>
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<tr>
<td>Endodontic Infections II</td>
<td>Regan</td>
<td>602</td>
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<tr>
<td>Anti-Microbials in Dentistry</td>
<td>Grogan</td>
<td>???</td>
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<tr>
<td>Finals Week – Comprehensive Exam</td>
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<td>18-617</td>
</tr>
</tbody>
</table>
TEXAS A&M UNIVERSITY BAYLOR COLLEGE OF DENTISTRY
Immunology
BMS 5251

CLASS SESSION(S)
Tuesday 9:00 am - 10:00 am; BCD Room 736

INSTRUCTOR
Joseph T. Newman, Ph.D.
214 820 3582, jnewman@bcd.tamhsc.edu
BCD SB 235; by appointment

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
Immunology 5251 is a didactic course which is supplemented with comprehensive handouts, lists of recent publications (usually from the dental literature) and case studies. The overall objective of the course is to review the basics of Immunology with an emphasis on the oral aspects along with a discussion on the latest developments pertaining to dentistry and medicine in general. The course is mainly attended by Dental graduate students in Periodontics, Endodontics and Oral Pathology who require a strong background in clinical immunology.

PREREQUISITES
Permission of instructor and some background in immunology.

COURSE REQUIREMENTS
Students are required to attend all lectures and submit a term paper.

COURSE LEARNING OBJECTIVES
1. Understand the basic principles of the innate immune response and how it applies to dentally related diseases. Topics covered include toll-like receptors, NOD proteins, defensins, etc.
2. Have an understanding of the basic principles of the acquired immune response and its clinical application. Topics will include the development, function and regulation of humoral and cell mediated immune responses, the complement system, cytokines, adhesion molecules, etc.
3. Understand the basic principles of the secretory immune response. This is a topic that is directly related to dental immunology and will be discussed in some detail.
4. Know how the immune response may be detrimental by an in depth discussion of the hypersensitivity reactions and an overview of their application in the clinical setting.
5. Be able to discuss fundamental defects of primary immunodeficiency diseases, recognition of patients with such deficiencies and any dental implications.
6. Understand the cause of relevant autoimmune diseases and their dental implications. A two hour session by a guest lecturer will cover this important topic. A detailed handout and references will be provided by the guest speaker.
7. Be familiar with role of the immune response in various forms of periodontal disease, endodontic related diseases and other dentally related disorders. A one hour session by a guest lecturer with cover the immunologic aspects of periodontal disease. A detailed handout and references will be provided by the guest speaker.
8. Develop an appreciation of the importance of immunology.

COURSE STRUCTURE
Course Format:
Course material will be presented in a lecture format. Students are required to attend all lectures. For each lecture a detailed handout will be provided as well as pertinent publications pertaining to the topic being discussed.

Assessment and Grading Policy
This is a one-hour course so grades mainly will be based on a written report of an immunologically-related research topic of the students’ choice. Class participation will also be a deciding factor.

Required Text:
Each student will be provided a class schedule with dates and topics of discussion at the beginning of the course. Before each lecture a detailed handout will be provided. Recent publications related to topic of discussion with be provided and discussed the following week.

I consider this course an update and review of dental-related immunology and most textbooks would be outdated or not applicable. By providing a detailed handout along with recent publications, including review articles, the student will be on the “cutting edge”.

Other Required Readings:
Additional material may be distributed throughout the course as described above.

Additional Recommended, but NOT required texts/materials:

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**COURSE SCHEDULE FOR FALL OF 2009:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Instructors</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 19</td>
<td>J. Newman</td>
<td>Introduction/Innate Immunity</td>
</tr>
<tr>
<td>August 26</td>
<td>J. Newman</td>
<td>Acquired Immunity Identifying Leukocytes/immunophenotyping</td>
</tr>
<tr>
<td>September 2</td>
<td>J. Newman</td>
<td>No formal class, take home assignment is to Review case studies for next class</td>
</tr>
<tr>
<td>September 9</td>
<td>J. Newman</td>
<td>Antigens, antibodies and haptens</td>
</tr>
<tr>
<td>September 16</td>
<td>J. Newman</td>
<td>Secretory Immunity</td>
</tr>
<tr>
<td>September 23</td>
<td>J. Newman</td>
<td>Complement</td>
</tr>
<tr>
<td>September 30</td>
<td>J. Newman</td>
<td>Cytokines and cell-mediated immunity</td>
</tr>
<tr>
<td>October 7</td>
<td>J. Newman</td>
<td>Adhesion Molecules/Inflammation</td>
</tr>
<tr>
<td>October 14</td>
<td>J. Newman</td>
<td>Cytokines &amp; Adhesion Molecules</td>
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<tr>
<td>October 21</td>
<td>J. Newman</td>
<td>Hypersensitivity Reactions: Part I</td>
</tr>
<tr>
<td>October 28</td>
<td>J. Newman</td>
<td>Hypersensitivity Reactions: Part II</td>
</tr>
<tr>
<td>November 4</td>
<td>J. Newman</td>
<td>Hypersensitivity Reactions/Immunodeficiency diseases</td>
</tr>
<tr>
<td>November 11</td>
<td>G. Mues</td>
<td>The generation of antibody diversity</td>
</tr>
<tr>
<td>November 18</td>
<td>L. Cheng</td>
<td>Immunological disorders of the oral mucosa I: Lichen Planus and Lichenoid mucositis</td>
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<tr>
<td>December 4</td>
<td>G. Mues</td>
<td>Immunology of periodontal disease</td>
</tr>
<tr>
<td>December 11</td>
<td>L. Cheng</td>
<td>Immunological disorders of the oral mucosa II: Mucous Membrand Pemphigoid and Pemphigus Vulgaris</td>
</tr>
</tbody>
</table>
TEXAS A&M UNIVERSITY BAYLOR COLLEGE OF DENTISTRY
Neuroscience
BIMS 5301

CLASS SESSION(S)
Spring, Mondays, 1pm-2pm, 3pm-4pm and Wednesdays, 1pm-2pm, Room 6.

INSTRUCTOR
Bob Hutchins, Ph.D.
(214) 828-8275, bhutchins@bcd.tamhsc.edu
Room 401; None (open door policy)

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
Gross and microscopic anatomy of the human central and peripheral nervous system.
Neurophysiology of the central nervous system, peripheral nerves, special sense, autonomies and clinical mediation.

PREREQUISITES
None

COURSE REQUIREMENTS
Graduate students take all dental tests and quizzes. In addition, the students will be given additional short answer tests on assigned reading and will give a 30 minute PowerPoint presentation on a topic selected by the course director.

There is no required attendance. If you are unable to take an exam due to illness, you will need to contact the course director within 48 hours of returning to school. Any incomplete grades will need to be completed within the next semester per Baylor College of Dentistry policy.

Attendance Policy
Although attendance is highly recommended, there is no required attendance.

Remediation Policy
Any student receiving a failing grade may be required by the student promotions committee to remediate their neuroscience requirements. This can be accomplished by arrangement with the Course Director at HSC-Baylor in the summer. Remediation typically is condensed into a shorter period of time and may emphasize the student’s deficiencies.

Make-up Exams
Any student who is unable to attend an exam must contact the Course Director prior to the exam. Students with absences that are not excused will also not be given the opportunity to take the exam and the student will be assigned a zero for that test. If the student is given an excused absence, it is up to the student to contact the Course Director within 48 hours of their return to school to re-schedule a make-up exam. The format of the make-up exam is left to the discretion of the faculty and class curves will not be extended to any make-up exam.
COURSE LEARNING OBJECTIVES
Students should be able to:

1) Know the names and CNS areas of the developing embryo and what they will become.
2) Describe the basic anatomy of the brain and spinal cord and their general function.
3) Describe and draw the neuroanatomical pathways taken by the major sensory and motor modalities in the central nervous system (including major motor and sensory tracts, points of synapse, cell bodies of origin, decussations and terminations).
4) Understand what modalities will be lost if their cell bodies or axons are lesioned.
5) Describe and draw the central nervous system pathways of the trigeminal nerve.
6) Describe the CNS control of motor functions, both voluntary and reflexive. Additionally, the student should have an appreciation of the general control of mastication.
7) Identify the areas responsible for the central control of the autonomic nervous system.
8) Describe the central nervous system pathways of the trigeminal nerve.
9) Describe the CNS control of motor functions, both voluntary and reflexive. Additionally, the student should have an appreciation of the general control of mastication.
10) Identify the areas responsible for the central control of the autonomic nervous system.
11) Identify the areas responsible for the central control of the autonomic nervous system.

12) Describe the higher functions of the cerebral cortex and what the signs/symptoms of someone who suffers from a lesion in these areas.
13) Describe the neural basis for the induction, transmission, perception, and modulation of pain. This will include a basic understanding of physiology, anesthesia, and areas of potential clinical significance.
14) Utilize the above information to identify the location and consequences of a neurological lesion when given the clinical signs and symptoms.

COURSE STRUCTURE
This course consists of lectures and laboratory sessions to provide the student with a basic understanding of the anatomy and physiology of the central nervous system (CNS). The course begins with a brief description of the brain’s embryological development, which leads into a study of the gross anatomical features of the brain and spinal cord. Within this section, we will study the major sensory and motor systems along with the study of some basic pathology illustrating disease of each of the major systems. This section ends with a survey of the integrative action of neurological signs using simple case histories. The last part of the course will contain special emphasis on the anatomical and physiological basis for the conscious perception and modulation of pain, particularly via the trigeminal nerve. This area of the course is considered important for the basic understanding of clinical manifestations of pain and therefore, material will be emphasized with clinical examples and clinical correlations.

Course Format:

Assessment and Grading Policy
Student grades will be based on:
Exam I .................................................................100 points
Midterm Exam .........................................................100 points
Final Exam .............................................................100 points
Term Paper ...........................................................100 points
Three major examinations will be given in the course. Each may consist of multiple choice, multiple answer, matching, true/false questions, or labeling of diagrams. Each exam will be worth 100 points. In addition, students may wish to submit a written review of the published literature (using the guidelines provided) to add up to 12 points to one of their exam scores. Final scores will be converted to letter grades according to the Baylor College of Dentistry/ Texas A&M University System Heath Science Center grading system:

- **A:** 93+
- **B+:** 90 – 92
- **B:** 84 – 89
- **C+:** 81 – 83
- **C:** 75 – 80
- **D:** 70 – 74
- **F:** 69 or less

**Required Text:**
Course manual/lecture outlines as provided and reference text:
Neuroscience: Ed. D. Purves et. al.

**Other Required Readings:**
None

**Additional Recommended, but NOT required texts/materials:**

**Required Policy Statements**

**FEDERAL EDUCATION RIGHTS & PRIVACY ACT (FERPA):** The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy.

**ACADEMIC INTEGRITY STATEMENT:** Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, HSC, and the Graduate School policies regarding academic integrity and classroom conduct. Academic integrity is the pursuit of scholarly activity free from fraud and deception. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student’s responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of academic dishonesty.

**THE AMERICANS WITH DISABILITIES ACT STATEMENT:** The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room 126 of Koldus Building, or call 845-1637.
**EQUAL OPPORTUNITY STATEMENT:** The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 458-7280 or by mail at 301 Tarrow, 6th Floor, College Station, TX 77840.

**COURSE SCHEDULE**

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>LECTURER</th>
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<tbody>
<tr>
<td>1/10/10</td>
<td>General Organization &amp; Dev. of the Nervous System I</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td>1/10/10</td>
<td>General Organization &amp; Dev. of the Nervous System II</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td>1/12/10</td>
<td>General Principles of the Somatosensory System I</td>
<td>Dr. Hutchins</td>
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<tr>
<td>1/17/10</td>
<td><strong>HOLIDAY</strong></td>
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<tr>
<td>1/19/10</td>
<td>General Principles of the Somatosensory System II</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td>1/24/10</td>
<td>General Principles of Somatosensory System III</td>
<td>Dr. Hutchins</td>
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<tr>
<td>1/24/10</td>
<td>Olfaction and Taste</td>
<td>Dr. Hutchins</td>
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<tr>
<td>1/26/10</td>
<td>Kinesthesia</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td>1/31/10</td>
<td>Control of Motor Function</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td><strong>1/31/10</strong></td>
<td><strong>Exam I (Grp A – Rm 211: Grp B – Rm 6)</strong></td>
<td>Dr. Hutchins</td>
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<tr>
<td>2/2/10</td>
<td>Central Autonomic Control</td>
<td>Dr. Hutchins</td>
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<tr>
<td>2/7/10</td>
<td>Cortical Function/Location I</td>
<td>Dr. Hutchins</td>
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<tr>
<td>2/7/10</td>
<td>Cortical Function/Location II</td>
<td>Dr. Hutchins</td>
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<tr>
<td>2/9/10</td>
<td>Pain Pathways</td>
<td>Dr. Hutchins</td>
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<td>2/14/10</td>
<td>Review of Pathways &amp; Lesions</td>
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<td>Pain</td>
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<td><strong>2/16/10</strong></td>
<td><strong>Exam II (Grp A – Rm 211: Grp B – Rm 6)</strong></td>
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<td>2/21/10</td>
<td>Pain</td>
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<td>2/23/10</td>
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<td>2/28/10</td>
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<td>2/81/10</td>
<td>Pain</td>
<td>Dr. Hutchins</td>
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<tr>
<td><strong>3/2/10</strong></td>
<td><strong>Final Exam (Grp A – Rm 211: Grp B – Rm 6)</strong></td>
<td>Dr. Hutchins</td>
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</table>
TEXAS A&M UNIVERSITY BAYLOR COLLEGE OF DENTISTRY  
Biochemistry, Cell and Molecular Biology  
BIMS 5307

CLASS SESSION(S)  
Fall Semester, Tuesday and Thursday, 10-11am, Wednesday, 1-2pm, Room 6

INSTRUCTOR  
Jay C. Groppe, PhD  
214.370.7203, jgroppe@bcd.tamhsc.edu  
BCD, SB224; By appointment

OTHER PARTICIPATING FACULTY  
Chunlin Qin, DDS, PhD;  
Lisa Harper-Mallonee, BSDH, MPH, RD, LD;  
Allen Honeyman, PhD;  
Reginald Taylor, DMD, DMSc;  
M. Douglas Benson, PhD;  
Lynne Opperman, PhD

COURSE DESCRIPTION  
Biochemistry, Cell and Molecular Biology is a 3 credit hour course that will provide students  
with an overview of foundational information concerning biochemistry, biochemistry of  
metabolism, nutrition and cell and molecular biology. Throughout this course, traditional  
structural/functional approaches will be presented with newer concepts from cell and molecular  
biology research.

PREREQUISITES  
Approval of the course director

COURSE REQUIREMENTS  
Attendance is expected at all scheduled lectures, unless prevented by illness or uncontrollable  
circumstances.

Cheating will not be tolerated. A student suspected of cheating will be reported to the Associate  
Dean for Academic Planning and Development. A student found cheating will receive a grade of  
zero on the exam and other consequences are possible.

Any student who is unable to attend an exam must contact the Course Director prior to the exam.  
Students with unexcused absences will not be given the opportunity to take the exam and the  
student will be assigned a zero for that test. If the student is given an excused absence, it is up to  
the student to contact the course director within 48 hours of their return to school to re-schedule  
a make-up exam.

Students required to remediate the course will need to take one or more approved course(s) at  
another school during the summer. The student will be required to get approval from the HSC-  
BCD course director before registering for the extramural course.

Although lectures will coincide with the dental course (DDDS 6510), the graduate course (BIMS  
5307) will require that material, which is designated as “additional and optional” at the end of  

...
many presentations, be comprehended through reading of assigned textbook sections, journal articles and reviews. Additional questions specific to the material will be included in each of the five exams. Instructors will be available for one-on-one discussion during regularly scheduled office hours.

COURSE LEARNING OBJECTIVES
Biochemistry will include understanding the characteristics of proteins, enzymes, enzyme kinetics, and vitamins. Biochemistry of metabolism will cover utilization of carbohydrates, lipids as well as an understanding of amino acid and nucleic acid metabolism. Nutrition will cover vitamins usage, food, nutrition and healthful diet and lifestyle. Molecular and cellular biology will include understanding nuclear structure and function and plasma membrane proteins that provide anchoring for the cytoskeleton for movement and communication, as well as, transcription, translation and post transitional regulation and modification including signal transduction. This section will also introduce students to modern molecular methods that are used to investigate gene expression in health and disease. Cell biology aspects of bone development, wound healing, cell cycle and cancer focuses on the regulation of bone development and wound healing, including bone distraction, augmentation and fracture healing will also be covered. In addition, this section will address the control of the cell cycle and how the deregulation of the cell cycle can lead to cancer. A brief discussion of classical Mendelian genetics will also be presented in this section. A final current topics lecture will revisit much of the course material in the context of a recent avenue of basic science research relevant to clinical dentistry.

COURSE STRUCTURE
The course contains five main topic areas: Biochemistry, biochemistry of metabolism, nutrition, molecular and cellular biology, and current topics.

Course Format: Lecture

Assessment and Grading Policy
Student grades will be based on: Five written exams worth 100 points each.

Exams consist of 50 multiple choice questions and are scheduled every 8-10 lectures. Exams may include information presented in class that is not addressed specifically in the instructional objectives. Each exam with an average below 83% will be scaled to 83%.

A letter grade will be assigned based on the numerical distribution listed in the HSC-Baylor College of Dentistry Bulletin:
A   = 93 – 100
B+  = 90 – 92
B   = 84 – 89
C+  = 81 – 83
C   = 75 – 80
D   = 70 – 74
F   = 00 – 69

Required Text:
Lectures, textbooks, lecture handouts (in three-ring binder) will be your primary resource for the course, complemented with the slides (.ppt files) and Camtasia audio recordings of the PowerPoint presentations.

Other Required Readings:
For most lectures, a reading assignment has been made or corresponding chapters or sections of the textbooks indicated in the lecture handouts. It is highly recommended to read the assignments to provide background information on the material covered in lecture and provide understanding of the material provided in lecture. Additional material can be presented in the handouts that is not directly covered in lecture.

Additional Recommended, but NOT required texts/materials:

Required Policy Statements

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<table>
<thead>
<tr>
<th>Date</th>
<th>Session Title/Topic</th>
<th>Instructor(s)</th>
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<tbody>
<tr>
<td>20-Aug</td>
<td>Chemical Components of Cells</td>
<td>Qin</td>
</tr>
<tr>
<td>20-Aug</td>
<td>Amino Acids</td>
<td>Qin</td>
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<tr>
<td>21-Aug</td>
<td>Amino Acids &amp; Proteins</td>
<td>Qin</td>
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<tr>
<td>22-Aug</td>
<td>Protein Structure and Function</td>
<td>Qin</td>
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<td>23-Aug</td>
<td>Enzymes</td>
<td>Qin</td>
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<td>27-Aug</td>
<td>Enzymes</td>
<td>Qin</td>
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<tr>
<td>27-Aug</td>
<td>Enzymes</td>
<td>Qin</td>
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<tr>
<td>28-Aug</td>
<td>Hemoglobin/Myoglobin, Collagen, IgG, Dentin Matrix Proteins</td>
<td>Qin</td>
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<tr>
<td>29-Aug</td>
<td>Vitamins</td>
<td>Qin</td>
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<tr>
<td>30-Aug</td>
<td>Vitamins</td>
<td>Qin</td>
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<tr>
<td>3-Sept</td>
<td>Exam 1 Rooms 6 &amp; 605</td>
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<td>3-Sept</td>
<td>Carbohydrate Structure &amp; Nomenclature</td>
<td>Groppe</td>
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<tr>
<td>4-Sept</td>
<td>Glycolysis &amp; Gluconeogenesis</td>
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<td>5-Sept</td>
<td>Tricarboxylic Acid Cycle</td>
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<td>6-Sept</td>
<td>Oxidative Phosphorylation</td>
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<td>10-Sept</td>
<td>Pentose Phosphate Pathway</td>
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<td>12-Sept</td>
<td>Glycogen Metabolism</td>
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<tr>
<td>13-Sept</td>
<td>Lipids &amp; Fatty Acid Catabolism</td>
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<td>17-Sept</td>
<td>Biosynthesis of Lipids</td>
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<td>19-Sept</td>
<td>Exam 2 Rooms 6 &amp; Lab 30</td>
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<td>20-Sept</td>
<td>Amino Acid Catabolism</td>
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<tr>
<td>24-Sept</td>
<td>Biosynthesis of Amino Acids</td>
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<td>26-Sept</td>
<td>Integration of Metabolism</td>
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<tr>
<td>27-Sept</td>
<td>Pyrimidines</td>
<td>Groppe</td>
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<td>1-Oct</td>
<td>Purines</td>
<td>Groppe</td>
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<tr>
<td>3-Oct</td>
<td>Nutrition- Basics</td>
<td>Mallonee</td>
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<td>4-Oct</td>
<td>Nutrition- Life Cycles</td>
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<td>8-Oct</td>
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<td>10-Oct</td>
<td>Exam 3 Rooms 6 &amp; 211</td>
<td>Groppe/Mallonee</td>
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<tr>
<td>11-Oct</td>
<td>DNA Replication, Repair and Recombination</td>
<td>Honeyman</td>
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<tr>
<td>15-Oct</td>
<td>DNA Replication, Repair and Recombination</td>
<td>Honeyman</td>
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<tr>
<td>17-Oct</td>
<td>DNA to Protein</td>
<td>Honeyman</td>
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<tr>
<td>18-Oct</td>
<td>Procaryotic Gene Expression</td>
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<td>22-Oct</td>
<td>Human Genetics Terminology</td>
<td>Taylor</td>
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<td>24-Oct</td>
<td>Human Genetics in Dentistry</td>
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<td>25-Oct</td>
<td>Eucaryotic Gene Expression</td>
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<td>29-Oct</td>
<td>Genetic Change</td>
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<td>31-Oct</td>
<td>Manipulating Genes and Cells</td>
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<td>1-Nov</td>
<td>Exam 4 Rooms 6 &amp; 211</td>
<td>Honeyman/Taylor/Groppe</td>
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<tr>
<td>5-Nov</td>
<td>Membranes, Channels and Receptors</td>
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<tr>
<td>6-Nov</td>
<td>Cell Communication</td>
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<tr>
<td>7-Nov</td>
<td>Intracellular Compartments &amp; Transport</td>
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<tr>
<td>12-Nov</td>
<td>Cytoskeleton</td>
<td>Benson</td>
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<td>14-Nov</td>
<td>Cell Cycle Control</td>
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<tr>
<td>15-Nov</td>
<td>Apoptosis, Cancer, Epithelial Mesenchymal Transformation</td>
<td>Benson</td>
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<tr>
<td>19-Nov</td>
<td>Wound healing</td>
<td>Opperman</td>
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<tr>
<td>19-Nov</td>
<td>Current Topic: Dental-Related Basic Science Research</td>
<td>Groppe</td>
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<tr>
<td>4-Dec</td>
<td>Exam 5 Rooms 6 &amp; 211</td>
<td>Groppe/Benson/Opperman</td>
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CLASS SESSION(S)
Tuesday Lectures 11.00 AM – Noon, Room 6
Wednesday Lectures 2.00 – 3.00 PM 8/21 - 9/04; 1.00 – 2.00 PM thereafter, Room 6
Wednesday Labs 3.00 – 5.00 PM 8/21 – 9/04; 2.00 – 4.00 PM thereafter, Lab 30

INSTRUCTOR
Lynne A. Opperman, Ph.D.
214.828.8134, lopperman@bcd.tamhsc.edu
BCD, Room 498; By appointment

OTHER INSTRUCTORS
Robert Spears, PhD
Kathy Svoboda, PhD

COURSE DESCRIPTION
This course is designed to provide you with knowledge of the microscopic structure and basic functional relationships of the cells, tissues, and organ systems of the human body. The information presented in this course will integrate cell and molecular biology, gross anatomy, physiology and biochemistry, and prepare you for understanding and interpreting histological sections of all the fundamental tissues of the body.

PREREQUISITES None

COURSE REQUIREMENTS
Missed Exams and Quizzes:
If you miss a lecture or lab exam due to illness or a legitimate personal reason (i.e. logged with Student Services), you must contact the Course Director within one week after returning to school in order to schedule a make-up exam. Make up exams will not be allowed if this time period is exceeded. The Course Director determines the composition of the exam. There will be no make-up quizzes. The first missed quiz grade will be used as the grade to be dropped from the final grade.

Attendance Policy:
As part of the Dental Profession, we expect you to take your responsibilities seriously from the first day, and one of those responsibilities is that we expect you to be in class every day. Arriving on time and being prepared, whether it is for a meeting, patient appointment or class, are expectations of professionalism. There will not be a mandatory attendance policy for General Histology. However, spot attendance records can be taken on occasion, and attendance can be counted towards a “professionalism point” added at the end of the course. Pop quizzes and exercises given during the labs can count as professionalism points towards the final grade. Anyone who misses these quizzes and exercises will not get the extra points.

Labs are provided for you to study laboratory assignments while faculty are present to assist you with the material. You are expected to be present in the lab during this time. In addition to the above hours, access to Lab 30 to study Histology will be allowed according to posted Lab 30 hours.

Remediation Policy:
A student who receives a grade of ‘F’ (i.e. below 70%) on any exam will be required to attend a study group. This study group will meet once a week. Any student who fails General Histology 6600 (an ‘F’ grade), and is permitted by the Student Promotions Committee to retake the course the following summer, must take a comparable general histology course at a school other than Baylor College of Dentistry. The Course Director of General Histology 6600 will provide a list of colleges offering summer courses in general histology. The course director MUST approve the course content.

Student Conduct:
You are expected to conduct yourselves in a professional manner during after-hours use of the laboratory. Only first-year students are permitted in the laboratory. Upperclassmen, Dental Hygiene students, friends, and spouses are not allowed in the laboratory, except on their own official recognizance. While you are responsible only for your own behavior, you are charged with the responsibility to report any non-professional behavior or conduct which compromises the security of the computers and the BCD servers, or which detracts from the study atmosphere of Lab 30. Radios with open speakers are not to be operated in the lab at any time. Only radios with individual earphones may be operated during after-hours laboratory use.

GRADUATE STUDENTS
Graduate Students must maintain a C average to pass the course. These students will be given extra homework assignments and projects.

COURSE LEARNING OBJECTIVES
An instructional objective is a statement that describes an intended outcome of instruction. Instructional objectives for each topic are included at the beginning of each chapter in this syllabus. These represent the basic areas within each topic that you must learn for successful completion of the course. You will be able to accomplish the instructional objectives by: (1) alert attendance at all lectures; (2) active participation in all laboratory exercises, (3) reading appropriate chapters in the assigned textbook; and (4) adequate self-study outside of the scheduled class time. Lecture exams and quizzes will include information presented in class that is not addressed by the Instructional Objectives.

COURSE STRUCTURE
Course Format: Lecture and Laboratory
The purpose of the laboratory portion of this course is to reinforce and add a visual component to the didactic information provided in the lectures. The lecture and lab should be considered as a single learning unit for each topic. The format for each laboratory period will consist of an introduction to the day's topic by the course director, followed by independent study of selected histology slides and, where appropriate, electron micrographs.

Assessment and Grading Policy
Student grades will be based on:

| Lecture Exam 1 | 100 Points | Lab Exam 1 | 25 Points |
| Lecture Exam 2 | 100 Points | Lab Exam 2 | 25 Points |
| Lecture Exam 3 | 100 Points | Lab Exam 3 | 25 Points |
| Lecture Quiz 1 | 15 Points  | Written Exam | 100 Points |
| Lecture Quiz 2 | 15 Points  | TOTAL | 505 Points |
| Lecture Quiz 3 | 15 Points  | |

The lowest quiz grade will be dropped from counting towards the final grade.
Grade Scale:
The overall numeric course grade is based on the distribution of the quizzes, examinations and practical examinations. A letter grade will be assigned based on the numerical distribution listed in the Baylor College of Dentistry Bulletin.

A = 92.50 - 100.0%
B+ = 89.50 - 92.49%
B = 83.50 - 89.49%
C+ = 80.50 - 83.49%
C = 74.50 - 80.49%
D = 69.50 - 74.49%
F = 00.00 - 69.49%

Evaluation Criteria/Methods:
The lower limit of acceptable performance on each quiz, exam, or practical is 70 percent. If you score below 70 percent, you must consult with the course director within 48 hours of the return of your test paper. The purpose of this policy is to identify and solve any problems you may be encountering before such problems become cumulative and place you at risk of failing the course.

Lecture Exams – Three 100-point lecture exams will be given during the entire course. Each exam will be a minimum of 50 minutes in length and may consist of multiple choice (single answer), true/false, matching, or machine-scored, fill-in-the-blank questions. The second and third exams will not cover material included in the first and second exam. Each exam will cover the topics indicated on the class schedule, as well as clinical correlation topics assigned in class. Lecture exams will cover material given in quizzes.

Lecture Quizzes – Three 15-point lecture quizzes will be given at scheduled times between major lecture exams. Each quiz will be on the lecture material covered up to, but not including the day the quiz is given, and will exclude topics covered in previous quizzes or exams. The purpose of these quizzes is to encourage studying between major exams. The lowest quiz grade will be dropped from counting towards the final grade.

Laboratory Exams – Three 25-point lab practical exams will be given during the course. Each exam will cover material up to but not including material covered on the day of the exam. The second and third exams will not cover material included in the first and second exam. The exams will consist of questions based on identification of microscopic features of tissue sections and on electron micrographs, or on didactic aspects related to the lab. Images will be brought onto computer monitors for set times for identification.

Take-Home Written Exam – One 100 point essay and short answer written exam will be given at the end of the course. This exam will test the ability to use histological sections to interpret morphological changes in response to experimental manipulation. It will also test the ability to use current literature when interpreting histological sections.

Required Text:

A laboratory manual is provided in your three-ring lecture binder after the lecture notes. This lab manual MUST be brought to each lab session, and the instructions for each lab should be followed to ensure maximum benefit from the labs.
Other Required Readings:
Lectures, books and lecture outlines should be your primary resource during the didactic portion of this course. Textbooks and/or required reading will be assigned for each lecture. Additional readings will be assigned from journals and books available electronically as necessary. All reading assignments must be completed before each scheduled class, in preparation for in-class discussion.

An electronic binder incorporating electron micrographic images with detailed explanations is provided on Blackboard. A “Bond Review” Powerpoint presentation of static images for all histological images is available on Blackboard for study review.

Additional Recommended, but NOT required texts/materials:
For each lecture, suggested reading assignments have been made, but primarily you will be expected to make use of the lecture outlines to cover the details of the material presented in lecture.

Required Policy Statements

FEDERAL EDUCATION RIGHTS & PRIVACY ACT (FERPA): The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy.

ACADEMIC INTEGRITY STATEMENT: Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, HSC, and the Graduate School policies regarding academic integrity and classroom conduct. Academic integrity is the pursuit of scholarly activity free from fraud and deception. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student's responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of academic dishonesty.

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### COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Topics</th>
<th>Laboratory Topics</th>
<th>Instructor(s)</th>
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<tbody>
<tr>
<td>8/20</td>
<td>1) Introduction to Cells I</td>
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<tr>
<td>8/21</td>
<td>2) Introduction to Cells II;</td>
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<td>8/21</td>
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<td>RS</td>
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<tr>
<td>8/27</td>
<td>3) Epithelium I</td>
<td>Histological Methods</td>
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<tr>
<td>8/28</td>
<td>4) Epithelium II</td>
<td>Cell Structure LAB</td>
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<td>9/03</td>
<td>5) Connective Tissue I</td>
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<td>9/10</td>
<td>7) Cartilage; Bone I</td>
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<td>8) Bone II</td>
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<td>9/17</td>
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<td>LAB EXAM I</td>
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<td>9/18</td>
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<td>Blood LAB</td>
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<td>9) Blood</td>
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<td>LAO/All faculty</td>
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<tr>
<td>9/24</td>
<td>10) Muscle I</td>
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<td>11) Muscle II</td>
<td>Muscle LAB</td>
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<td>10/01</td>
<td>12) Nerve</td>
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<td>Lecture Quiz II; 13) Cardiovascular</td>
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<td>10/08</td>
<td>14) Integument</td>
<td>Integument &amp; Respiratory LAB</td>
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<td>10/09</td>
<td>15) Respiratory System</td>
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<td>10/09</td>
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<td>All faculty</td>
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<td>10/15</td>
<td>16) Urinary System</td>
<td>LAB EXAM II; Urinary System LAB</td>
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<td>10/16</td>
<td>EXAM II</td>
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<td>10/16</td>
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<tr>
<td>10/22</td>
<td>17) Lymphoid Organs I</td>
<td>Lymphoid Organs LAB</td>
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<td>10/23</td>
<td>18) Lymphoid Organs II</td>
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<td>10/23</td>
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<td>All faculty</td>
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<tr>
<td>10/29</td>
<td>19) Digestive System I</td>
<td>Digestive System LAB</td>
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<td>10/30</td>
<td>20) Digestive System II</td>
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<td>10/30</td>
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<td></td>
<td>All faculty</td>
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<td>11/05</td>
<td>Lecture Quiz III; 21) Endocrine I</td>
<td>Endocrine System LAB</td>
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<td>11/06</td>
<td>22) Endocrine System II</td>
<td></td>
<td>RS</td>
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<tr>
<td>11/06</td>
<td></td>
<td></td>
<td>All faculty</td>
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<tr>
<td>11/12</td>
<td>23) Male Reproductive System</td>
<td>Reproductive Systems LAB</td>
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<tr>
<td>11/13</td>
<td>24) Female Reproductive System</td>
<td></td>
<td>KKS</td>
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<tr>
<td>11/13</td>
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<td></td>
<td>All faculty</td>
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<tr>
<td>11/20</td>
<td>Voluntary Noon Review Lab30</td>
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<td>All faculty</td>
</tr>
<tr>
<td>11/22</td>
<td>EXAM III 10.00 AM</td>
<td>LAB EXAM III 9.00 AM</td>
<td>All faculty</td>
</tr>
</tbody>
</table>
CLASS SESSION(S)
Monday, Tuesday, and Thursday, 1-5pm, Lecture Hall, Room 6 and Dissection Lab Room 14

INSTRUCTOR
Robert Spears, PhD
214.828.8297, rspears@bcd.tamhsc.edu
Office: Room 449; Office Hours: By Appointment

TEACHING ASSISTANT(S) None

COURSE DESCRIPTION
Lectures will describe the anatomical structure of the human body. The student will be expected to learn the functional anatomy and apply their knowledge in clinical applications. Regions of the body will include the abdomen, thorax, all central nervous system structures, upper arm, with emphasis on the head and neck area.

PREREQUISITES None

COURSE REQUIREMENTS
Graduate students take all dental tests and quizzes. In addition, the students will be given additional short answer tests on assigned reading and will give a 30 minute PowerPoint presentation on a topic selected by the course director. Although lecture attendance is highly recommended, there is no required attendance. However, attendance during dissection is required.

Remediation Policy: Any student receiving a failing grade will be required to make up their deficiencies in accordance with their graduate director and in consultation with the course director.

Make-up Exams: Any student who is unable to attend an exam must contact the Course Director prior to the exam. Students with absences that are not excused will also not be given the opportunity to take the exam and the student will be assigned a zero for that test. If the student is given an excused absence, it is up to the student to contact the course director within 48 hours of their return to school to re-schedule a make-up exam. The format of the make-up exam is left to the discretion of the faculty and class curves will not be extended to any make-up exam.

COURSE LEARNING OBJECTIVES
- Describe the anatomical relationships of the musculature, nerves and arteries.
- Identify the bony anatomy of the skull.
- Be able to describe the anatomical dissection and functional significance to your colleagues.
- Understand, assimilate, and relate the anatomical significance of clinical cases.
- Understand the detail anatomy of one area of the body not dissected during the class (eg., perineum, pelvis, thigh, lower leg).

COURSE STRUCTURE
Course Format:
Lecture and Lab

Assessment and Grading Policy
Student grades will be based on:
Exam ............................................. 100 points
Exam ............................................. 100 points
Exam ............................................. 100 points
Exam ............................................. 100 points
Exam ............................................. 100 points
Peer Teaching .................................. Pass/Fail
Presentation.................................... 100 points

Five major examinations will be given in the course. Each may consist of multiple choice or labeling of diagrams. Peer teaching will be graded by their peers and the presentation will be graded by the faculty. Final numeric grades will be converted to letter grades according to the Texas A&M University Baylor College of Dentistry Center grading system.

Required Text:
Course manual/lecture outlines as provided and reference texts
Atlas of Human Anatomy by Frank Netter
The Interactive Color Atlas of the Human Skull by Hutchins

Other Required Readings:
None

Additional Recommended, but NOT required texts/materials:
Netter’s Head and Neck for Dentistry (Saunders)
Color Atlas of Anatomy by Rohen and Yokochi
Gray’s Anatomy for students by Drake, Vogl, and Mitchell
Crash Course, Anatomy by Granger and Dykes
Review of Gross Anatomy by Pansky
Thieme’s Atlas of Anatomy by Gilroy, MacPherson, and Ross
The Anatomical Basis of Dentistry by Liebgott
Clinically Oriented Anatomy by Moore
Textbook of Head and Neck Anatomy by Hiatt and Gartner

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**COURSE SCHEDULE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Session Title/Topic</th>
<th>Instructor(s) Last Name</th>
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<tbody>
<tr>
<td>8/20/12</td>
<td>Lecture 1: Introduction and Terminology</td>
<td>Spears</td>
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<tr>
<td></td>
<td>NO DISSECTION</td>
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<tr>
<td>8/21/12</td>
<td>Lecture 2: Skull, Muscles, &amp; Joints</td>
<td>Spears</td>
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<td>*Note, this is the only lecture that begins at 3pm</td>
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<td></td>
<td>NO DISSECTION</td>
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<tr>
<td>8/23/12</td>
<td>Lecture 3: Introduction to the Nervous System and Lab Orientation</td>
<td>Hutchins/Spears</td>
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<tr>
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<tr>
<td>8/27/12</td>
<td>Lecture 4: Back</td>
<td>Hutchins</td>
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<td>Team 1&amp;2 Dissection 2: Back</td>
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<tr>
<td>8/28/12</td>
<td>Lecture 5: Spinal Cord and Its Membranes</td>
<td>Hutchins</td>
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<td>Team 1 Dissection 3: Spinal Cord</td>
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<tr>
<td>8/30/12</td>
<td>Lecture 6: Posterior Shoulder</td>
<td>Spears</td>
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<td></td>
<td>Team 2 Dissection 4: Posterior Shoulder</td>
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<tr>
<td>9/3/12</td>
<td><strong>LABOR DAY HOLIDAY</strong></td>
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<td>9/4/12</td>
<td>Lecture 7: Anterior Shoulder Region, Axilla I</td>
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<td>Team 1 Dissection 5: Anterior Shoulder Region, Axilla I</td>
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<td>9/6/12</td>
<td><strong>Lab Quiz 1 (Dissections 2-4)</strong></td>
<td>Spears</td>
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<td>Lecture 8: Axilla II</td>
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<td>Team 2 Dissection 6: Axilla</td>
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<td>9/10/12</td>
<td><strong>Quiz 1 (Lectures 1-8)</strong></td>
<td>Spears</td>
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<td></td>
<td>Lecture 9: Brachium; Cubital Fossa, Elbow Joint</td>
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<td>Team 1 Dissection 7: Brachium; Cubital Fossa</td>
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<tr>
<td>9/11/12</td>
<td>Lecture 10: Thoracic Wall, Pleural Cavity, Mediastinum</td>
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<td>Team 2 Dissection 8: Mediastinum, Thoracic Wall, Pleural Cavity</td>
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<tr>
<td>9/13/12</td>
<td>Lecture 11: Brachial Plexus Lesions: Functional Loss</td>
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<td>Team 1&amp;2 Dissection 9: Review Lab</td>
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<td>EXAM 1 and PRACTICAL 1 (Lectures 1-11)</td>
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<td>Lecture 12: Middle Mediastinum, Pericardium, Heart</td>
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<td>9/20/12</td>
<td>Lecture 13: Superior and Posterior Mediastinum; Cranial Nerve Overview</td>
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<td>Team 2 Dissection 11: Superior and Posterior Mediastinum</td>
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<td><strong>Case Presentation 1 Due: Cause of Death Paper</strong></td>
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<td>9/24/12</td>
<td>Lecture 14: Neck I</td>
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<td>9/25/12</td>
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<td>Lecture 17: Abdomen I</td>
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<td>Team 1 Dissection 16: Vasculature, Acc. Organs, Posterior Abdominal Wall</td>
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<td>Lecture 21: Face II, Vasculature, and Glands</td>
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<td>Lecture 32: Autonomics of the Head &amp; Neck Revisited</td>
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<td>Lecture 39: Forensic Anatomy</td>
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<td><strong>FINAL WRITTEN EXAM AND PRACTICAL + SKULL PRACTICAL</strong> (Lectures 33-40)</td>
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CLASS SESSION(S)
With dental students:
Monday & Wednesday 2:00pm - 3:00pm, Tuesday & Thursday 2:00 – 4:00pm;
Friday 10:00am – 11:00am, Room 211 and Lab 30
With course director or instructors:
Tuesday 8:00am - 10:00am, Room 736

COURSE DIRECTOR
L. Bruno Ruest, PhD
214-828-8294, LBRuest@bcd.tamhsc.edu
Room 448, walk by or inquire by email for availability

INSTRUCTORS
Larry L. Bellinger, PhD
214-828-8322, lbellinger@bcd.tamhsc.edu
Room 483, By Appointment

M. Douglas Benson, PhD
214-828-8190, MDBenson@bcd.tamhsc.edu
Room 455, By Appointment

Jerry Feng, MD PhD
214-828-7235, JFeng@bcd.tamhsc.edu
Science Building Room 228, By Appointment

Phillip Kramer, PhD
214-828-8162, pkramer@bcd.tamhsc.edu
Room 493, By Appointment

Darren Roesch, PharmD
214-828-8324, Roesch@pharmacy.tamhsc.edu
Room 456, By Appointment

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
Advanced understanding of physiological principles of cells, muscle, nerve, blood, heart,
circulation, respiration, digestion, excretion, central and autonomic nervous system and
endocrinology in maintaining homeostasis.

The course is worth five units of credit.
PREREQUISITES
Successful completion of an undergraduate dental school physiology course (to be taken at the same time)

COURSE REQUIREMENTS
Residents are expected to attend all class and must tell the Course Director in advanced of a planned absence. Graduate students take all dental tests and quizzes. In addition, the students will be given additional short answer tests on assigned reading and will give a 30 minute PowerPoint presentation on a topic selected by the course director.

COURSE LEARNING OBJECTIVES
1. Provide a general understanding of cell membrane function in controlling movement of materials into and out of the cell, along with an understanding of membrane receptors and the mechanisms by which they modify cellular function.
2. Provide an understanding of the structure of the neuron and its processes, the ionic basis of the membrane potential, the nerve impulse and the mechanism of synaptic transmission.
3. Provide an understanding of muscle contraction mechanisms and control by both nerves and hormones.
4. Provide an understanding of cardiovascular function including reflex and hormonal controlling mechanisms on blood pressure. These will be related to the normal individual with some pathological alterations also discussed.
5. Provide an understanding of respiratory function related to the ventilation mechanisms, oxygen and carbon dioxide transport within the blood and control mechanisms.
6. Provide an understanding of gastrointestinal function as related to oral reflexes, salivary control, oral functions, digestive processes, and absorptive mechanisms along with nerve and local hormone regulation.
7. Provide an understanding of kidney function in electrolyte and body water regulation.
8. Provide an understanding of endocrine mechanisms relative to cell control, regulation of metabolism and nutrient supply, body water and electrolyte balance, growth and reproduction.

COURSE STRUCTURE

Course Format:
The course will consist of lectures, demonstrations/simulations, laboratory sessions, and independent and group work.

Assessment and Grading Policy
Student grades will be based on:
Major Progress Exams .................................................................800 points
Quizzes .................................................................80 points
Laboratory activities .............................................................55 points
Weekly exercises, homework and pop-quizzes .......................170 points
Comprehensive Final Exam ...............................................200 points

A= 93% and >; B+= 90 to 92%; B= 84 to 89%; C+= 81 to 83%; C= 75 to 80%; D= 70 to 74%; F= less than 70%. A grade of C or below is considered a failure for this course
Evaluation Criteria/Methods:
Dental Student Evaluation

1. Eight major progress exams worth a total of 800 points.
   Students must be able to demonstrate their knowledge of material presented in: (1) lectures, (2) demonstrations, simulations and the laboratory, and (3) the textbook. These exams may consist of a combination of multiple choice, true/false, matching, and/or completion of sentences, calculation and short discussion type questions. The class performance may be curved up to 83% on these exams. Students missing progress exams due to family emergencies or medical problems must contact the course director before the exam or as soon as possible. With an excused absence a make-up exam will be made available; however, there is no basis for a curve on make-up progress exams as they are unique.

2. Quizzes: there will be 10 scheduled quizzes worth 10 points each; the two lowest grades will be dropped. 80 pts
   Students must be able to demonstrate their knowledge of material presented in: (1) lectures, (2) demonstrations, simulations and the laboratory, and (3) the textbook. These quizzes may consist of a combination of multiple choice, true/false, matching, and/or completion of sentences, calculation and short discussion type questions. There are no curves applied to the quiz grades. Based on the College’s policies, there are no provisions for make-up quizzes (extenuating provisions can be made under special circumstances such as extended leaves for medical reason (i.e. maternity leave), with approval from the Director of the Biomedical Sciences Graduate Program and the Associate Dean of Graduate Studies and Research). A grade of “0” is given for missed quizzes which can be among the dropped quizzes.

3. Laboratories: there are 5 laboratories (10 points each)/1 mini laboratory (5 points) scheduled throughout the length of the course. Activities will happen either in the Lecture Hall 211 or in Lab 30 (instructors will provide the information in advance). Some of these activities may require team work and a team grade will be given in these cases. The maximum points for these laboratories will be 55 points.

4. Weekly exercises, homework and pop-quizzes: The teachers of this course believe in the added value of active learning for the long-term retention/comprehension of the learned material and helping in the application of advanced learning principles (critical thinking) and self-directed learning of future dental practitioners, as promoted by the American Dental Association and supported by the competency requirements delineated by the College. In addition to the laboratories, the faculty will provide in-class or take-home exercises. The completion of some of these exercises may require the application of the reverse lecture model in which students learn the material by themselves before coming to class. Some of these exercises may require team work. Unannounced quizzes (pop-quizzes) may be added to any lab or lecture at the discretion of the faculty. The value of each of these exercises and quizzes is at the discretion of the faculty teaching the specific section and the course director. A maximum of 10 points/week are anticipated for these activities for a maximum of 170 points total.

3. A comprehensive final exam worth 200 points (similar type of questions as described above)
4. Unannounced quizzes may be added to any lab or lecture at the discretion of the faculty.
5. Total course points available from dental portion: approximately 1135 to 1305 points
6. Professionalism: The course director also reserves the right to subjectively add 1% or less to the final grade based on student professionalism.

Graduate Additional Evaluations and PowerPoint presentation
1. Graduate students will be given eight additional short answer examinations over assigned reading assignments that are worth 25 points each and 40 points for the PowerPoint presentation for an additional 240 points.
Remediation:
Should an individual fail to achieve a passing grade (C+ or better) in the course, the failing students would have to remediate. Remediation may include additional work, such as answering supplemental questions, at the discretion of the course director and graduate program director.

Required Text:

Other Required Readings:
The instructors will hand out other materials and selected readings.

Additional Recommended, but NOT required texts/materials:
“Medical Physiology”, 2nd ed. 2009, Boron & Boulpaep
“Interactive Physiology, 10-system suite”, CD-ROM (highly recommended and inexpensive)
“Human Physiology: form cells to systems”; 5th Ed. or more recent, L. Sherwood
“Textbook of Medical Physiology”, 11th Ed. or more recent, AC Guyton and JE Hall

Required Policy Statements
FEDERAL EDUCATION RIGHTS & PRIVACY ACT (FERPA): The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy.

ACADEMIC INTEGRITY STATEMENT: Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, HSC, and the Graduate School policies regarding academic integrity and classroom conduct. Academic integrity is the pursuit of scholarly activity free from fraud and deception. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student’s responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of academic dishonesty.

THE AMERICANS WITH DISABILITIES ACT STATEMENT: The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room 126 of Koldus Building, or call 845-1637.

EQUAL OPPORTUNITY STATEMENT: The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 458-7280 or by mail at 301 Tarrow, 6th Floor, College Station, TX 77840.
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<th>Type</th>
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<td>Heart 6 Cardiac Cycle</td>
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<td>Smooth Muscle 1</td>
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<td>GI 1 Salivary Function 1</td>
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<td>GI 2 Salivary Function 2</td>
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March 17 - March 21, 2014 Spring Recess

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<td>GI 5 Stomach</td>
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<td>Endocrinology, Glands 8 Insulin - Metabolism</td>
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<td>Kramer</td>
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<td>16-May</td>
<td>10:00 AM</td>
<td>Q&amp;A &amp; <strong>Quiz 10</strong></td>
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*Comprehensive Exam in Finals Week*
Curriculum

Free Elective Courses
CLASS SESSION(S)
Tuesdays, 3pm-5pm and Thursdays, 4pm-5pm, Room 736

INSTRUCTOR
Bob Hutchins, Ph.D.
(214) 828-8275, bhutchins@bcd.tamhsc.edu
Room 401; None (open door policy)

OTHER PARTICIPATING FACULTY
Dr. David Grogan, dgrogan@bcd.tamhsc.edu
Dr. Emet Schneiderman, emet@bcd.tamhsc.edu
Dr. Robert Hinton, bhinton@bcd.tamhsc.edu
Dr. Peter Buschang, phbuschang@bcd.tamhsc.edu
Dr. Gil Triplett, gtriplett@bcd.tamhsc.edu

TEACHING ASSISTANTS
None

COURSE DESCRIPTION
This course teaches the functional anatomy of the orofacial structures. This course reviews important head and neck structures and discusses their functional importance with an emphasis on their clinical and surgical importance to dentistry.

PREREQUISITES
None

COURSE REQUIREMENTS
There is no required attendance. If you are unable to take an exam due to illness, you will need to contact the course director within 48 hours of returning to school. Any incomplete grades will need to be completed within the next semester per Baylor College of Dentistry policy.

COURSE LEARNING OBJECTIVES
The information provided in this course is designed to support the clinical practice of evidence-based dentistry.

The objectives of this course are to review the functional anatomy relevant to the head and neck. Information will be presented to support both the basic science coursework and the clinical training that the postgraduate student will be involved with during their time at Baylor College of Dentistry. This will include a self-paced review of gross anatomy, overviews of the functional anatomy of the oral cavity, emergency airway and spread of infection, overviews of the control and masticatory process, as well as an overview of nociception and the basis for olfaction and taste.

Therefore, the content of this course is meant to prepare and support the resident’s endeavors regardless of their clinical training program.
COURSE STRUCTURE
The course is split into between an initial working groups reviewing basic anatomy of the head and neck followed by a pass/fail exam. The remainder of the course is a series of team taught lectures given in a blended format of live and recorded lectures. Two 100 point exams are given over the lecture material using a variety of question formats (e.g., short essay, fill in the blank, multiple choice, etc).

Assessment and Grading Policy
Student grades will be based on:
Exam I ............................................................... Pass/Fail
Exam II ............................................................. 100 points
Exam III ............................................................. 100 points

Average of Exams II & III determine your course grade

There will be a total of 3 exams; the first will be pass/fail (All failures will need to be successfully remediated in order to receive a final grade). The remaining 2 exams will be written and your score on these latter 2 exams will determine your grade for this course.

Course Format:
Workgroups and lecture

Required Text:
None

Other Required Readings:
None

Additional Recommended, but NOT required texts/materials:
None

Required Policy Statements

FEDERAL EDUCATION RIGHTS & PRIVACY ACT (FERPA): The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy.

ACADEMIC INTEGRITY STATEMENT: Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, HSC, and the Graduate School policies regarding academic integrity and classroom conduct. Academic integrity is the pursuit of scholarly activity free from fraud and deception. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student’s responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of
academic dishonesty.

THE AMERICANS WITH DISABILITIES ACT STATEMENT: The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room 126 of Koldus Building, or call 845-1637.

EQUAL OPPORTUNITY STATEMENT: The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 458-7280 or by mail at 301 Tarrow, 6th Floor, College Station, TX 77840.
## COURSE SCHEDULE

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<tr>
<td>5</td>
<td>Tue. (3-5 pm) Intro &amp; Anatomy Workshop</td>
<td>Dr. Hutchins</td>
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<td>Thur. (4-5 pm)</td>
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<td>Tue. (3-5 pm) Anatomy Workshop – (Mock Test)</td>
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<td>Thur. (4-5 pm) Exam I (Anatomy Practical - pass/fail)</td>
<td>Dr. Hutchins</td>
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<td>19</td>
<td>Tue. (3-5 pm) Clinical Pharm &amp; Spread of Infection/Emergency Airway</td>
<td>Dr. Grogan**</td>
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<td>21</td>
<td>Thur. (4-5 pm) CN V, VII / Taste &amp; Olfaction (Recorded)</td>
<td>Drs. Schneiderman/</td>
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<td>Hutchins</td>
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<td>Tue. (3-5 pm) Autonemics / Nociception (Recorded)</td>
<td>Dr. Hutchins</td>
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<td>Thur. (4-5 pm) TMJ/ Motor Integration (control of mastication/speech)</td>
<td>Drs. Hinton/ Hutchins</td>
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<td><strong>August</strong></td>
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<td>2</td>
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<td>Dr. Buschang</td>
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<tr>
<td>4</td>
<td>Thur. (4-5 pm) Mastication</td>
<td>Dr. Buschang</td>
</tr>
<tr>
<td>9</td>
<td>Tue. (3-5 pm) Surgical Anatomy of the Oral Cavity with Emphasis on Nerves and Arteries that Need Protection during Implant Insertion</td>
<td>Dr. Triplett</td>
</tr>
<tr>
<td>11</td>
<td>Thur. (4-5 pm) Exam III – Final</td>
<td></td>
</tr>
</tbody>
</table>
CLASS SESSION(S)  
Tuesday and Thursday, 2:00 – 3:00 PM, Room 211

COURSE DIRECTOR  
L. Bruno Ruest, PhD  
214-828-8294,  
LBRuest@bcd.tamhsc.edu  
Room 448, walk by or inquire by email for availability

INSTRUCTORS  
Dr. Bruno Ruest, course director  
Dr. Kathy Svoboda

INVITED INSTRUCTORS  
Dr. Richard Finnell  
Dr. Angela Scheuerle

TEACHING ASSISTANT(S)  
Dr. Maria J. Serrano

COURSE DESCRIPTION  
The course focuses on the fundamentals of modern developmental biology, genetics, and embryology, focusing primarily on the morphogenesis of the craniofacial complex. Clinical correlation lectures on the genetic-environmental factors responsible for craniofacial dysmorphogenesis are included in this course. The craniofacial anomalies section of the course deals with abnormal development and growth of the craniofacial complex with a perspective towards normal craniofacial development. (1cr. hr – lectures only, 2 cr. hr lectures and journal club discussion)

PREREQUISITES  
None

COURSE REQUIREMENTS  
BMS graduate students:  
Attendance and participation in the weekly Journal Club is required for obtaining the additional credit hour.

Professionalism:  
The course director also reserves the right to subjectively add or remove 1% or less to the final grade based on student professionalism.

Student absence during exam or quiz:
Students missing an in-class exam or quiz due to family emergencies or medical problems (other issues should be discussed with the course director for acceptability) should contact the course director before the exam or as soon as possible. With an excused absence, remediation will be possible to compensate for the missing grade. The format will be at the discretion of the course director.

COURSE LEARNING OBJECTIVES
The goal of the course is to provide graduate students from the clinical and biomedical sciences with an overview of foundational information concerning human development, postnatal growth, and developmental anomalies. Emphasis is placed on normal and abnormal development, growth, and adaptation of the craniofacial complex.

COURSE STRUCTURE
The course is structured as a combination of lecture/discussion format. Students are expected to participate through discussions, questions, and critical review of reading material and overall subject matter. For BMS graduate students, more information is available below.

COURSE FORMAT
Assessment and Grading Policy:
Student grades will be based on:
2 In-Class Progress Exams ...................................................... 25% each
In-Class Comprehensive Exam ................................................. 50%
A= 92.5% and +; B+= 89.5 to 92%; B= 83.5 to 89%; C+= 80.5 to 83%; C= 74.5 to 80%; D= 70 to 74%; F= less than 70%. A C grade is considered a failure for this course

Unannounced quizzes may be added to any lecture at the discretion of the faculty, for bonus points.

Grades are posted on Blackboard

BMS graduate students register for one additional credit hour/course. Additional requirement for students taking the extra credit hours include:
• Assigned reading of original literature
• Participation in weekly Journal Club
  ○ Scheduled for Thursday at 3pm (subject to change depending on student and faculty schedules)
• Additional exam questions and/or a term paper at the end of the course(s).

Remediation: Should an individual fail to achieve a passing grade (C+ or better) in the course, the failing students would have to remediate. Remediation may include additional work, such as answering supplemental questions, at the discretion of the course director.

Course Materials:
Lectures are usually recorded with Camtesia and made available on Blackboard. Other materials may be added to the Blackboard class’ folder for student to consult.

Required Text:
None
Other Required Readings:
Additional reading may be assigned from journals and books placed on reserve in the BCD-BUMC Library.

Additional Recommended, but NOT required texts/materials:


Required Policy Statements:

FEDERAL EDUCATION RIGHTS & PRIVACY ACT (FERPA): The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy.

ACADEMIC INTEGRITY STATEMENT: Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, HSC, and the Graduate School policies regarding academic integrity and classroom conduct. Academic integrity is the pursuit of scholarly activity free from fraud and deception. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student’s responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of academic dishonesty.

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# CRANIOFACIAL GROWTH TRACK

## MECHANISMS OF DEVELOPMENT

**(BMS 5V69), 2-3 PM Tuesday and Thursday, Room 211**

**Dr. L. Bruno Ruest, Course Director**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Instructor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug. 20</td>
<td>Introduction – Overview of the Course- Introduction to Craniofacial Anomalies</td>
<td>Ruest</td>
</tr>
<tr>
<td>Aug. 22</td>
<td>Fertilization and Implantation</td>
<td>Svoboda</td>
</tr>
<tr>
<td>Aug. 27</td>
<td>Early Embryogenesis – Weeks 3 and 4</td>
<td>Svoboda</td>
</tr>
<tr>
<td>Aug. 29</td>
<td>Axial organization; Transcription and Growth Factors and cardiac development</td>
<td>Ruest</td>
</tr>
<tr>
<td>Sept. 3</td>
<td>Building a Face I- Weeks 5 and 6</td>
<td>Svoboda</td>
</tr>
<tr>
<td></td>
<td>Quiz 1</td>
<td></td>
</tr>
<tr>
<td>Sept. 5</td>
<td>Genetic Regulation of Body Plan I: – Central Nervous System</td>
<td>Ruest</td>
</tr>
<tr>
<td>Sept. 10</td>
<td>Genetic Regulation of Body Plan II: Development of the Brain and Cranial Nerves</td>
<td>Ruest</td>
</tr>
<tr>
<td>Sept. 12</td>
<td><strong>Environmental Factors in Early Embryogenesis</strong></td>
<td>Finnell</td>
</tr>
<tr>
<td>Sept. 17</td>
<td>Tissue Interactions and Cell Migration of Neural Crest</td>
<td>Ruest</td>
</tr>
<tr>
<td>Sept. 19</td>
<td>Neural Tube Defects; anencephaly; microcephaly</td>
<td>Finnell</td>
</tr>
<tr>
<td>Sept. 24</td>
<td>Building a Face II -Oral Region and Branchial Arches</td>
<td>Ruest</td>
</tr>
<tr>
<td></td>
<td>Quiz 2</td>
<td></td>
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<tr>
<td>Sept. 26</td>
<td>Tooth Development – general principles and signaling molecules</td>
<td>Ruest</td>
</tr>
<tr>
<td>Oct. 1</td>
<td>Genetics of Anomalies</td>
<td>Scheuerle</td>
</tr>
<tr>
<td>Oct. 3</td>
<td>In class Exam</td>
<td>Ruest</td>
</tr>
</tbody>
</table>
CLASS SESSION(S)
Tuesday and Thursday, 2:00 – 3:00 PM, Room 211

COURSE DIRECTOR
L. Bruno Ruest, PhD
214-828-8294, LBRuest@bcd.tamhsc.edu
Room 448, walk by or inquire by email for availability

INSTRUCTORS
Dr. Bruno Ruest, course director
Dr. Peter Buschang
Dr. David Carlson
Dr. Robert Hinton
Dr. Gabriele Mues
Dr. Lynne Opperman
Dr. Kathy Svoboda

INVITED INSTRUCTORS
Dr. Peter Gakunga
Dr. David Genecov

TEACHING ASSISTANT(S)
Dr. Maria J. Serrano

COURSE DESCRIPTION
The course focuses on the prenatal and postnatal growth of the craniofacial skeleton and related structures. Particular emphasis is placed on the epigenetic factors that influence craniofacial growth, form, and treatment. The craniofacial anomalies section of the course deals with abnormal development and growth of the craniofacial complex. Emphasis is placed on the definition and recognition of craniofacial syndromes and processes involved in the development, growth and adaptation of the craniofacial region; both prenatal and postnatal development and growth are considered, with emphasis on postnatal events; impact of orofacial function on growth; unique properties of the cartilages, skeletal structure and musculature of the craniofacial region. (1cr. hr – lectures only, 2 cr. hr lectures and journal club discussion)

PREREQUISITES
None

COURSE REQUIREMENTS
BMS graduate students:
Attendance and participation in the weekly Journal Club is required for obtaining the additional credit hour.

Professionalism:
The course director also reserves the right to subjectively add or remove 1% or less to the final grade based on student professionalism.

**Student absence during exam or quiz:**
Students missing an in-class exam or quiz due to family emergencies or medical problems (other issues should be discussed with the course director for acceptability) should contact the course director before the exam or as soon as possible. With an excused absence, remediation will be possible to compensate for the missing grade. The format will be at the discretion of the course director.

**COURSE LEARNING OBJECTIVES**
The goal of the course is to provide graduate students from the clinical and biomedical sciences with an overview of foundational information concerning human development, postnatal growth, and developmental anomalies. Emphasis is placed on normal and abnormal development, growth, and adaptation of the craniofacial complex.

**COURSE STRUCTURE**
The course is structured as a combination of lecture/discussion format. Students are expected to participate through discussions, questions, and critical review of reading material and overall subject matter. The students also participate in a team presentation at the end of the course.

**COURSE FORMAT**

**Assessment and Grading Policy:**

Student grades will be based on:
- In-Class Progress Exam .................................................. 20%
- Take Home Comprehensive Exam ................................. 40%
- Oral Presentation & Summary Document (1:1) ............... 40%

A= 92.5% and +; B+= 89.5 to 92%; B= 83.5 to 89%; C+= 80.5 to 83%; C= 74.5 to 80%; D= 70 to 74%; F= less than 70%. A C grade is considered a failure for this course.

Unannounced quizzes may be added to any lecture at the discretion of the faculty, for bonus points.

BMS graduate students register for one additional credit hour/course. Additional requirement for students taking the extra credit hours include:
- Assigned reading of original literature
- Participation in weekly Journal Club
  - Scheduled for Thursday at 3pm (subject to change depending on student and faculty schedules)
- Additional exam questions and/or a term paper at the end of the course(s).

**Remediation:** Should an individual fail to achieve a passing grade (C+ or better) in the course, the failing students would have to remediate. Remediation may include additional work, such as answering supplemental questions, at the discretion of the course director.

**Required Text:**
Other Required Readings:
Additional reading may be assigned from journals and books placed on reserve in the BCD-BUMC Library.

Additional Recommended, but NOT required texts/materials:


Required Policy Statements:
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# ADVANCED HUMAN CRANIOFACIAL DEVELOPMENT AND CRANIOFACIAL ANOMALIES

(BMS 5V73), 2-3 PM Tuesday and Thursday, Room 211  
Dr. L. Bruno Ruest, Course Director

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Lecturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 8</td>
<td>Organization of the Craniofacial Complex</td>
<td>Carlson</td>
</tr>
<tr>
<td>Oct. 10</td>
<td>Midface 1: Development of the Nasal Septum and Nasal Capsule</td>
<td>Carlson</td>
</tr>
<tr>
<td>Oct. 15</td>
<td>Chondrocranium: Growth of the Cranial Base</td>
<td>Gakunga</td>
</tr>
<tr>
<td>Oct. 17</td>
<td>Development of the Neurocranium, Desmocranium, Chondrocranium and Sutures &amp; Anomalies</td>
<td>Opperman</td>
</tr>
<tr>
<td>Oct. 22</td>
<td>Tooth Anomalies</td>
<td>Mues</td>
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<tr>
<td>Oct. 24</td>
<td>Facial Clefts</td>
<td>Genevoc</td>
</tr>
<tr>
<td>Oct. 29</td>
<td>Midface 2: Palatal Development, CLP</td>
<td>Svoboda</td>
</tr>
<tr>
<td>Oct. 31</td>
<td>In class exam, Oral presentation assignment</td>
<td>Ruest</td>
</tr>
<tr>
<td>Nov. 5</td>
<td>Midface 3: Postnatal Growth of the Maxillary Complex</td>
<td>Buschang</td>
</tr>
<tr>
<td>Nov. 7</td>
<td>Growth of the Dental Arches</td>
<td>Buschang</td>
</tr>
<tr>
<td>Nov. 12</td>
<td>Mandible 2: Postnatal Growth of the Mandible</td>
<td>Buschang</td>
</tr>
<tr>
<td>Nov. 14</td>
<td>Mandible 1: Development of the Mandible and Temporomandibular Joint</td>
<td>Ruest</td>
</tr>
<tr>
<td>Nov. 19</td>
<td>The Effects Of Muscles And Airway On Craniofacial Growth</td>
<td>Buschang</td>
</tr>
<tr>
<td>Nov. 21</td>
<td>Mandible 3: Orthopedic Effects on TMJ &amp; Mandibular Growth</td>
<td>Hinton</td>
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2-3 PM Tuesday and Thursday, Room 211

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov. 26</td>
<td>THANKSGIVING BREAK</td>
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<tr>
<td>Nov. 28</td>
<td>THANKSGIVING BREAK</td>
<td></td>
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<tr>
<td>Dec. 3</td>
<td>Student Presentations</td>
<td>Ruest</td>
</tr>
<tr>
<td>Dec. 5</td>
<td>Student Presentations</td>
<td>Ruest</td>
</tr>
<tr>
<td>Dec. 10</td>
<td>Student Presentations</td>
<td>Ruest</td>
</tr>
<tr>
<td>Dec. 12</td>
<td>Student Presentations</td>
<td>Ruest</td>
</tr>
<tr>
<td>Dec. 17</td>
<td>Student Presentations</td>
<td>Ruest</td>
</tr>
<tr>
<td>Dec. 19</td>
<td>Use for Student Presentations if we need it</td>
<td>Ruest</td>
</tr>
</tbody>
</table>
TEXAS A&M UNIVERSITY BAYLOR COLLEGE OF DENTISTRY
Physical Growth and Maturation
BIMS 5V75

CLASS SESSION(S)
Spring quarter on Tuesdays from 1:00-2:00. Lectures will be given in Room 736.

INSTRUCTOR
Course Director, Peter H. Buschang, Ph.D., 214-828-8122, phbuschang@bcd.tamhsc.edu, Room 720;
Office hour: Monday and Wednesday 4:00-5:00 PM.

TEACHING ASSISTANT(S) - None

COURSE DESCRIPTION
This course part of a sequence of courses pertaining to growth and development; it was designed as a survey course to introduce the student to physical growth and development. The purpose of the course is to initiate the student with the processes and changes that occur during postnatal development. Physical growth and maturation provides background information that can be used by the student to better understand craniofacial developments and it provides the basic information necessary for the student to assess patients’ growth and maturation.

PREREQUISITES - None

COURSE REQUIREMENTS
It is expected that students will attend all sessions. All work should be the original work of the student. There will be no remediation of this course; failure will require the course to be retaken at a future date.

COURSE LEARNING OBJECTIVES
1) Provide a basic understanding of processes controlling postnatal somatic growth and development.
2) Understand normal growth changes that occur and appreciate their clinical significance.
3) Provide background necessary for the student to evaluate patient’s physical growth status, growth rate, and maturation.
4) Understand basic hormonal control of physical growth
5) Have a basic understanding of the adaptation of the musculoskeletal system that occur during growth

Course Format:
The course will follow a lecture format with class participation and discussion.

Assessment and Grading Policy
Student grades will be based on:
One Final Exam (100% of the grade)
The final exam will consist of short answer, fill-in-the-blank, and multiple choice questions,

Required Text:
Handouts

Additional Recommended, but NOT required texts/materials:
Growth, Maturation and Physical Activity, RM Malina, C Bouchard, O Bar-Or (eds), Human Kinetics (2nd edition), Champaign, Il. 2004
Required Policy Statements

**FEDERAL EDUCATION RIGHTS & PRIVACY ACT (FERPA):** The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy.

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**COURSE SCHEDULE**

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 8</td>
<td>Physical Growth and Maturation I</td>
<td>Buschang</td>
</tr>
<tr>
<td>Jan 15</td>
<td>Physical Growth and Maturation II</td>
<td>Buschang</td>
</tr>
<tr>
<td>Jan 22</td>
<td>Assessment of Maturational Status</td>
<td>Buschang</td>
</tr>
<tr>
<td>Jan 29</td>
<td>Endocrinology of Growth 1</td>
<td>Bellinger</td>
</tr>
<tr>
<td>Feb 5</td>
<td>Endocrinology of Growth 2</td>
<td>Bellinger</td>
</tr>
<tr>
<td>Feb 12</td>
<td>Endocrinology of Growth 3</td>
<td>Bellinger</td>
</tr>
<tr>
<td>Feb 19</td>
<td>Growth and Adaptation of the Musculoskeletal System 1</td>
<td>Dechow</td>
</tr>
<tr>
<td>Feb 26</td>
<td>Growth and Adaptation of the Musculoskeletal System 2</td>
<td>Dechow</td>
</tr>
<tr>
<td>Mar 5</td>
<td>Growth and Adaptation of the Musculoskeletal System 3</td>
<td>Dechow</td>
</tr>
<tr>
<td>Mar 12</td>
<td>IN CLASS EXAM</td>
<td>Buschang</td>
</tr>
</tbody>
</table>
CLASS SESSION(S)
Fall - Time arranged between student and faculty.

INSTRUCTOR
Bob Hutchins, PhD
214-828-8275; bhutchins@bcd.tamhs.edu
Room 401; Open door policy

TEACHING ASSISTANT(S) None

COURSE DESCRIPTION
BIMS 5V78 is designed to teach anatomy using a conceptual and functional understanding of macroscopic structures. Prosections of human cadavers provides each student with the opportunity to gain a firsthand understanding of structures, their location, and how they relate to the overall function of the human body. Regional anatomy of the back upper limb, thorax, and abdomen are included in the course with a special emphasis on a thorough understanding of head and neck anatomy. Students will then teach this information to the professional students taking the course.

PREREQUISITES
All students must be registered for an M.S. or Ph.D. degree at Texas A&M University Health Science Center that have previously passed either Gross Anatomy 5603, 6640, or Phase I (COM).

COURSE REQUIREMENTS
Prosections will be produced for use in the class as determined between the student and the faculty.
Teaching within the anatomy labs will be expected and lectures may be assigned as determined between the student and faculty.
Additionally, the student will be asked to keep a portfolio during the semester where they can keep track of their teaching experiences and reflect on their own learning.

COURSE LEARNING OBJECTIVES
The objectives of this course are to provide a 3-dimensional understanding of the human body with emphasis on the head and neck and how these structures provide the foundation for the understanding of the pathophysiology of the body.

COURSE STRUCTURE
Individualized courses for single students wanting teaching experiences in Gross Anatomy.
Course Format:

Assessment and Grading Policy
Quality of prossections will be graded and the faculty will determine a grade based on the quality of teaching as well as the student’s portfolio.

GRADE SCALE
A letter grade will be assigned based on the numerical distribution listed in the Baylor College of Dentistry Bulletin:
- A = 93-100
- B+ = 90-92
- B = 84-89
- C+ = 81-83
- C = 75-80
- D = 70-74
- F = 00-69

Required Text: None

Other Required Readings:
To be determined by the course director

Additional Recommended, but NOT required texts/materials:
Course faculty may indicate additional sources of information (articles, books, videos, internet sites, etc.) that will provide the interested student with information about teaching in the anatomical sciences.

Required Policy Statements
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**COURSE SCHEDULE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Session Title/Topic</th>
<th>Instructor(s) L. Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/20/12</td>
<td>Lecture 1: Introduction and Terminology</td>
<td>Spears</td>
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<tr>
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<td>NO DISSECTION</td>
<td></td>
</tr>
<tr>
<td>8/21/12</td>
<td>Lecture 2: Skull, Muscles, &amp; Joints</td>
<td>Spears</td>
</tr>
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<td>*Note, this is the only lecture that begins at 3pm</td>
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<tr>
<td>8/23/12</td>
<td>Lecture 3: Introduction to the Nervous System and Lab Orientation</td>
<td>Hutchins/Spears</td>
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<td>Team 1&amp;2 Dissection 1: Back</td>
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<td>8/27/12</td>
<td>Lecture 4: Back</td>
<td>Hutchins</td>
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<td>Team 1&amp;2 Dissection 2: Back</td>
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<tr>
<td>8/28/12</td>
<td>Lecture 5: Spinal Cord and Its Membranes</td>
<td>Hutchins</td>
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<td>Team 1 Dissection 3: Spinal Cord</td>
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<tr>
<td>8/30/12</td>
<td>Lecture 6: Posterior Shoulder</td>
<td>Spears</td>
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<td>Team 2 Dissection 4: Posterior Shoulder</td>
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<tr>
<td>9/3/12</td>
<td><strong>LABOR DAY HOLIDAY</strong></td>
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<tr>
<td>9/4/12</td>
<td>Lecture 7: Anterior Shoulder Region, Axilla I</td>
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<td>Team 1 Dissection 5: Anterior Shoulder Region, Axilla I</td>
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<tr>
<td>9/6/12</td>
<td><strong>Lab Quiz 1 (Dissections 2-4)</strong></td>
<td>Spears</td>
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<td>Lecture 8: Axilla II</td>
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<td>Team 2 Dissection 6: Axilla</td>
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<tr>
<td>9/10/12</td>
<td><strong>Quiz 1 (Lectures 1-8)</strong></td>
<td>Spears</td>
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<td></td>
<td>Lecture 9: Brachium; Cubital Fossa, Elbow Joint</td>
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<td>Team 1 Dissection 7: Brachium; Cubital Fossa</td>
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<tr>
<td>9/11/12</td>
<td>Lecture 10: Thoracic Wall, Pleural Cavity, Mediastinum</td>
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<tr>
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<td>Team 2 Dissection 8: Mediastinum, Thoracic Wall, Pleural Cavity</td>
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<tr>
<td>9/13/12</td>
<td>Lecture 11: Brachial Plexus Lesions; Functional Loss</td>
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<td>Team 1&amp;2 Dissection 9: Review Lab</td>
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<td>9/17/12</td>
<td><strong>EXAM 1 and PRACTICAL 1 (Lectures 1-11)</strong></td>
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<td>9/18/12</td>
<td>Lecture 12: Middle Mediastinum, Pericardium, Heart</td>
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<td>Team 1 Dissection 10: Middle Mediastinum, Heart</td>
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<td>9/20/12</td>
<td>Lecture 13: Superior and Posterior Mediastinum; Cranial Nerve Overview</td>
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<td>Team 2 Dissection 11: Superior and Posterior Mediastinum</td>
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<td><strong>Case Presentation 1 Due: Cause of Death Paper</strong></td>
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<td>9/24/12</td>
<td>Lecture 14: Neck I</td>
<td>Hinton</td>
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<td>Team 1 Dissection 12: Neck I</td>
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<tr>
<td>9/25/12</td>
<td>Lecture 15: Neck II</td>
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<td>Team 2 Dissection 13: Neck II</td>
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<td>9/27/12</td>
<td><strong>Lab Quiz 2 (Dissections 10-12)</strong></td>
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<td>Lecture 16: Neck III</td>
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<td>Team 1 Dissection 14: Neck III</td>
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<td>10/1/12</td>
<td><strong>Quiz 2 (Lectures 12-16)</strong></td>
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<td>Lecture 17: Abdomen I</td>
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<td>Overview</td>
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<td>10/2/12</td>
<td>Lecture 18: Abdomen II</td>
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<td>Team 1 Dissection 16: Vasculature, Acc. Organs, Posterior Abdominal Wall</td>
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<td>10/4/12</td>
<td>Lecture 19: Neck Synthesis</td>
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<td>Team 1 and 2 Dissection 17: Q/A Review</td>
<td>Small Groups/ Lab</td>
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<td>Lecture 20: Face I</td>
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<td>Team 2 Dissection 18: Muscles of Facial Expression</td>
<td>Spears</td>
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<td>Lecture 21: Face II, Vasculature, and Glands</td>
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<td>Lecture 22: Infratemporal Region I</td>
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<td>10/16/12</td>
<td>Lecture 23: Infratemporal Region II / Temporomandibular Joint</td>
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<td>Lecture 24: Intracranial Region</td>
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<td>Quiz 3 (Lectures 20-24)</td>
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<td>Lecture 25: Brain</td>
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<td>Team 1 Dissection 23: Brain</td>
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<td>Case Presentation 2: Small Group Discussions</td>
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<td>10/23/12</td>
<td>Lecture 26: Orbit</td>
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<td>Clinical Correlation</td>
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<td>10/25/12</td>
<td>Trigeminal Nerve Review</td>
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<td>(Lectures 20-26 + H&amp;N Review)</td>
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<td>10/30/12</td>
<td>Lecture 27: Pharynx and Larynx</td>
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<td>Team 1 Dissection 25: Pharynx and Larynx</td>
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<tr>
<td>11/1/12</td>
<td>Lecture 28: Tongue and Floor of Mouth; Submandibular Region</td>
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<td>Team 2 Dissection 26: Tongue and Floor of Mouth, Submandibular Region</td>
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<td>11/5/12</td>
<td>Lecture 29: Nasal Cavity, Pterygopalatine Fossa I</td>
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<td>Team 1 Dissection 27: Nasal Cavity, Pterygopalatine Fossa I</td>
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<td>11/6/12</td>
<td>Lecture 30: Pterygopalatine Fossa II and Palate</td>
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<td>Team 2 Dissection 28: Pterygopalatine Fossa and Palate</td>
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<tr>
<td>11/8/12</td>
<td>Lecture 31: Ear and Facial Nerve Overview</td>
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<td>Lecture 32: Autonomics of the Head &amp; Neck Revisited</td>
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<td>Team 1&amp;2 Dissection 29: Ear Models and Review</td>
<td>Small Groups</td>
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<td>11/12/12</td>
<td>EXAM 4: Comprehensive Head and Neck Exam and Practical</td>
<td>Hinton</td>
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<td>(Lectures 27-32 + H&amp;N Review)</td>
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<td>EXAM 4 Re-Take is scheduled for Friday, Dec. 2, 1pm</td>
<td>Spears</td>
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<td>11/13/12</td>
<td>Lecture 33: Oral Cavity Surface Features</td>
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<td>Team 1&amp;2 Dissection 30: Intra/Extra Oral Exam in the Living</td>
<td>Spears</td>
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<td>11/15/12</td>
<td>Lecture 34: Mastication and Deglutition</td>
<td>Hinton</td>
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<td>11/19-23/12</td>
<td>THANKSGIVING HOLIDAY BREAK</td>
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<td>11/26/12</td>
<td>Lecture 35: Surgical Anatomy of the Head</td>
<td>Hutchins</td>
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<td>Clinical Correlation</td>
<td>Abraham</td>
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<td>11/27/12</td>
<td>Lecture 36: Anatomy of Local Anesthesia</td>
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<td>Lecture 37: Fascial Layers and Spaces of the Head</td>
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<td>Clinical Correlation: Fascia of the Head and Neck and the Spread of Infection</td>
<td>Grogan</td>
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<td>12/3/12</td>
<td>Quiz 4 (Lectures 33-37)</td>
<td>Spears</td>
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<td>Lecture 38: Cross Sectional Anatomy</td>
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<td>12/4/12</td>
<td>Lecture 39: Forensic Anatomy</td>
<td>Hinton/ Kessler</td>
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<td>Case Presentation 3: Small Group Discussions</td>
<td>Small Groups</td>
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<td>12/6/12</td>
<td>Lecture 40: Systemic Overview of H&amp;N Anatomy</td>
<td>Hinton</td>
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<tr>
<td>12/10/12</td>
<td>FINAL WRITTEN EXAM AND PRACTICAL + SKULL PRACTICAL (Lectures 33-40)</td>
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</table>
CLASS SESSION(S)
Class days and times vary throughout the Fall and Spring Semesters

INSTRUCTOR
Paul C. Dechow, PhD
214-828-8993, pdechow@bcd.tamhsc.edu
Room 408; By appointment

TEACHING ASSISTANT(S)
Robert Hinton, PhD
214-828-8272, bhinton@bcd.tamhsc.edu

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Emet Schneiderman, PhD
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Robert Spears, PhD
214-828-8297, rspears@bcd.tamhsc.edu

COURSE DESCRIPTION
Introduction to Evidence-Based Dentistry and Clinical Research (IEBDCR) is a year-long course for graduate students consisting of large group and interactive lecture sessions, and small group discussions and seminars. A progress grade will be given at the end of the first semester followed by a final grade of record at the end of the year. The main goal of the EBD curriculum at HSC-Baylor College of Dentistry is to provide dentists-in-training with the knowledge and tools to take advantage of constantly increasing knowledge in clinical, material, and basic biomedical sciences. Clinical training in dental school teaches the current state of the discipline but cannot predict the continuing advances that will improve dental care in the future. A dental researcher MUST be equipped to evaluate and take advantage of ongoing and future research in order to make competent decisions concerning patient diagnosis and care. The knowledge needed to do this has often not been part of traditional graduate training, but has now become essential as rapid advances in all fields of science require a modern clinician to be able to evaluate and apply advances in their fields of dental care. This course has two primary aims. The first is to provide a foundation of knowledge important for the effective practice of EBD. The second is to begin to develop the practical skills needed for such practice. Foundational knowledge includes a background in applied clinical epidemiology, biostatistics, and some areas of modern dental and craniofacial research. The development of practical skills will emphasize (1) how to formulate a focused clinical research question, (2) how to search the dental literature to find the best evidence, and (3) how to evaluate evidence to answer the question.

PREREQUISITES
None

COURSE REQUIREMENTS
Graduate students take all dental tests and quizzes. In addition, the students will be given additional short answer tests on assigned reading and will give a 30 minute PowerPoint presentation on a topic selected by the course director.

**Attendance Policy:** Attendance is required at all sessions. Because grades will be partially based on responses to questions in class (using clickers), missing a class will result in a decreased point total for determining a final grade.

**Remediation Policy:** If a student fails the course and has had excessive absences (more than three (3) unexcused) per semester, no remediation will be offered and the course must be repeated the following year. In all other cases, the matter will go to the Student Promotion Committee (SPC) for review. If the SPC decides that the student may repeat the course for remediation of the failing grade, a special course will be offered in the Summer Semester. A reading list will be provided and the student will meet each week with the faculty to discuss the assigned material. The student will be assessed weekly to determine whether his/her preparation has been adequate to take a final examination given by the faculty in an oral or written format. Successful remediation will require a passing grade on this examination.

**COURSE LEARNING OBJECTIVES**
The course objective for Introduction to Evidence-Based Dentistry and Clinical Research is to understand the purpose of EBD and its potential for application in a clinical setting. The student should understand the basics of clinical epidemiology and biostatistics as they relate to EBD and be able to formulate meaningful clinical questions in the context of EBD. The student should be able to search effectively the electronic dental literature to find answers to these questions. Apply basic principles of statistics and critical thinking to evaluating the dental literature, clinical decision making, and evidence-based dentistry. The student should be able to perform detailed written evaluations of research articles related to clinical dentistry and have a working knowledge of evidence related to selected current hot research topics in modern dental treatment.

**COURSE STRUCTURE**
The course will consist of lectures, seminars, and small group sessions.

**Course Format:**

**Assessment and Grading Policy**
Student grades will be based on:

- Attendance and audience responses .........................10%
- Small group session assignments .........................30%
- Exams .......................................................60%
  
  - 15% Exam1 (Midterm) October 22, 2013
  - 15% Exam2 (Final) TBD
  - 15% Exam3 (Midterm) March 11, 2014
  - 15% Exam4 (Final) TBD

Grading will follow the standards scale used at HSC-BCD. A progress grade will be given at the end of the first semester. Since the course is a D1 dental school course, some additional content is provided for graduate students. Graduate students have a small number of additional seminar sections per semester (at least one per exam period) with additional questions targeted for them on each exam.

**Required Text:**

Other Required Readings:
The textbook will be supplemented with other readings throughout the course.

Additional Recommended, but NOT required texts/materials:

Required Policy Statements
FEDERAL EDUCATION RIGHTS & PRIVACY ACT (FERPA): The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy.

ACADEMIC INTEGRITY STATEMENT: Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, HSC, and the Graduate School policies regarding academic integrity and classroom conduct. Academic integrity is the pursuit of scholarly activity free from fraud and deception. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student’s responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of academic dishonesty.

THE AMERICANS WITH DISABILITIES ACT STATEMENT: The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room 126 of Koldus Building, or call 845-1637.

EQUAL OPPORTUNITY STATEMENT: The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 458-7280 or by mail at 301 Tarrow, 6th Floor, College Station, TX 77840.
## COURSE SCHEDULE

### Course Sessions - Fall Semester

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<th>Day</th>
<th>Time</th>
<th>Session Title</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>8/20</td>
<td>Tu</td>
<td>8-9</td>
<td>What is evidence-based dentistry?</td>
<td>Dechow</td>
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<tr>
<td>8/27</td>
<td>Tu</td>
<td>8-9</td>
<td>PICO (Patient, Intervention, Comparison, Outcome): Asking Good Questions</td>
<td>Dechow</td>
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<tr>
<td>9/3</td>
<td>Tu</td>
<td>8-9</td>
<td>PICO: Asking Good Questions, Part 2</td>
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<tr>
<td>9/10</td>
<td>Tu</td>
<td>8-9</td>
<td>Incidence, Prevalence and Risk</td>
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<td>9/17</td>
<td>Tu</td>
<td>8-9</td>
<td>Descriptive Studies</td>
<td>Bufford</td>
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<td>9/24</td>
<td>Tu</td>
<td>8-9</td>
<td>Bias and Confounding</td>
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<tr>
<td>10/1</td>
<td>Tu</td>
<td>8-9</td>
<td>Cohort Studies</td>
<td>Dechow</td>
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<td>10/8</td>
<td>Tu</td>
<td>8-9</td>
<td>Case-control Studies</td>
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<td>10/22</td>
<td>Tu</td>
<td>8-9</td>
<td>Searching for EBD Part 1</td>
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<tr>
<td>10/29</td>
<td>Tu</td>
<td>8-9</td>
<td>Searching for EBD Part 2</td>
<td>Dechow</td>
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<td>11/8</td>
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<td>11-12</td>
<td>Experimental Studies 1</td>
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<td>3-4</td>
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<td>11/22</td>
<td>F</td>
<td>11-12</td>
<td>Causal Association</td>
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<td>Thanksgiving Recess</td>
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<td>12/6</td>
<td>F</td>
<td>11-12</td>
<td>Detecting Disease</td>
<td>Dechow</td>
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<td>F</td>
<td>11-12</td>
<td>Review</td>
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#### Small Group Session 1

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<tr>
<td>9/13</td>
<td>F</td>
<td>8-9</td>
<td>Session 1, Groups 1,3,5, Rooms 309-2, 309-3, 369</td>
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<td>8-9</td>
<td>Session 1, Groups 7,9,11, Rooms 309-2, 309-3, 369</td>
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#### Small Group Session 2

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Time</th>
<th>Session Title</th>
<th>Instructor</th>
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<tr>
<td>12/3</td>
<td>T</td>
<td>10-11</td>
<td>Session 2, Groups 1,3,5, Rooms 309-2, 309-3, 369</td>
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<td>12/10</td>
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<td>10-11</td>
<td>Session 2, Groups 7,9,11, Rooms 309-2, 309-3, 369</td>
<td>Faculty</td>
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<td>11-12 Session 2, Groups 8,10,12, Rooms 309-2, 309-3, 369</td>
<td>Faculty</td>
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### Course Sessions - Spring Semester

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Time</th>
<th>Session Title</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>1/14</td>
<td>Tu</td>
<td>1-2</td>
<td>Exam Review</td>
<td>Dechow</td>
</tr>
<tr>
<td>1/21</td>
<td>Tu</td>
<td>1-2</td>
<td>Sources and Levels of Evidence</td>
<td>Dechow</td>
</tr>
<tr>
<td>1/28</td>
<td>Tu</td>
<td>1-2</td>
<td>Paper Review – Abstract and Introduction</td>
<td>Dechow</td>
</tr>
<tr>
<td>2/4</td>
<td>Tu</td>
<td>1-2</td>
<td>Paper Review – Methods and Materials</td>
<td>Dechow</td>
</tr>
<tr>
<td>2/11</td>
<td>Tu</td>
<td>1-2</td>
<td>Paper Review - Results</td>
<td>Dechow</td>
</tr>
<tr>
<td>2/18</td>
<td>Tu</td>
<td>1-2</td>
<td>Paper Review – Discussion, Conclusions, and Clinical Application</td>
<td>Dechow</td>
</tr>
<tr>
<td>2/25</td>
<td>Tu</td>
<td>1-2</td>
<td>Systematic Reviews and Guidelines</td>
<td>Dechow</td>
</tr>
<tr>
<td>3/4</td>
<td>Tu</td>
<td>1-2</td>
<td>Critically Appraised Topics (CATs)</td>
<td>Dechow</td>
</tr>
<tr>
<td>3/11</td>
<td>Tu</td>
<td>1-2</td>
<td>Exam 3</td>
<td>Dechow</td>
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<tr>
<td>3/18</td>
<td>Tu</td>
<td>1-2</td>
<td>Spring semester Recess</td>
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<td>3/25</td>
<td>Tu</td>
<td>1-2</td>
<td>Exam Review</td>
<td>Dechow</td>
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<tr>
<td>4/1</td>
<td>Tu</td>
<td>1-2</td>
<td>Variables and Variation</td>
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<tr>
<td>4/8</td>
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<tr>
<td>4/14</td>
<td>Tu</td>
<td>1-2</td>
<td>Variation and Comparing Groups</td>
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<tr>
<td>4/22</td>
<td>Tu</td>
<td>1-2</td>
<td>Statistical Tests and Error</td>
<td>Dechow</td>
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<tr>
<td>4/29</td>
<td>Tu</td>
<td>1-2</td>
<td>No class</td>
<td>Dechow</td>
</tr>
<tr>
<td>5/6</td>
<td>Tu</td>
<td>1-2</td>
<td>Application of EBD</td>
<td>Dechow</td>
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<tr>
<td>5/13</td>
<td>Tu</td>
<td>1-2</td>
<td>EBD Review</td>
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<td>1/15</td>
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<td>1/29</td>
<td>W</td>
<td>3-4</td>
<td>Session 4, Groups 1,3,5</td>
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<td>2/5</td>
<td>W</td>
<td>3-4</td>
<td>Session 4, Groups 7,9,11</td>
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<td>2/12</td>
<td>W</td>
<td>3-4</td>
<td>Session 5, Groups 1,3,5</td>
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<td>3-4</td>
<td>Session 5, Groups 7,9,11</td>
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<td>Session 6, Groups 1,3,5</td>
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<td>3-4</td>
<td>Session 6, Groups 7,9,11</td>
<td>Rooms 309-2, 309-3, 369</td>
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<td>3/24</td>
<td>M</td>
<td>3-4</td>
<td>Session 7, Groups 1,3,5</td>
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<td>3/31</td>
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<td>3-4</td>
<td>Session 7, Groups 7,9,11</td>
<td>Rooms 309-2, 309-3, 369</td>
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<td>Session 8, Groups 1,3,5</td>
<td>Rooms 309-2, 309-3, 369</td>
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<td>M</td>
<td>3-4</td>
<td>Session 8, Groups 7,9,11</td>
<td>Rooms 309-2, 309-3, 369</td>
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<td>4/21</td>
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<td>3-4</td>
<td>Session 9, Groups 1,3,5</td>
<td>Rooms 309-2, 309-3, 369</td>
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<td>4/28</td>
<td>M</td>
<td>3-4</td>
<td>Session 9, Groups 7,9,11</td>
<td>Rooms 309-2, 309-3, 369</td>
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TEXAS A&M UNIVERSITY BAYLOR COLLEGE OF DENTISTRY
BMS 5V81
Current Issues in Bone and Mineralized Tissue Biology

CLASS SESSION(S)
Thursday 12-1PM

INSTRUCTOR
Paul C. Dechow, PhD, Course Director
214-828-8993, pdechow@bcd.tamhsc.edu
Room 408, By Appointment

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
Topics of current importance in bone and mineralized tissue biology.
Dechow – Variable 0.5 or 1 sem. hr. Fall/Spring, as announced.

PREREQUISITES
None

COURSE REQUIREMENTS
Graduate students are expected to attend all classes and must tell the Course Director in advanced of a planned absence. One absence per semester is permitted. Beyond one absence, a written article evaluation based on the assigned article of the day must be completed to make up for the student’s absence. Students are required to make PowerPoint presentations about assigned articles and facilitate critical class room discussions.

COURSE LEARNING OBJECTIVES
The objective of this course is to provide a forum for the discussion of current issues in mineralized tissue research, with an emphasis on research advances related to dental and craniofacial research. As an additional objective, the course will allow students and fellows to develop presentation skills in a collegial atmosphere.

COURSE STRUCTURE

Course Format:
Seminar

Assessment and Grading Policy:
Student grades will be based on:
Attendance and participation in discussion……………………. 50 points
Presentations of assigned articles……………………………. 50 points

- This course is taught as an interactive seminar using a journal club approach to the examination of current issues in mineralized tissue research.
- Each week a student is responsible for presenting an assigned journal article on a designated topic and moderation of the ensuing critical discussion.
• Evaluation is based on these presentations (50%) and on classroom participation and attendance (50%). Students are expected to read all articles prior to the classroom discussions.
• If students cannot attend a class, please inform Dr. Dechow in advance. Laboratory experiments are not a valid excuse to miss this class. Plan your experiments so that you will be able to attend.

Required Text:
None

Other Required Readings:
The instructor hands out materials and selected readings developed each time this course is given.

Additional Recommended, but NOT required texts/materials:
None

Required Policy Statements
FEDERAL EDUCATION RIGHTS & PRIVACY ACT (FERPA): The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their HSC assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy.

ACADEMIC INTEGRITY STATEMENT: Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, HSC, and the Graduate School policies regarding academic integrity and classroom conduct. Academic integrity is the pursuit of scholarly activity free from fraud and deception. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student’s responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of academic dishonesty.

THE AMERICANS WITH DISABILITIES ACT STATEMENT: The Americans with Disabilities Act (ADA) is a federal antidiscrimination statue that provides comprehensive civil protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room 126 of Koldus Building, or call 845-1637.

EQUAL OPPORTUNITY STATEMENT: The Texas A&M Health Science Center is an Equal Opportunity/ Affirmative Action employer. Inquiries regarding nondiscrimination policies may be directed to the Human Resources Officer by phone at (979) 458-7280 or by mail at 301 Tarrow, 6th Floor, College Station, TX 77840.
**COURSE SCHEDULE** (for 1 credit; sessions are cut in half for 0.5 credit)

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic</th>
<th>Responsible Person</th>
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<tbody>
<tr>
<td>January 13</td>
<td>Assigned article</td>
<td>Paul Dechow and assigned graduate student</td>
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<tr>
<td>January 20</td>
<td>Assigned article</td>
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<tr>
<td>January 27</td>
<td>Assigned article</td>
<td>Paul Dechow and assigned graduate student</td>
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<tr>
<td>February 3</td>
<td>Assigned article</td>
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<tr>
<td>February 10</td>
<td>Assigned article</td>
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<td>February 17</td>
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<td>April 28</td>
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<tr>
<td>May 5</td>
<td>Assigned article</td>
<td>Paul Dechow and assigned graduate student</td>
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CLASS SESSION(S)
Fall, Spring and Summer Semesters
Time arranged between student and faculty

INSTRUCTOR
Faculty

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
Individualized courses for small groups of students involved in in-depth study of specific topics in the biomedical sciences.

PREREQUISITES
All students must be registered for an M.S. or Ph.D. degree in Biomedical Sciences

COURSE REQUIREMENTS
This course will address student learning outcomes by showing they will be able to define, explain and apply the key concepts in their field of specialization.

COURSE LEARNING OBJECTIVES
Statement of the Learning Objectives for the Course
1. Completion of elective coursework related to their specialty field
2. Participation in seminars or journal club presentations

COURSE STRUCTURE
Reading and discussion of current literature pertinent to the topic of the seminar. Presentation of papers on selected topics is required for all students.

Course Format: seminar

Assessment and Grading Policy
Homework will be given periodically, and will be graded. Journal discussion and reading assignment for BMS graduate students will be graded by the faculty member and/or by the student’s thesis supervisors. Sometimes writing assignments are given or oral exams. Grades will be assigned for each course individually.
GRADE SCALE
A letter grade will be assigned based on the numerical distribution listed in the Baylor College of Dentistry Bulletin:

A = 93-100
B+ = 90-92
B = 84-89
C+ = 81-83
C = 75-80
D = 70-74
F = 00-69

Required Text:
None

Other Required Readings:
Readings will be assigned from journals and books available on reserve in the BCD Library or online as necessary.
All reading assignments must be completed before each scheduled session, in preparation for discussion.

Additional Recommended, but NOT required texts/materials:
Lead participants may indicate additional sources of information (articles, books, videos, internet sites, etc.) that will provide the interested student with additional information about the topic.

Required Policy Statements
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**COURSE SCHEDULE**

Schedule arranged between student and faculty.
TEXAS A&M UNIVERSITY BAYLOR COLLEGE OF DENTISTRY
Directed Readings
BMS 5V93, 5V94 and 5V95

CLASS SESSION(S)
Fall, Spring and Summer Semesters
Time arranged between student and faculty

INSTRUCTOR
Faculty

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
Individualized courses for single students involved in in-depth study of specific topics in the biomedical sciences.

PREREQUISITES
All students must be registered for an M.S. or Ph.D. degree in Biomedical Sciences

COURSE REQUIREMENTS
Students will be able to define, explain, and apply the key concepts and fundamental principles of modern biology related to dental and craniofacial research. They will define a question or area. The faculty will assign a reading list, and then meet with the students to discuss the topic. The course will be used to fulfill a preliminary examination for PhD candidates. The students usually write essays on specific topics that in some cases are used as a review manuscript.

COURSE LEARNING OBJECTIVES
Statement of the Learning Objectives for the Course
   Passing preliminary examinations (PhD candidates: 2 cognate exams and a dissertation proposal)

COURSE STRUCTURE
Course Format: Reading assignments from a designated topic arranged between the student and faculty. The student and faculty meet several times to discuss the topic and the student writes a literature review of the topic.

Assessment and Grading Policy
Homework will be given periodically, and will be graded. Journal discussion and reading assignment for BMS graduate students will be graded by the faculty member and/or by the student’s thesis supervisors. Sometimes writing assignments are given or oral exams. Grades will be assigned for each course individually.
GRADE SCALE
A letter grade will be assigned based on the numerical distribution listed in the Baylor College of Dentistry Bulletin:

A    =    93-100
B+   =    90-92
B    =    84-89
C+   =    81-83
C    =    75-80
D    =    70-74
F    =    00-69

Required Text:
None

Other Required Readings:
Readings will be assigned from journals and books available on reserve in the BCD Library or online as necessary.
All reading assignments must be completed before each scheduled session, in preparation for discussion.

Additional Recommended, but NOT required texts/materials:
Lead participants may indicate additional sources of information (articles, books, videos, internet sites, etc.) that will provide the interested student with additional information about the topic.

Required Policy Statements
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COURSE SCHEDULE
Schedule arranged between student and faculty.
TEXAS A&M UNIVERSITY BAYLOR COLLEGE OF DENTISTRY
Research and Special Problems
BMS 5V96 and 5V97

CLASS SESSION(S)
Fall, Spring and Summer Semester- Time arranged between student and faculty.

INSTRUCTOR
Faculty

TEACHING ASSISTANT(S) None or it depends on the topic

COURSE DESCRIPTION
Student directed research short courses.

PREREQUISITES
All students must be registered for an M.S. or Ph.D. degree in Biomedical Sciences

COURSE REQUIREMENTS
Are determined by the faculty member directing the course.

COURSE LEARNING OBJECTIVES
The Learning Objectives are determined by the faculty.

COURSE STRUCTURE
Research protocols will be discussed with the faculty advisor. Experimental design, techniques, and lab protocols will be used in the effort to train the student on modern investigation procedures.

Course Format: Usually a combination of laboratory experiences and reading material.

Assessment and Grading Policy
Lab notebooks will be reviewed periodically, and may be graded. Journal discussion and reading assignment for BMS graduate students will be graded by a faculty member and/or by the student’s thesis supervisors. The students will write a report of their research experience. Grades will be assigned for each course individually.

GRADE SCALE
A letter grade will be assigned based on the numerical distribution listed in the Baylor College of Dentistry Bulletin:
A = 93-100
B+ = 90-92
B = 84-89
C+ = 81-83
C = 75-80
D = 70-74
F = 00-69
Required Text:
None

Other Required Readings:

Additional Recommended, but NOT required texts/materials:
Lead participants may indicate additional sources of information (articles, books, videos, internet sites, etc.) that will provide the interested student with additional information about the research topic.

Required Policy Statements

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COURSE SCHEDULE
Schedule arranged between student and faculty.
CLASS SESSION(S)
Fall, Spring and Summer Semester- Time arranged between student and faculty.

INSTRUCTOR
Mentor and Dissertation Committee

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
This course is used by students that have achieved candidacy for research and preparation of the PhD dissertation.

PREREQUISITES
All students must be registered for an M.S. or Ph.D. degree in Biomedical Sciences

COURSE REQUIREMENTS
The student needs to understand the literature for their thesis topic.

COURSE LEARNING OBJECTIVES
Complete literature review for thesis topic.

Complete research specific aims as outlined in the thesis proposal.
Write thesis with the approval of the advisory committee.

COURSE STRUCTURE
Self-study under the direction of the mentor and thesis advisory committee.

COURSE FORMAT
See mentor

ASSESSMENT AND GRADING POLICY
The thesis committee tracks progress of the student along with the thesis advisor.
Grades will be assigned for each course individually. Assessment of progress will be made at thesis advisory committee meetings. The student will present a progress report each semester.

GRADE SCALE
A letter grade will be assigned based on the numerical distribution listed in the Texas A&M Health Science Center Catalog:
A = 93-100
B+ = 90-92
B = 84-89
C+ = 81-83
C = 75-80
D = 70-74
F = 00-69

REQUIRED TEXT:
None

OTHER REQUIRED READINGS:
All papers cited in the dissertation.

ADDITIONAL RECOMMENDED, BUT NOT REQUIRED TEXTS/MATERIALS:
Thesis 101

REQUIRED POLICY STATEMENTS

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COURSE SCHEDULE
Time arranged between student and thesis advisory committee.
TEXAS A&M UNIVERSITY BAYLOR COLLEGE OF DENTISTRY  
Microscopy, Imaging, and Associated Techniques  
BIMS 5127

CLASS SESSION(S)  
Mondays, 3:00PM – 5:00PM, BMS Conference Room  
Spring Semester

INSTRUCTORS  
Robert Spears, PhD  
214-828-8297, rspears@bcd.tamhsc.edu  
Room 449  
Kathy Svoboda, PhD, ksvoboda@bcd.tamhsc.edu  
Room 430

COURSE DESCRIPTION  
This course is designed to acquaint students with the basic principles of the various aspects of microscopy and the use of the microscopes. While different teaching tools, such as textbooks, lectures, and handouts, will be utilized, the main focus of the course will consist of learning via a “hands-on” approach that will allow each student to develop basic prerequisite skills necessary to operate and conduct experiments using the various microscopes housed within the school.

PREREQUISITES  
None

COURSE REQUIREMENTS  
There are only a few requirements for you in this course. First, attendance is mandatory, and any class session missed will be required to be made up at a subsequent time agreed to by both the course director and student.

All work pertaining to the required project must be the original work of the student as performed for this course. Usage of work performed previously is not allowed.

COURSE LEARNING OBJECTIVES  
A certain level of achievement will be expected from you in this course. However, the amount of knowledge obtained will be dependent upon the student, as part of this course will be tailored to meet any specific requirement or needs of each individual student as it relates to preparing for their eventual research program.

Class will typically meet in one of two ways. First, a typical lecture format will be utilized to discuss the didactic portion of the course. This will typically be done using power point presentations that will provide information necessary to understand the theoretical usage of the microscopes. Secondly, small group session will be arranged such that student can learn in a “hands-on” manner how the microscopes work and how they are used. Often times the student will be divided into multiple small groups since it is difficult to get a large group of students in the microscope rooms at one time.

Course Format:
Assessment and Grading Policy
Student grades for this course will be assigned based on student performance on written examinations and the project assignment. Letter grades are assigned in accordance with the grade scale adopted by Baylor College of Dentistry. Additionally, inappropriate professional behavior demonstrated by any student may be taken into consideration as individual situations warrant; this is primarily (but not exclusively) applicable to students whose academic performance is consistently in the D or F grade range.

No other mechanism exists to adjust any student’s grade, i.e., no “retests” or papers, etc.

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Exam</td>
<td>100 points</td>
</tr>
<tr>
<td>Assigned Project</td>
<td>100 points</td>
</tr>
<tr>
<td>Total</td>
<td>200 points</td>
</tr>
</tbody>
</table>

Written examinations may consist of various types of essay, multiple choice questions, true or false questions, fill-in-the-blank, short answer, drawing type, or matching questions.

A course project will be chosen by the student that will utilize techniques learned within this course. The project must be approved by the course director and subsequently turned in at the designated time.

A mid-term examination will be given over the materials lectured on up to that point in time. A set of instructional objectives is given to for each lecture period that details what is expected to be learned. Additionally, questions pertaining to the hands-on training sessions will be included as well.

Required Text:
None

Other Required Readings:
Handouts as provided within the course.

Additional Recommended, but NOT required texts/materials:
None

Required Policy Statements
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**COURSE SCHEDULE**

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Session</th>
<th>Faculty</th>
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<tbody>
<tr>
<td>1</td>
<td>January 7</td>
<td>Introduction to the Course</td>
<td>Spears</td>
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<tr>
<td>2</td>
<td>January 14</td>
<td>Sample Preparation</td>
<td>Spears</td>
</tr>
<tr>
<td>3</td>
<td>January 21</td>
<td>No Class-MLK Holiday</td>
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</tr>
<tr>
<td>4</td>
<td>January 28</td>
<td>Sample Preparation</td>
<td>Spears</td>
</tr>
<tr>
<td>5</td>
<td>February 4</td>
<td>Theory of Scanning Electron Microscopy</td>
<td>Spears</td>
</tr>
<tr>
<td>6</td>
<td>February 11</td>
<td>Using the Electron Microscope</td>
<td>Spears</td>
</tr>
<tr>
<td>7</td>
<td>February 18</td>
<td>Theory of Light Microscopy</td>
<td>Svoboda</td>
</tr>
<tr>
<td>8</td>
<td>February 25</td>
<td>Using the Light Microscopes</td>
<td>Svoboda</td>
</tr>
<tr>
<td>9</td>
<td>March 4</td>
<td>Special Techniques in Scanning Electron Microscopy</td>
<td>Spears</td>
</tr>
<tr>
<td>10</td>
<td>March 11</td>
<td>Mid Term Examination</td>
<td>Spears</td>
</tr>
<tr>
<td>11</td>
<td>March 18</td>
<td>Spring Break</td>
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<tr>
<td>12</td>
<td>March 25</td>
<td>Special Techniques in Light Microscopy</td>
<td>Svoboda</td>
</tr>
<tr>
<td>13</td>
<td>April 1</td>
<td>Projects Using Various Microscopy Techniques</td>
<td>Various Faculty</td>
</tr>
<tr>
<td>14</td>
<td>April 8</td>
<td>Immunohistochemistry</td>
<td>Spears</td>
</tr>
<tr>
<td>15</td>
<td>April 15-30</td>
<td>Complete Projects</td>
<td>Spears</td>
</tr>
</tbody>
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CLASS SESSION(S)
Tuesday and Thursday, 3:00 – 4:00 PM (Fall semester)
Blanton Library (BMS)

INSTRUCTOR
Xiaohua Liu, PhD
214-370-7007, xliu@tamhsc.edu
Science Building Room 130I, Office hours: walk by or inquire by email

TEACHING ASSISTANT(S) None

COURSE DESCRIPTION
Nanobiomaterials are the next-generation biomaterials with unique properties and have shown great promising for tissue engineering and regenerative medicine. This course will bring state-of-the-art knowledge of nanobiomaterials and regenerative medicine to students. Topics includes nanobiomaterials design, syntheses and preparation, nanobiotechnology for scaffold fabrication, surface functionality of nanobiomaterials, nanobiomaterials for drug and gene delivery, stem cell and nanobiomaterials, and the applications of nanobiomaterials for various tissue regeneration (bone, cartilage, tooth, et. al.). (1 Credit, Lecture).

PREREQUISITES
Introduction to Biomaterials, Molecular Cell Biology

COURSE REQUIREMENTS
This course is a lecture format. Students are expected to participate through discussions, questions, and critical review of assigned reading materials and overall subject matter. The students also participate in a presentation at the end of the course.

COURSE LEARNING OBJECTIVES
The main aim of this course is to provide the students the in-depth knowledge of nanobiomaterials and regenerative medicine. Upon completion of the course, the students are expected to be capable of critically reading and discussing scientific papers in the field of regenerative medicine

COURSE STRUCTURE
Lecture

Course Format:

Assessment and Grading Policy
Student grades will be based on:
2 Class quizzes .............................................. 20% each
Oral presentation .......................................... 60%

A= 92.5% and +; B+= 89.5 to 92%; B= 83.5 to 89%; C+= 80.5 to 83%; C= 74.5 to 80%; D= 70 to 74%; F= less than 70%. A D grade is considered a failure for this course.
Remediation: Should an individual fail to achieve a passing grade (C or better) in the course, the failing students would have to remediate. Remediation may include additional work, such as answering supplemental questions or taking an exam.

Required Text:

Other Required Readings:
Specific reading will be assigned in each class

Additional Recommended, but NOT required texts/materials:

Required Policy Statements
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<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 9</td>
<td>Introduction – biomaterials and regenerative medicine</td>
</tr>
<tr>
<td>Oct 11</td>
<td>Introduction to metals and ceramics</td>
</tr>
<tr>
<td>Oct 16</td>
<td>Introduction to polymers</td>
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<tr>
<td>Oct 18</td>
<td>Polymeric biomaterials-Synthetic polymers</td>
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<tr>
<td>Oct 23</td>
<td>Polymeric biomaterials-Natural polymers</td>
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<td>Oct 25</td>
<td>Hydrogels</td>
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<td>Oct 30</td>
<td>Scaffolds I - <strong>Quiz 1</strong></td>
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<tr>
<td>Nov 1</td>
<td>Scaffolds II</td>
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<tr>
<td>Nov 6</td>
<td>Surface modifications of biomaterials</td>
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<tr>
<td>Nov 8</td>
<td>Stem cells</td>
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<tr>
<td>Nov 13</td>
<td>Nanobiotechnology and nanobiomaterials</td>
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<tr>
<td>Nov 15</td>
<td>Nanobiomaterials for drug and gene delivery – <strong>Quiz 2</strong></td>
</tr>
<tr>
<td>Nov 20</td>
<td>Bone regeneration- Student presentations</td>
</tr>
<tr>
<td>Nov 22</td>
<td>Thanksgiving break</td>
</tr>
<tr>
<td>Nov 27</td>
<td>Cartilage regeneration- Student presentations</td>
</tr>
<tr>
<td>Nov 29</td>
<td>Dental regeneration- Student presentations</td>
</tr>
</tbody>
</table>
CLASS SESSION(S)
Spring semester, Lecture: Mon 1-2pm & Wed 2-3pm, Room 6; Lab: Wed. 3-5pm, Lab 30

INSTRUCTOR
Dr. Robert Spears, Ph.D.
214-828-8297, rspears@bcd.tamhsc.edu
Room 449; By appointment

Chunlin Qin, PhD
214-828-8292, cqin@bcd.tamhsc.edu
Room 452; By appointment

COURSE DESCRIPTION
This course is designed to provide students with a basic knowledge of tooth development, eruption and shedding, and the microscopic structure of the oral mucous membrane, the teeth and their supporting tissues, and the temporomandibular joint. With this knowledge, students will have the necessary foundation for future work in clinical dentistry. Additionally, such knowledge will allow students, as clinicians, to more effectively evaluate the claimed merits of new procedures and/or products which become available, and to read with intelligent discernment, the scientific and clinical literature.

PREREQUISITES
General Histology

COURSE REQUIREMENTS
Graduate students take all dental tests and quizzes. In addition, the students will be given additional short answer tests on assigned reading and will give a 30 minute PowerPoint presentation on a topic selected by the course director.

Make-up lecture examinations and lab practicals will be permitted only for excused absences, and will be allowed only if arranged in advance. A student who must be absent for an exam should contact the course director prior to the exam to notify him of this fact and the reason for the absence. If the absence is excused by the faculty and college, the student must contact the course director within 48 hours after his/her return to school to arrange for a make-up exam. The format of the make-up exam will be left up to the discretion of the faculty. Every effort should be made to attend the scheduled exams. If an adjustment, or curve, has been applied to a regularly scheduled written exam or practical, this adjustment will not apply to the make-up tests.

Attendance is highly encouraged, particularly for the laboratory sessions, but not required. The course director reserves the right to utilize pop quizzes or other assignments that will count towards the final grade at any time during lecture or laboratory time.
Students experiencing difficulty in comprehending lecture or laboratory material are encouraged to utilize the instructional objectives, make optimal use of scheduled laboratory time, obtain the service of a student tutor, and schedule periodic discussion sessions with course director. Students who fail this
course are provided the opportunity to take a remediation course at the college the following summer if allowed to do so by the Student Promotions Committee.

**COURSE LEARNING OBJECTIVES**
Teach the structure and mechanisms of tooth development. Teach the structure and function of the mature tooth: enamel, dentin, and pulp, the periodontium, the oral mucous membrane and salivary glands, tooth eruption and shedding of deciduous teeth, and the temporomandibular joint.

**COURSE STRUCTURE**
The two-hour laboratory will be held in the D1 Lab. Images used in the laboratory will be accessed from several different online references. These images will be displayed on monitors in the lab, and discussed by faculty. Additionally, students may access the images from library computers or their own computers at home. Slides from the Bacus program will also be used.

**Course Format:**
Lecture and Laboratory

**Assessment and Grading Policy**
Numerical grades for this course will be assigned based on student performance on written examinations and laboratory examinations. Letter grades are assigned in accordance with the grade scale adopted by HSC-Baylor College of Dentistry. Additionally, inappropriate professional behavior demonstrated by any student may be taken into consideration as individual situations warrant; this is primarily (but not exclusively) applicable to students whose academic performance is consistently in the D or F grade range. All examinations are curved to 83%, and a 0.5% curve is added to final grades to boost grades that are on the borderline between two letter grades. No other mechanism exists to adjust any student’s grade, i.e., no “retests” or papers, etc.

Lecture Exam 1 100 points
Lecture Exam 2 100 points
Lecture Exam 3 100 points
Final Exam 200 points
Lab Exam 1 100 points
Lab Exam 2 100 points
Final Lab Exam 100 points
Weekly work 50 points
**Total** **850 points**

Written examinations may consist of various types of multiple choice questions, true or false questions, fill-in-the-blank, short answer, drawing type, or matching questions. Computer-graded answer sheets will be provided for all written exams and you will need a #2 lead pencil to mark answer sheets.

Laboratory Practicals will require you to identify or supply other information regarding structures tagged on microscopic slides. Secondary questions will be part of the practicals. Written and practical examinations will be comprehensive for both the final written and laboratory examinations.

Weekly Work will consist of six different 10 point exercises geared towards both lecture and lab that will be performed as either group activities or individual assignments during lab time. This will consist of problem solving sets, case scenarios, and other types of exercises designed to help students master the material. These will be done during lab time and will be turned in at the end of lab. Six activities are
planned and the lowest grade will be dropped. These exercises are a weekly grade and cannot be made up due to absence, so an absence will result in the dropped score.

**Required Text:**

**Other Required Readings:**
Course syllabus: Laboratory material
Bacus program and online materials

**Additional Recommended, but NOT required texts/materials:**

**Required Policy Statements**

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## COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Session Title/Topic</th>
<th>Instructor Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4/13</td>
<td>Tooth Development – Crown &amp; Amelogenesis, Dentinogenesis</td>
<td>Dr. Spears</td>
</tr>
<tr>
<td>3/6/13</td>
<td>Tooth Development – Root: Dentinogenesis, Cementogenesis &amp; Lab: Tooth Development</td>
<td>Dr. Spears</td>
</tr>
<tr>
<td>3/11/13</td>
<td>Enamel</td>
<td>Dr. Spears</td>
</tr>
<tr>
<td>3/13/13</td>
<td>Dentin &amp; Lab: Enamel, Dentin, Pulp</td>
<td>Dr. Spears</td>
</tr>
<tr>
<td>3/18-3/22</td>
<td>Spring Break</td>
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<tr>
<td>3/25/13</td>
<td>Pulp</td>
<td>Dr. Spears</td>
</tr>
<tr>
<td>3/27/13</td>
<td><strong>EXAM 1 (Tooth Development-Pulp) &amp; LAB EXAM 1</strong></td>
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<tr>
<td>4/1/13</td>
<td>Oral Mucous Membrane I</td>
<td>Dr. Spears</td>
</tr>
<tr>
<td>4/3/13</td>
<td>Oral Mucous Membrane II &amp; Lab: Oral Mucous Membrane</td>
<td>Dr. Spears</td>
</tr>
<tr>
<td>4/8/13</td>
<td>Periodontium I</td>
<td>Dr. Qin</td>
</tr>
<tr>
<td>4/10/13</td>
<td>Periodontium II &amp; Lab: Periodontium &amp; Tooth Eruption</td>
<td>Dr. Qin</td>
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<tr>
<td>4/15/13</td>
<td>Tooth Eruption and Shedding</td>
<td>Dr. Spears</td>
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<tr>
<td>4/17/13</td>
<td><strong>EXAM 2: (Oral Mucous Membrane-Tooth Eruption and Shedding) &amp; LAB EXAM 2</strong></td>
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<tr>
<td>4/22/13</td>
<td>Genetics of Tooth Development</td>
<td>Dr. Spears</td>
</tr>
<tr>
<td>4/24/13</td>
<td>Salivary Glands &amp; Lab: Salivary Glands</td>
<td>Dr. Spears</td>
</tr>
<tr>
<td>4/29/13</td>
<td>Temporomandibular Joint (TMJ)</td>
<td>Dr. Spears</td>
</tr>
<tr>
<td>5/1/13</td>
<td>Nasal Mucosa &amp; Paranasal Sinuses &amp; Lab: TMJ</td>
<td>Dr. Spears</td>
</tr>
<tr>
<td>5/6/13</td>
<td>Review</td>
<td>Dr. Spears</td>
</tr>
<tr>
<td>5/8/13</td>
<td><strong>EXAM 3: (Genetics of Tooth Development-Nasal Mucosa) &amp; COMPREHENSIVE FINAL LAB EXAM</strong></td>
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</tr>
<tr>
<td>TBA</td>
<td><strong>COMPREHENSIVE FINAL EXAM</strong></td>
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</tbody>
</table>
CLASS SESSION(S)
Tuesday and Thursdays, 1:00 – 3:00 p.m., Room 736

COURSE DIRECTOR
Darren M. Roesch, Ph.D.
214-828-8324 roesch@bcd.tamhsc.edu
Room 456, 3302 Gaston Ave, Dallas, TX 75246

OTHER FACULTY
Dr. David Grogan, DDS, MSD
Dr. John Wright, DDS, MS
Dr. Gabriele Mues, MD
Dr. Ibtisam Al-Hashimi, BDS, MS, PhD
Dr. M Gonzalez, DDS, MS, MD

COURSE DESCRIPTION
The 5214 Clinical Pharmacology course provides a review of commonly prescribed medications and recently approved agents that may potentially impact the practice of dentistry. This course focuses on major drug class mechanisms of action, pharmacokinetics, pharmacodynamics, pharmacovigilance (adverse effects) and drug interactions with medications prescribed for dental procedures. In addition, students are given 1) access to resources to facilitate judgment regarding the manner in which drugs modify patient management and treatment planning; 2) practice in evaluating patient drug histories with special emphasis on drug interactions in patients receiving multiple drug therapy; and 3) practical information on the clinical aspects of infection and pain control.

PREREQUISITES
Admission into a TAMHSC or Baylor College of Dentistry residency or graduate program is required. Others by approval of the course director in accordance with TAMHSC guidelines.

COURSE REQUIREMENTS
Graduate students take all dental tests and quizzes. In addition, the students will be given additional short answer tests on assigned reading and will give a 30 minute PowerPoint presentation on a topic selected by the course director. Students are expected to actively participate in class discussions.

COURSE LEARNING OBJECTIVES
Upon successful completion of this course, the dentist will be able to:
1. Locate clinically relevant information describing the effects of new and existing medications.
2. Identify clinical indications, mechanisms of action, clinically relevant adverse reactions, prescribing precautions, drug interactions and impact on the practice of dentistry of commonly prescribed drug classes.
3. Recognize the clinical indications, mechanisms of action, clinically relevant adverse reactions, prescribing precautions, drug interactions and impact on the practice of dentistry of drugs recently approved by the FDA.
4. To review key sections of Texas and federal drug laws which impact drug use and prescription writing in dental practice.

COURSE STRUCTURE
The class sessions will consist of lectures from the Baylor faculty and presentations from student participants.

Course Format:

Assessment and Grading Policy

Attendance: Five points will be given for each lecture session attended.

Exams: There will be two take-home, essay-type examinations. The first exam will be released July 11 and will be due in class on July 18. The second exam will be released August 8 and will be due by 5PM August 15. Each exam will be worth 100 points.

Presentation: Fifty points will be given for a student presentation on a drug interaction commonly encountered in the clinic. The presentation should identify the interacting drugs or classes of drugs, a typical clinical context for the drug interaction, known mechanism(s) of the interaction, and should detail appropriate management of situations where the interaction might occur.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>50</td>
</tr>
<tr>
<td>Exam 1</td>
<td>100</td>
</tr>
<tr>
<td>Exam 2</td>
<td>100</td>
</tr>
<tr>
<td>Oral Presentation</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total Points Available</strong></td>
<td>300</td>
</tr>
</tbody>
</table>

There will be a total of 300 points available in this course, and grades will be assigned according to the Baylor College of Dentistry grading scale based on 200 points.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Grade Scale</th>
<th>Points Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>≥93</td>
<td>≥279</td>
</tr>
<tr>
<td>B+</td>
<td>90-92</td>
<td>270-278</td>
</tr>
<tr>
<td>B</td>
<td>84-89</td>
<td>252-269</td>
</tr>
<tr>
<td>C+</td>
<td>81-83</td>
<td>243-251</td>
</tr>
<tr>
<td>C</td>
<td>75-80</td>
<td>225-242</td>
</tr>
<tr>
<td>D</td>
<td>70-74</td>
<td>210-224</td>
</tr>
<tr>
<td>F</td>
<td>&lt;70</td>
<td>&lt;210</td>
</tr>
</tbody>
</table>

Required Text: Instructor Handouts

Additional Recommended, but NOT required texts/materials:


Required Policy Statements

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2013 COURSE SCHEDULE

**BMS 5214 CLINICAL PHARMACOLOGY**
**SUMMER SEMESTER**
*July 9, 2013-AUGUST 15, 2013*

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>INSTRUCTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 9 (Tues)</td>
<td>Anti-infective Agents used in Dentistry</td>
<td>Dr. Grogan</td>
</tr>
<tr>
<td>July 11 (Thurs)</td>
<td>Analgesics used in Dentistry</td>
<td>Dr. Grogan</td>
</tr>
<tr>
<td>July 16 (Tues)</td>
<td><strong>Exam I</strong></td>
<td></td>
</tr>
<tr>
<td>July 18 (Thurs)</td>
<td>Oral Side Effects of Medications</td>
<td>Dr. Wright</td>
</tr>
<tr>
<td>July 23 (Tues)</td>
<td>Autonomic &amp; Salivary Pharmacology</td>
<td>Dr. Al-Hashimi</td>
</tr>
<tr>
<td>July 25 (Thurs)</td>
<td>Evaluation of the Medically Compromised Patient</td>
<td>Dr. Gonzalez</td>
</tr>
<tr>
<td>July 30 (Tues)</td>
<td>Clinical Aspects of Infection &amp; Pain Control</td>
<td>Dr. Grogan</td>
</tr>
<tr>
<td>August 1 (Thurs)</td>
<td>Dental Drug Interactions with CNS Drugs</td>
<td>Dr. Roesch</td>
</tr>
<tr>
<td>August 6 (Tues)</td>
<td>Dental Drug Interactions with Cardiovascular Drugs</td>
<td>Dr. Roesch</td>
</tr>
<tr>
<td>August 8 (Thurs)</td>
<td>Dental Drug Interactions with Anti-inflammatory Drugs</td>
<td>Dr. Roesch</td>
</tr>
<tr>
<td>August 13 (Tues)</td>
<td>Drug Interaction Presentations</td>
<td>Students</td>
</tr>
<tr>
<td>August 15 (Thurs)</td>
<td><strong>Exam II</strong></td>
<td></td>
</tr>
</tbody>
</table>

*3PM, Room 736*
CLASS SESSION(S)
Spring - Time arranged between student and faculty.

INSTRUCTOR
Emet Schneiderman, PhD
214-828-8377, emet@bcd.tamhsc.edu
Room 499, By appointment

TEACHING ASSISTANT(S) None

COURSE DESCRIPTION
This practicum is designed to engage the advanced student in all aspects of teaching applied biostatistics. In his/her primary role as a laboratory teaching assistant (TA) in BMS 5555, the student will assist students (1) in the operation and application of SPSS statistical software, and interpretation of its output, (2) with basic computer operation and data input/manipulation. The TA will prepare and present a lecture and conduct a laboratory exercise on a mutually selected topic, e.g., survival analysis. He or she will also learn about and carry out the routine preparation of laboratory computers, course materials and the grading of student assignments.

PREREQUISITES
All students must be registered for an M.S. or Ph.D. degree in Texas A&M University and who have previously passed Applied Biostatistics BIMS 5222 or equivalent, as determined by instructor.

COURSE REQUIREMENTS
Teaching in the biostatistics laboratory will be expected and lectures may be assigned as determined between the student and faculty. Teaching in the lab includes assisting students in the operation and application of SPSS statistical software, and interpretation of its output. Assisting students with basic computer operation and data input and manipulation is also required. The routine preparation of laboratory computers, course materials and assistance in grading of student assignments, and tests is also required.

COURSE LEARNING OBJECTIVES
Objective (1) of the practicum is to learn how to distill and present biostatistics such that typical health professions graduate students can master it. Such mastery includes applying statistical concepts and methods to one's own research and to that in the professional literature. Objective (2) is to learn about the fair evaluation of student performance (quizzes, exams, projects, and grading them).

COURSE STRUCTURE
Individualized course for single students wanting teaching experiences in Biostatistics
Course Format:
Assessment and Grading Policy
For assessment of objectives, the instructor will evaluate the clarity, accuracy and completeness of the student lecture and other contributions, e.g., exam questions. Students' evaluations of the TA at the end of the semester will also enter into the assessment of his/her performance.

A grade will be awarded based on the extent to which the expectations described above are carried out as well as the quality of instruction given to the students. Mastery of material, timeliness and accuracy in all activities enter into the grade.

Grade Scale
A letter grade will be assigned based on the numerical distribution listed in the Baylor College of Dentistry Bulletin:

A  =  93-100  
B+  =  90-92  
B    =  84-89  
C+   =  81-83  
C    =  75-80  
D    =  70-74  
F    =  00-69

Required Text:

Other Required Readings:
Mastery of tutorials and help-facilities in SPSS that pertain to modules covered in course (see syllabus). Additional articles and topics (self-directed) as designated by instructor.

Additional Recommended, but NOT required texts/materials:
Course faculty may indicate additional sources of information (articles, books, videos, internet sites, etc.) that will provide the interested student with information about teaching in statistics.

Required Policy Statements
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### COURSE SCHEDULE

Tuesday 2:00-4:00 in ICL, January 10 – May 1, 2012. Quizzes will be in Room 211 at 2:00. Practical Exams will be in ICL at 2:00 or 4:00.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Lecturer</th>
<th>Reading</th>
<th>Assignments &amp; Quizzes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 10</td>
<td>1. Introduction; SPSS; descriptive statistics; fundamentals</td>
<td>Schneiderman</td>
<td>Ch 1 &amp; 2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Jan 17</td>
<td>2. Confidence intervals</td>
<td>Buschang</td>
<td>Ch 7</td>
<td>Quiz 1 – Didactic Rm. 134</td>
</tr>
<tr>
<td>3</td>
<td>Jan 24</td>
<td>3. Data exploration, cleanup, characterization</td>
<td>Schneiderman</td>
<td>Ch 2 &amp; 7</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Jan 31</td>
<td>4. Using Flow Charts; t-tests Difference between two means</td>
<td>Schneiderman</td>
<td>Ch 3-6</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Feb 7</td>
<td>5. Linear regression &amp; correlation, Part 1</td>
<td>Buschang</td>
<td>Ch 8</td>
<td>Assignment #1 due</td>
</tr>
<tr>
<td>7</td>
<td>Feb 21</td>
<td>7. Survival Analysis</td>
<td>Rangiani (TA)</td>
<td>Ch 11</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Feb 28</td>
<td>8. <strong>Midterm</strong></td>
<td></td>
<td></td>
<td>Midterm - Practical</td>
</tr>
<tr>
<td>9</td>
<td>Mar 6</td>
<td>9. Multivariate regression &amp; partial correlation</td>
<td>Buschang</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Mar 13</td>
<td>10. Analysis of variance (ANOVA); post-hoc tests &amp; control of experiment-wise error</td>
<td>Schneiderman</td>
<td>Ch 3</td>
<td>Assignment #2 due</td>
</tr>
<tr>
<td>11</td>
<td>Mar 20</td>
<td><strong>SPRING BREAK – NO CLASS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Mar 27</td>
<td>11. Nonparametric statistics for nominal &amp; ordinal data – Chi-Square &amp; Fishers Exact Test</td>
<td>Schneiderman</td>
<td>Ch 10; Ch 8: 296-302</td>
<td>Quiz 3 – Didactic Rm. 134</td>
</tr>
<tr>
<td>13</td>
<td>April 3</td>
<td>12. Nonparametric methods, Part 2</td>
<td>Schneiderman</td>
<td>Ch 10 Ch 8: 296-302</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>April 10</td>
<td>13. Statistical methods in epidemiology (RR and OR)</td>
<td>Schneiderman</td>
<td>Ch. 5: pp 163-170</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>April 17</td>
<td>14. Power analysis; Sample size computations using G*Power</td>
<td>Schneiderman</td>
<td>Ch 6</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Apr 24</td>
<td>15. Analysis of qualitative data</td>
<td>McCann</td>
<td>TBA</td>
<td>Assignment #3 (group project) due</td>
</tr>
<tr>
<td>17</td>
<td>May 1</td>
<td><strong>16. Final Exam - Practical</strong></td>
<td></td>
<td></td>
<td>Final – Practical</td>
</tr>
</tbody>
</table>
CLASS SESSION(S)
Tuesday 2-4:00, Instructional Computer Laboratory, Texas A&M University Baylor College of Dentistry Campus, Dallas

INSTRUCTOR
Emet Schneiderman, PhD
214-828-8377, emet@bcd.tamhsc.edu
Rm. 499, TAMBCD; Wednesday 11:00-12:00

TEACHING ASSISTANT(S)
TBA

COURSE DESCRIPTION
Lecture and laboratory course on advanced statistical methods such as multivariate analysis, cluster and discriminate analysis, survival analysis, generalized linear models, logistic regression and exact tests. Emphasis is on the proper selection of methods, their execution and interpretations. Biomedical research problems, especially in the realm of basic, translational and clinical research related to oral health are emphasized.

PREREQUISITES
BIMS 5222 Applied Biostatistics or equivalent as determined by instructor.

COURSE REQUIREMENTS
Grading, Expectations & Policies
Practical exams will be done in-class in the ICL using SPSS and other software in two sections, 2:00-4:00 & 4:00-6:00.

Each student will do his/her own work on the quizzes and exams with no assistance of any kind. Academic dishonesty of any kind on a quiz, exam or assignment will result in a failing grade of zero for that item, and may result in course failure and disciplinary action. Students are encouraged to work together on the homework assignments and project, however must turn in their own work.

Remediation policy:
Students who fail course will need to successfully repeat the course the next time it is offered to receive credit.

COURSE LEARNING OBJECTIVES
Students must be able to explain the reason involved in selection of particular methods and describe data structures and research questions requiring advanced and complex statistical methods.

Be able to explain the pros and cons of using advanced and complex methods.

Demonstrate proficiency in the application of methods to actual data using contemporary software.

Demonstrate ability to properly interpret statistical results and write them up with clarity, concision and accuracy, as if they were to be published in a professional journal.

**COURSE STRUCTURE**
Lectures and laboratory sessions. Each meeting consists of one hour of each. Exams are practical where students solve problems on computers.

**Assessment And Grading Policy**
3 didactic quizzes at 10 points each = 30% of grade
3 written assignments/projects at 10 points each = 30% of grade
2 practical exams at 20 points each = 40% of grade
Total number of points = 100
Grades will be assigned on the standard scale (e.g. 80-89 = B, 90-100 = A, etc., and adjusted to Baylor scale (e.g. 84-92=B, 93-100=A) when submitted for transcript.

All graduate programs require their students to pass at least at the “C” level; some programs require at least a “B”. Please check with your program director to clarify expectations.

**Other**
Quiz #1 (didactic background material) must be passed (≥ 75) in order to proceed in the course.

**Required Text:**
Primary text TBA.

IBM SPSS Statistics 21 - Standard Student Version; available through the eStore, [OnTheHub.com](http://OnTheHub.com) for $50.50 for 6 mos. Look under the data analysis section.

**Other Required Readings:**

Additional Recommended, but NOT required texts/materials:


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**COURSE SCHEDULE**
TBA
CLASS SESSION(S)
3:00-4:00 PM each Tuesday

INSTRUCTOR
Jerry (Jian) Q. Feng, MD, PhD
214-370-7235, JFeng@bcd.tamhsc.edu
Office: 228 Science Building
Office Hours: TBA

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
This course will provide an overview of the advanced biology of mineralized tissues and their roles in oral health and disease. The course will cover the basic molecular biology of the teeth and the skeleton, including bone and cartilage. Other aspects of systemic biology will be explored, such as the local and systemic factors that control the calcium and phosphate balance, as well as recent advances in molecular biology and research methodologies (molecular biology, gene targeting and histology at both light and electronic microscopic levels).

PREREQUISITES
Undergraduate Biochemistry

COURSE REQUIREMENTS
Attendance: It is expected that students will attend ALL classes on time.

Tardiness: Classes will start on time and will not be delayed for students who are late. Students who are late to class will need to catch up on any missed information on their own time.

Cheating: Cheating will not be tolerated under any circumstances. Students who are caught cheating will not be graded for this course.

Make-up examinations: There will be no make-up examinations except under exceptional circumstances. Students who have an unavoidable reason for missing an examination must talk with the course director as soon as possible, and arrangements will be made at the discretion of the course director.

COURSE LEARNING OBJECTIVES
This two-credit course is rooted in an understanding of the molecules within cells and of the inter-reactions between cells that allow the formation of bone and teeth. The goal is to provide basic concepts and mechanisms of how bone and tooth cells are formed and regulated during development. The course will address the current state of mineralized tissue biology and will look ahead to the potential outcome of ongoing research in the coming decades.

COURSE STRUCTURE
Lectures with active student participation

Course Format:

Assessment and Grading Policy
Examinations: There will be one mid-term examination and one final examination and the questions will consist of essay questions.

Papers: A review paper is required.

Grading criteria: The final grade for this course will be based on the examinations and the required review paper; all equal weight. Participation in class discussion is encouraged.

Required Text:
None

Other Required Readings:
Selected readings from the literature

Additional Recommended, but NOT required texts/materials:
None

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### COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Session #1</th>
<th>Introduction to modern research in mineralized tissue biology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session #2</td>
<td>The molecular biology of tooth formation</td>
</tr>
<tr>
<td>Session #3</td>
<td>The molecular biology of tooth eruption</td>
</tr>
<tr>
<td>Session #4</td>
<td>Cell signaling in osteoclast function and bone resorption</td>
</tr>
<tr>
<td>Session #5</td>
<td>Molecular and genetic research methods in vertebrate mineralized tissue biology</td>
</tr>
<tr>
<td>Session #6</td>
<td>The importance of stem cell research for advancements in the treatment of disorders associated with craniofacial bone and teeth</td>
</tr>
<tr>
<td>Session #7</td>
<td>Modern techniques in physiological research and advances in mineralized tissue biology</td>
</tr>
<tr>
<td>Session #8</td>
<td>Mid-term examination</td>
</tr>
<tr>
<td>Session #9</td>
<td>Bone matrix proteins and the mineralization process</td>
</tr>
<tr>
<td>Session #10</td>
<td>Static imaging techniques for studying mineralized tissue biology</td>
</tr>
<tr>
<td>Session #11</td>
<td>Live imaging of odontoblasts, osteoblasts, and osteocytes</td>
</tr>
<tr>
<td>Session #12</td>
<td>Local growth factors in bone and their effect on osteoporosis</td>
</tr>
<tr>
<td>Session #13</td>
<td>Thanksgiving</td>
</tr>
<tr>
<td>Session #15</td>
<td>Molecular mechanisms of hormonal influence on the biology of bones and teeth</td>
</tr>
<tr>
<td>Session #16</td>
<td>Modern concepts of mineral balance and homeostasis in bone</td>
</tr>
<tr>
<td>Session #17</td>
<td>Final examination</td>
</tr>
</tbody>
</table>
CLASS SESSION(S)
Spring, Tuesdays, 10am-12pm, Room 400A (given in odd years)

INSTRUCTOR
Bob Hutchins, Ph.D.
(214) 828-8275, bhutchins@bcd.tamhsc.edu
Room 401; None (open door policy)

TEACHING ASSISTANTS
None

COURSE DESCRIPTION
This course is designed to provide the graduate student with an overview of the various sensory systems with the primary emphasis on the processing of pain and temperature information from the craniofacial complex.

PREREQUISITES
None

COURSE REQUIREMENTS
There is no required attendance. If you are unable to take an exam due to illness, you will need to contact the course director within 48 hours of returning to school. Any incomplete grades will need to be completed within the next semester per Baylor College of Dentistry policy.

Class Performance Expectations
Students will be expected to research a major topic, pre-approved by the course director, concerning the subject of nociception and its clinical implications. Students will research the subject, generate a bibliography (using only research papers published within the last five years), and present the material to their colleagues.

One week prior to the presentation, the presenter will distribute one or two articles relevant to the research. Presentations should be an overall review of the subject, lasting approximately 30 minutes. Students should begin with a basic biological background, use examples, and explain mechanisms. Most importantly, the presentation should highlight clinical issues and their relevance to the practice of Dentistry/Endodontics.

As part of the presentation, students will provide an outline of the presentation and a separate list of at least ten journal references for distribution. Students will send a copy of their presentation to the course director, who will create a CD of all the presentations for the students’ reference.

During the presentation of the research data, students will be expected to critically evaluate the data and include clinical examples. Students are encouraged to present appropriate patient data for discussion, if the topic is relevant to a patient being treated.

Presentations will be evaluated by colleagues, using the Baylor College of Dentistry numerical grading scale. The course director will use the evaluations to calculate the presentation grades.
After the last presentation, students will submit two essay questions covering material included in their presentation. These questions (with some editing by the course director) will make up the final exam.

**Attendance Policy**
Although attendance is highly recommended, there is no required attendance.

**COURSE LEARNING OBJECTIVES**
Statement of the Learning Objectives for the Course
This course is designed to highlight clinical issues and their relevance to the practice of dentistry/endodontics.

**COURSE STRUCTURE**
This course will consist of five 2-hour lectures presented by the Course Director. The remainder of the course will focus on student research projects and presentations. Presentations will highlight clinical issues and their relevance to the practice of Dentistry and/or Endodontics.

**Course Format:**

**Assessment and Grading Policy**
Student grades will be based on:
Midterm and Final Exam ......................50%
Presentation........................................30%
Participation......................................20%

Two major examinations will be given in the course. Each exam will consist of essay questions and will be worth 100 points. Presentations will be evaluated by the course director and their colleagues, using the Baylor College of Dentistry numerical grading scale. The course director will use the evaluations to calculate the presentation grades. In addition, students will be graded on class participation.

Final grades will be converted to letter grades according to the Baylor College of Dentistry/Texas A&M Health Science Center grading system:
A:  93+
B+: 90 – 92
B:  84 – 89
C+: 81 – 83
D:  70 – 74
F:  69 or less

**Required Text:**
Course/lecture outlines and handouts as provided.

**Other Required Readings:**
None

**Additional Recommended, but NOT required texts/materials:**
None
Required Policy Statements

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ACADEMIC INTEGRITY STATEMENT: Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Students are expected to adhere to all TAMUS, HSC, and the Graduate School policies regarding academic integrity and classroom conduct. Academic integrity is the pursuit of scholarly activity free from fraud and deception. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used, or tampering with the academic work of another student. Individuals found guilty of academic dishonesty may be dismissed from the degree program, and at a minimum will receive an F for the course. It is the student’s responsibility to have a clear understanding of how to reference other individuals’ work, as well as having a clear understanding in general as to the various aspects of academic dishonesty.

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COURSE SCHEDULE

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>LECTURER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 11</td>
<td>Somatosensory system</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td>Jan. 18</td>
<td>Nociceptive system</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td>Jan. 25</td>
<td>Allodynia/hyperalgesia</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td>Jan. 3</td>
<td>Modulatory systems</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td>Feb. 8</td>
<td>Midterm</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td>Feb. 15</td>
<td>Student presentations</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td>Feb. 22</td>
<td>Student presentations</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td>Mar. 1</td>
<td>Student presentations</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td>Mar. 8</td>
<td>Student presentations</td>
<td>Dr. Hutchins</td>
</tr>
<tr>
<td>Mar. 22</td>
<td>Final</td>
<td>Dr. Hutchins</td>
</tr>
</tbody>
</table>
CLASS SESSION(S)
Tuesday & Thursday, 8:00am - 10:00am, Room 736

INSTRUCTORS
Larry L. Bellinger, PhD, Course Director
214-828-8322, lbellinger@bcd.tamhsc.edu
Room 483, By Appointment

M. Douglas Benson
214-828-8190, MDBenson@bcd.tamhsc.edu
Room 455, By Appointment

David M. Grogan, DDS, MSD
214-828-8451, dgrogan@bcd.tamhsc.edu
Room 159, By Appointment

Darren Roesch, PhD
214-828-8324, roesch@bcd.tamhsc.edu
Room 456, By Appointment

Brendan S. Wong, PhD
214-828-8323, bswong@bcd.tamhsc.edu
Room 451, By Appointment

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
This course focuses on the physiology and clinical correlates of the heart, circulatory system, respiration, and hemostasis.

Dentists with graduate specialty degrees often have to treat medically compromised patients. Treatment plans have to be developed that take into count the patient's abnormal physiology. The physiological areas of greatest concern are those that if compromised can produce life-threatening consequences. It is therefore imperative that the clinician has an excellent understanding of the physiological functioning of the cardiovascular system, the respiratory system and hemostasis.

The course is worth two units of credit.
PREREQUISITES
Successful Completion of an Undergraduate Dental School Physiology Course

COURSE REQUIREMENTS
Residents are expected to attend all class and must tell the Course Director in advanced of a planned absence. PowerPoint presentation should be the resident’s own original work. Residents with performance on any major exam below 75% should consult with the course director.

COURSE LEARNING OBJECTIVES
The resident will have a competent understanding of the physiology of: the myocardium; the electrocardiogram; hemodynamics; cardiovascular control; hypertension and shock; pulmonary ventilation, gas diffusion and transport, normal and abnormal respiratory control; hemostasis; and clinical emergency procedures. Course objectives by lecture will be emailed to you after the first day of class.

COURSE STRUCTURE
Course Format:
Lecture and demonstrations

Assessment and Grading Policy:
Student grades will be based on:
First Written Exam .........................................................125 points
PowerPoint Presentation................................................... 25 points
Second Written Exam .....................................................75 points

Residents must be able to demonstrate their knowledge of material presented in: (1) lectures, (2) demonstrations, simulations and dry laboratory, and (3) the reading assignments. These exams may consist of a combination of multiple choice, true/false, matching, and/or completion and short discussion type questions. The class performance will be curved up to 85% on these exams. Students missing progress exams due to family emergencies or medical problems should contact the course director before the exam or as soon as possible. With an excused absence a makeup exam will be made available; however, there is no basis for a curve on make-up progress exams.

The first written exam is 125 points. Dr. Wong’s requires a PowerPoint presentation (10 minute presentation followed by 5 minutes of discussion) relating dentistry and cardiovascular physiology, which will be due on July 25th and will be worth 25 points. The second written exam will be worth 75 points. Thus there are 225 points available. You will be given 2 hours to take the written examinations.

Required Text:

Other Required Readings:
The instructors will hand out other materials and selected readings.

Additional Recommended, but NOT required texts/materials:
“Human Physiology”, 6th Ed 2013, D. Silverthorn
“Medical Physiology”, 2nd Ed. 2011, Boron & Boulpaep

Required Policy Statements
FEDERAL EDUCATION RIGHTS & PRIVACY ACT (FERPA): The Federal Education Rights & Privacy Act requires that we advise students that by registering for this course, their Texas A&M Health Science Center assigned e-mail address will be revealed to classmates and the instructor. By continuing your enrollment in the course you acknowledge your understanding of this policy.

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## Schedule of Lectures and Examinations

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2</td>
<td>Respiration 1</td>
<td>Dr. Roesch</td>
</tr>
<tr>
<td>June 9</td>
<td>Respiration 2</td>
<td>Dr. Roesch</td>
</tr>
<tr>
<td>July 11</td>
<td>Respiration 3</td>
<td>Dr. Roesch</td>
</tr>
<tr>
<td>July 16</td>
<td>Hemostasis</td>
<td>Dr. Benson</td>
</tr>
<tr>
<td>July 18</td>
<td>Electrical mechanical events of the cardiac cycle</td>
<td>Dr. Wong</td>
</tr>
<tr>
<td>July 23</td>
<td>Basic electrocardiogram</td>
<td>Dr. Wong</td>
</tr>
<tr>
<td>July 25</td>
<td>Lab on normal and abnormal ECG PowerPoint Presentations</td>
<td>Dr. Wong</td>
</tr>
<tr>
<td>July 30</td>
<td>Exam</td>
<td>Drs. Roesch /Benson/Wong</td>
</tr>
<tr>
<td>Aug 1</td>
<td>Cardiovascular Control</td>
<td>Dr. Bellinger</td>
</tr>
<tr>
<td>Aug 6</td>
<td>Hypotension and Shock</td>
<td>Dr. Bellinger</td>
</tr>
<tr>
<td>Aug 8</td>
<td>Autonomic control of blood pressure through an analysis of blood pressure graphs</td>
<td>Dr. Bellinger</td>
</tr>
<tr>
<td>Aug 13</td>
<td>Clinical Emergency Procedures</td>
<td>Dr. Grogan</td>
</tr>
<tr>
<td>Aug 15</td>
<td>Exam</td>
<td>Drs. Bellinger</td>
</tr>
</tbody>
</table>
TEXAS A&M UNIVERSITY BAYLOR COLLEGE OF DENTISTRY
Oral Microbiology
BMS 5350

CLASS SESSION(S)
Thursdays, 8:00-10:00 AM, Room 736

INSTRUCTOR
Dr. Allen Honeyman, PhD
214-370-7225, ahoneyman@bcd.tamhsc.edu
Sciences Building, By Appointment

TEACHING ASSISTANT(S)
None

COURSE DESCRIPTION
The environment of the mouth and its relation to the endogenous and exogenous oral microbiota are taught. There will be discussion of special differences and immunologic determinant of health and disease.

PREREQUISITES
All students must be registered for an M.S. or Ph.D. degree in Biomedical Sciences

COURSE REQUIREMENTS
All students will be required to attend all presentations and are required to make a presentation on a topic relevant to Oral Microbiology as it relates to their clinical specialty. This presentation will be a review of the current field and will include a topic on recent advances in the area.

COURSE LEARNING OBJECTIVES
Statement of the Learning Objectives for the Course

COURSE STRUCTURE
Oral Microbiology is organized into weekly lectures and discussions given by various members of the course. Topics include any subject of current interest to program faculty and students and of general interest in the broad area of oral microbiology and current topics in microbiology in general. Any topic that would affect the practice of dentistry or research in the community would be appropriate. Each of the specific topics is selected by the presenter and may be relevant to their practice or development in the profession. All students are expected to participate through presentations, discussions, questions, and critical analysis of the overall subject matter.

COURSE FORMAT
Assessment and Grading Policy
Student grades will be based on their presentation to the class, their understanding of the material as determined by the instructor, and their class attendance.
Grades will be assigned for each individual based upon their course presentation and participation in class discussions

**Required Text:**
None

**Other Required Readings:**
Readings may be assigned by the presenter from any print or online source. All reading assignments must be completed before each scheduled class, in preparation for in-class discussion.

**Additional Recommended, but NOT required texts/materials:**
Lead participants may use additional sources of information (articles, books, videos, internet sites, etc.) that will provide the class with relevant additional information about the topic being presented.

**REQUIRED POLICY STATEMENTS**

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Course Schedule
The course schedule will be determined by the class participants during an initial class meeting and will be done in a manner so that all students will make a presentation.
CLASS SESSION(S)
TBA

INSTRUCTOR(S)
Bob Hutchins, PhD, Co-course Director
214.828.8575, bhutchins@bcd.tamhsc.edu
BCD Room 401; Open door policy

Brendan Wong, PhD, Co-course Director
214.828.8323, bwong@bcd.tamhsc.edu
BCD Room 451: By appointment

TEACHING ASSISTANT(S) None

COURSE DESCRIPTION
Neuroscience has become an extensive subject covering all aspects of the central nervous system. This course is designed to give the student an appreciation for a more restricted, yet highly focused study of one aspect of the central nervous system by discussing current hypotheses in an agreed upon topic.

PREREQUISITES
An undergraduate degree and at least a lower level graduate course in either neuroscience or anatomy (eg. Gross Anatomy 6640)

COURSE REQUIREMENTS

Attendance: Although attendance is highly recommended, there is no required attendance.

Remediation: Any student receiving a failing grade may be required by the student promotions committee to remediate their neuroscience requirements. This can be accomplished by arrangement with the Course Director(s) at Baylor. Remediation typically is condensed into a shorter period of time and may emphasize the student's deficiencies.

Make-up Exams: Any student who is unable to attend an exam must contact the Course Director prior to the exam. Students with absences that are not excused will also not be given the opportunity to take the exam and the student will be assigned a zero for that test. If the student is given an excused absence, it is up to the student to contact the course director within 48 hours of their return to school to re-schedule a make-up exam. The format of the make-up exam is left to the discretion of the faculty.

COURSE LEARNING OBJECTIVES
To provide the student with a better understanding and appreciation for how the many individual areas of the normal nervous system functions separately as well as together. The student is also expected to gain a more thorough understanding of the mechanisms and pathology specific to one area of the central nervous system.
COURSE STRUCTURE

Course Format:
Lecture and Discussion, 3 Credit Hours

Rationale:
An understanding of the anatomical and physiological basis for processing mechanisms is necessary for the understanding of higher cognitive function.

Assessment and Grading Policy:
Student grades will be based on:
Topic presentation........................................25%
Research paper ...........................................25%
Written exam/Laboratory project.....................50%

Required Text:
(To be determined)

Other Required Readings:

Additional Recommended, but NOT required texts/materials:

Required Policy Statements

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COURSE SCHEDULE

I. Overview of Brain and Pathway Morphology (Weeks 1-2)
II. Overview of Membrane Physiology and Choice of System Topic (Weeks 3-4)
III. Basic Mechanisms (Weeks 5-6)
IV. Developmental Aspects (Weeks 7)
V. Control Mechanisms (Weeks 8-9)
VI. Integrative Mechanisms (Week 9)
VII. Pathological Conditions/Clinical Correlation (Week 10)
VIII. Research Paper Finished with a Written Exam or Finished Project (Week 11)
Appendix B

Curriculum Vitae for Core Faculty
Appendix B

Curriculum Vitae for Core Faculty
CURRICULUM VITAE

I. PERSONAL INFORMATION

A. Name: Larry Lee Bellinger, Regents Professor
   Associate Dean for Research and Graduate Studies
   and Department of Biomedical Sciences
   Texas A&M Health Science Center Baylor College of Dentistry
   Chair (Interim)
   Department of Biomedical Sciences
   Texas A&M Health Science Center Baylor College of Dentistry
   Associate Dean
   Texas A&M Health Science Center School of Graduate Studies, Dallas Campus

B. Address: 3302 Gaston Avenue
   Dallas, Texas 75246

C. Phone: Office: (214) 828-8322
   Laboratory: (214) 828-8326
   Fax: (214) 828-8951
   email: lbellinger@bcd.hsctam.edu

E. Marriage: Karen
   Children: Matthew, Sara, Daniel

II. EDUCATION

Chabot College, Hayward, California 1965-1967

University of California
   Davis, California 95616
   B.S. Zoology 1969

University of California
   Davis, California 95616
   Ph.D. Physiology 1974

Dissertation: An Investigation of a Control System for Food Intake Involving the Vagus Nerve and Various Metabolic Hormones
III. **PROFESSIONAL APPOINTMENTS**

Associate Dean for Research and Graduate Studies  
Baylor College of Dentistry Texas A & M  
Health Science Center, Dallas, TX  
2004-Present

Associate Dean for Graduate Studies  
School of Graduate Studies,  
Texas A & M Health Science Center  
Dallas Campus  
2011-Present

Chair (Interim)  
Department of Biomedical Sciences  
Texas A&M Health Science Center  
Baylor College of Dentistry  
May 1, 2012 – September 30, 2012

Awarded title of Regents Professor by the  
Texas A&M University System Board of Regents and Chancellor, December 4, 2003  
2003-Present

Professor, Dept. Biomedical Sciences  
Baylor College of Dentistry Texas A & M  
Health Science Center, Dallas, TX  
1999-Present

Director, Animal Resource Unit  
Baylor College of Dentistry Texas A & M  
Health Science Center, Dallas, TX  
1999-2010

Professor, Dept. Biomedical Sciences  
Baylor College of Dentistry, a member of  
The Texas A & M University System Dallas, TX  
1996-1998

Director, Animal Resource Unit  
Baylor College of Dentistry, a member of  
Texas A & M University System, Dallas, TX  
1996-1998

Director, Animal Resource Unit  
Baylor College of Dentistry  
Dallas, TX  
1991-1996
Professor, Dept. Biomedical Sciences
Baylor College of Dentistry
and
Professor, Baylor University
Graduate School, Dallas Division 1985-1996

Associate Professor, Dept. Physiology
Baylor College of Dentistry
and
Associate Professor, Baylor University
Graduate School, Dallas Division 1979-1985
Tenured 1979

Assistant Professor, Dept. Physiology
Baylor College of Dentistry
Dallas, TX
and
Assistant Professor, Baylor University
Graduate School, Dallas Division 1976-1979

Individual NIH Postdoctoral Fellowship with
Dr. Lee L. Bernardis, Dept. of Surgery,
State University of New York, Buffalo, NY 1974-1976

IV. RESEARCH - AREAS OF INTEREST

My primary research involves the study of the neural and hormonal control of feeding and drinking behavior and body weight regulation. Secondarily, I have been studying how feeding behavior can be used as a tool to study temporomandibular joint inflammation.

V. RESEARCH GRANTS - CONTRACTS - GIFTS

A. Extramural

Approved and Funded (Direct Funding Amount listed to include F&A add 46.5%)

N.I.H. 1R01 DE022129 $1,000,000 (direct costs), 2012-2016, Title: Estrogen and TMJ Pain. Dr. P.R. Kramer, PI, Dr. L.L. Bellinger, Co-PI (17% effort).
N.I.H. 1 P30DE020742-01 $1,000,000 (direct costs), 2009-2011, Title: ARRA Baylor’s Program for Bioengineering Sciences and Translational Research “B-Best”. Dr. R. D’Souza, PI, Dr. L.L. Bellinger, Co-Investigator (15% effort); Dr. P.E. Dechow Co-Investigator.

Appian Labs, LLC, Austin, TX, #48018900000, $60,065, 2008-2009, Title: Intra-articular TMJ Injection Study. Dr. P. Kramer, P.I., Dr. L.L. Bellinger, Co-Investigator (5% effort).

N.I.H. 1 T32 DE018380-01A1, $1,522,274 (direct costs), 2008-2012, Title: Baylor’s Scientific Training Program for Dental Academic Researchers (B-STARS). Dr. Rena D’Souza, PI. Dr. L.L. Bellinger, Program Advisory and Review Committee, Mentor (10% effort).

N.I.H. 1 R25 DE018883-01, $589,000 (direct costs), 2008-2012, Title: Clinicians Using Science Produce Inspired Dentists (CUSPID). Drs. C. Berry, R. Hinton and D. Jones, PI. Dr. L.L. Bellinger, Co-leader Dental Scholars Team and Steering Committee (5% effort).

N.I.H. 5UL1RR024982-02, $34,000,000 (direct costs), 2007-2012, Title: North and Central Texas Clinical and Translational Science Initiative. Dr. M. Packer, PI. Dr. L.L. Bellinger, Research Career Milestone Committee and Mentor (5% effort).

N.I.H. R01 DE016059-01 Supplement, $9,000 (direct costs), 2009-2010. Title: Sex Steroids, and TMJ Pain. Dr. L.L. Bellinger, P.I. (30% effort), P. Kramer Co-P.I.

N.I.H. R01 DE016059-01, $1,000,000.00 (direct costs), 2005-2009. Title: Sex Steroids, and TMJ Pain. Dr. L.L. Bellinger, P.I., P. Kramer Co-P.I.

N.I.H. K12 HD052225-01, $9,700,000.00 (direct costs), 2005-2010. Title: UT Southwestern Clinical Science Scholars Program. Milton Packer, M.D., P.I.; Baylor College of Dentistry Partner, L.L. Bellinger, Mentor (5% effort)

N.I.H. 1 T35 DE07188 Training Grant. $5,743.00, 2005-2006. A mouse model of TMJ pain. Mr. Roth Hinkle, Fellow and Dr. L.L. Bellinger, mentor (5% effort).

N.I.H. 1 T35 DE07188 Training Grant. $5,743.00, 2004-2005. Removing Pain Fibers to Test an Animal Model of TMJ Pain. Mr. Christopher King, Fellow and Dr. L.L. Bellinger, mentor (5% effort).
N.I.H. 1 T35 DE07188 Training Grant. $5,039.00, 2002-2003. The role of CART on the hyperphagia after stopping nicotine use. Ms. Karina Marr, Fellow and Dr. L.L. Bellinger, mentor (5% effort).

N.I.H. NS 33347, $854,837.00, 2001-2006. Title: Integrative Responses to Amino Acid Deficiencies. Dr. Dorothy Gietzen, P.I., Dr. L.L. Bellinger, Subcontract PI 2001-2006 $65,000.00 (5% time).

N.I.H. 1 T35 DE07188 Training Grant. $6,625.00, 2001-2006. Satietin a putative anorexic protein. Mr. Lance Bullard, Fellow and Dr. L.L. Bellinger, mentor (5% effort).

N.I.H. T35 DE07188, $275,400, 2001-2006. Title: Short Term Training Program in Dental and Craniofacial Research, Dr. D.S. Carlson, P.I., Dr. L.L. Bellinger, Program Faculty (5% effort).

N.I.H. R03 DE12657-01A1, $50,000.00, 2000-2003. Title: An Animal Model for Studying TMJ Inflammation in Rats. Dr. L.L. Bellinger, P.I. (20% effort)

N.I.H. F30 DE05726-01, $132,263.00, 1998-2003. Title: Individual Predoctoral Dental Scientist Fellowship. Dr. L.L. Bellinger, PI (15% effort) and Ms. Carolyn Kerins, Fellow.

N.I.H. T32 DE07256, $470,766.00, 1995-2000. Title Craniofacial Biology Training Program. Dr. David Carlson, P.I., Dr. L.L. Bellinger, Program Faculty (5%) time.

N.I.H. NS 33347, $499,475.00, 1995-2000. $75,000.00 to L.L. Bellinger. Title: Integrative Responses to Amino Acid Deficiencies. Dr. Dorothy Gietzen, P.I., Dr. L.L. Bellinger, Collaborator (10% time).


Secured a gift of equipment worth $60,000 from Kraft General Foods International, 1993.

N.I.H. S15 HL49352-01, $8,000.00, 1992-1993. Title: Small Instrumentation Grant. Dr. L.L. Bellinger, P.I. (5% effort)

EM-SCAN, Inc., $500.00, 1991 Travel Grant
N.I.H. R15 DK42635-01, $91,462.00, 1990-1994. Title: Satietin a Putative Endogenous Satiety Agent. Dr. L.L. Bellinger, P.I (30% effort); Dr. V.E. Mendel, Co-Investigator.

N.I.H. DK42274, $350,000.00, 1990-1995. Title: Dietary Amino Acid Disproportion--Neural responses. Dr. Dorothy W. Gietzen P.I.; L.L. Bellinger, Collaborator (5%)


Eli Lilly and Company, $800.00, 1985, 1987. Research drug to Dr. L.L. Bellinger, P.I.

DuPont Chemical, $6,000.00, 1979, 1983. Research drugs to Dr. L.L. Bellinger, P.I.

N.S.F. PCM 76-84381, $99,000.00, 1978-1981. Title: Neuroendocrine-Neurogenic Control of Metabolism. Dr. L.L. Bernardis and J. Goldman P.I. and Dr. L.L. Bellinger, co-P.I (20% effort).

N.I.H. F22 NSO2625-D1 $26,400, 1974-1976, Title: The Neural and Humoral Basis of Food Intake Control, Dr. L.L. Bellinger Individual Fellowship (100% effort) with Dr. L.L. Bernardis, S.U.N.Y. at Buffalo.

B. Intramural -

1. Grants


   Baylor Oral Health Foundation, FY03-8. $10,000.00, 2003-2004. The effects of nicotine administration on expression of genes important in feeding behavior in rat hypothalamic nuclei. Dr. L.L. Bellinger, PI, Drs. Phillip Kramer and Shannon Kramer co-investigators.

$2,200.00, 1999, Habitat for Science. Ms. Felica Coleman, Fellow and Dr. Larry L. Bellinger, PI.

$1500.00, 1994 (Baylor University Funds), Title: Satietin: possible hormonal and metabolic actions. Dr. L.L. Bellinger, P.I.

$1481.00, 1992 (Baylor University Funds), Title: The Effects of Visceral Denervation on ICS 205-930 Ability to Attenuate the Hypophagia Induced by Imbalanced Amino Acid Diets. Dr. L.L. Bellinger, P.I.

$2000.00, 1992 (NIDCR T-35), Title: The Effects of Liver and Gastric Innervation on the Ingestion of rats given an Imbalanced Amino Acid Diet. George Dula, Fellow and Dr. L.L. Bellinger, mentor.

$1496.00, 1989, (Baylor University Funds) Title: The Satiety Effects of HPLC Purified Satietin. Dr. L.L. Bellinger, P.I.

$1486.00, 1987, (Baylor University Funds) Title: Rat satietin: Is it a satiety agent? Dr. L.L. Bellinger, P.I.

$1480.00, 1986, (Baylor University Funds) Title: Satietin: a putative satiety agent. Dr. L.L. Bellinger, P.I.

$1481.50, 1985, (Baylor University Funds) Title: The Role of the Dorsomedial Hypothalamic Nucleus in Cholecystokinin's Suppression of Feeding Behavior. Dr. L.L. Bellinger, P.I.


2. Technician

Baylor College of Dentistry Funded Technician, 1980-2004 September ($625,550.00), Larry L. Bellinger, P.I.
3. **Other**

$49,850.00, 1976-1996, Equipment funded by Century Club or special accounts

$3600.00, N.I.H. BMRG funds

$14,500.00, Department Equipment Funds

$750.00, 1992 Faculty Development Award

**VI. SOCIETY AND ORGANIZATION MEMBERSHIPS - REGULAR**

A. American Association for Dental Research/International Association for Dental Research

B. Sigma Xi, 1976→

C. Endocrine Society - 1976→

D. Society for Neuroscience - 1976→

E. International Brain Research Organization - 1976→

F. American Physiological Society - 1977→

G. American Society of Nutritional Sciences - 1982→

H. Society for Study of Ingestive Behavior (Charter Member) - 1986→

I. International Behavioral Neuroscience Society (Charter Member, Elected Fellow 1995) - 1992→

**VII. HONORS, AWARDS AND RECOGNITIONS**

A. University of California Presidents Undergraduate Research Scholarship, 1969.

B. University of California Chancellor's Pattern Fund Research Grant, 1972.

C. University of California at Davis Physiology Graduate Group Best Physiology Graduate Student, I.I. Hertzendorf Humanitarian and Intellectual Award, 1973

D. Individual N.I.H. Postdoctoral Fellowship with Dr. L.L. Bernardis, State
University of New York, Buffalo, NY 14215, 1974-1976.

E. Invited published comments by the editors of The Behavioral and Brain Sciences; Endocrine effects of glucose and insulin periodicity. The Behavioral and Brain Sciences 4:576, 1981.


G. Sabbatical leave award to work with Dr. V.E. Mendel, Dept. Animal Physiology and Food Intake Control Laboratory, University of California, Davis, CA, 1983-1984. Appointed Adjunct Associate Professor, Department of Animal Physiology, University of California at Davis..

H. Invited to co-author a chapter in Early Brain Damage, Vol. 2 Neurobiology and Behavior, Academic Press. 1984


J. Charter Member Society for Study of Ingestive Behavior, 1986


L. Chair Scientific Session X International Congress on the Physiology of Food and Fluid Intake, July 1989, Paris, France.


N. Baylor College of Dentistry Faculty Development Award, 1992.


P. Charter member of International Behavioral Neuroscience Society, 1992

Q. Elected Fellow by International Behavioral Neuroscience Society, 1995

S. Successfully completed post-tenure review in May 1998.


U. My student Ms. Carolyn Kerins was awarded the first ever NIH Individual Pre-doctoral Dental Scientist Fellowship in September 1998. This award of over $200,000.00 in direct/indirect cost funded Ms. Kerins DDS and PhD program. Dr. Kerins completed her DDS degree in 2002 and was awarded the PhD in May 2004.

V. Baylor College of Dentistry Student Research Day, April 21, 1999 – Carolyn Kerins (DDS Ph.D. student) - First Place Overall. This work was then presented at the 1999 Texas State Tri-Dental School Meeting, University of Texas at Houston where Carolyn again won First Prize Overall and at the 1999 Texas Dental Association meeting.

W. Carolyn Kerins (DDS Ph.D. student) – invited to present paper at the 1999 Hinman Student Research Symposium, University of Tennessee Health Science Center, College of Dentistry. Peabody Hotel, Memphis, Tennessee, October 29-31, 1999.


Y. Baylor College of Dentistry Student Research Day, February 18, 2000 – Carolyn Kerins (DDS Ph.D. student) - First Place Overall. This work was then presented at the 2000 Tri-State Dental Meeting, University of Texas at San Antonio where Carolyn won Honorable Mention and at the 2000 Texas Dental Association meeting.


AA. Baylor College of Dentistry Student Research Day, April 11, 2003 – Karina Marr (DDS student) - First Place Overall Oral Presentation.

BB. Karina Marr (DDS student) – invited to present paper at the 2003 Hinman Student Research Symposium, University of Tennessee Health Science Center, College of Dentistry. Peabody Hotel, Memphis, Tennessee October 24-26. 2003

DD. Awarded title of Regents Professor by the Texas A&M University System Board of Regents and Chancellor, December 4, 2003. This award is given to eight professors a year out of the 14,000 faculty members of the Texas A&M University System components.

EE. Interviewed and quoted by Science Magazine; Science Now March 17, 2005; http://sciencenow.sciencemag.org/cgi/content/full/2005/317/2.


GG. The primary paper from my R01 (Endocrinology 150:3680-9, 2009) was reported in HealthDay New April 16, 2009.

HH. Invited by Chief Editor of all Elsevier Journals, as a Editorial Board member, to take part in a meeting entitled “a 20:20 Vision on the Future of Peer Review”. April 11, 2011.

II. “Does Estrogen Diminish TMJ Pain”, an article about Dr. Kramer’s and my laboratory appeared in the November TMJ Association News Bites Vol. 3 (Issue 7), page 3-4, 2011. This study was funded by an R01 to me and the data was generated by Dr. Kramer’s and my laboratory.

JJ. “Modulation of temporomandibular joint nociception and inflammation in male rats after administrating a physiological dose of 17β-estradiol”; this was study was funded by an R01 to me and the data generated by Dr. Kramer’s and my laboratory appeared in the July issue of TMJ Association The Latest News in Science July 24, 2012.

KK. Advisory Committee for University of Texas at Arlington’s Center of Excellence for the Study of Health and Chronic Illnesses 2012-present.

VIII. PROFESSIONAL DEVELOPMENT AND SERVICE

A. Professional Contributions:

1. Invited Presentations

   Extramural

   a. Feeding Patterns and Hormone Levels. Dec. 1973, University of California at Berkeley, Dept. of Avian Sciences,

c. The Role of the Mesencephalon in the Control of Feeding Behavior. Nov. 1977, University of California at Davis, Dept. of Animal Physiology, Davis, CA.

d. Some Aspects of Hormonal and Neural Control of Feeding Behavior. Feb. 1979, Texas Christian University, Dept. of Psychology, Fort Worth, TX.

e. Liver Glucoreceptors and Their Influence on Feeding Behavior. Nov. 1983, University of California at Davis, Dept. of Nutrition, Davis, CA.

f. The Effect of Dorsomedial Hypothalamic Nuclei Lesions in Body Weight Regulation and Opioid Induced Feeding. March 1984, University of California at Davis, Physiology Graduate Group, Davis, CA.

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m. Satietin: A Putative Satiety Agent. Nov. 1989, Dept. of Medicine, SUNY at Buffalo, Buffalo, NY.


p. The Effects of Semi and HPLC Purified Human Satietin and Alpha-1-glycoprotein on Ingestion and Body Weight. May 1992, Texas Tech University, Dept. of Biochemistry, Lubbock, TX.

q. HPLC Purified Satietin: A Satiety Agent. June 1992, SUNY at Buffalo, Behavioral Sciences Graduate Group, Buffalo, NY.

r. Liver Denervation and Ingestion of Imbalanced Amino Acid Diets. Jan 1993, SUNY Health Science Center at Syracuse, Dept. of Surgery, Syracuse, NY.

s. Invited speaker at NSF sponsored 4-day workshop on territoriality by Animal Behavior Graduate Group. University of California at Davis. Lectures on feeding aspects of: 1) Habitat Selection; 2) "To be or not to be" Territorial; 3) Territorial Acquisition; 4) Territorial Maintenance and Abandonment; and 5) Summary; daily small group discussions. March 27-31, 1993, Davis, CA.


u. The Effect of Liver Innervation on Feeding Behavior. April 1993, Texas Tech University, Dept. of Biochemistry,
Lubbock, TX.

v. The Role of the Liver in Food Intake and Regulation. June 1993, SUNY at Buffalo, Division of Nutrition, Buffalo, NY.


x. Satietin: what we know and don't know. March 1999, Texas Tech University, Dept of Cell Biology and Biochemistry, Lubbock, TX.


Intramural


b. Computerized and Other Types of information Retrieval. Baylor College of Dentistry, April 1981.


g. Does the Liver Have a Role in the Control of Feeding Behavior? Baylor College of Dentistry, October 1991.


k. The Control of Feeding Behavior. Sigma XI Meeting. Baylor University Medical Center, November 1994.


o. The Control of Feeding Behavior and Why There is an Obesity Epidemic, Dallas Section of the North American Division International Association for Dental Research, Dallas, TX, November 2002.

p. Why there is still a need to use animals in research and testing (2h program), Research Executive Committee of
Texas A&M University Health Science Center, College Station, TX, December 2003.


r. Overview of CODA Section 3 Faculty and Staff. Given to faculty of Baylor College of Dentistry-TAMUSHSC. April 26, 2004

s. New Faculty Orientation presentation given December 12, 2005, June 14, 2006 and December 13, 2006.


u. New Faculty Orientation presentation given June 2007 and December 7 2007


w. Faculty Development and Networking Series – Appointment, Promotion and Tenure August 27, 2008.

x. HSC Faculty Appointment Promotion and Tenure Process. Given to component APT Committee, component Chairs, component Faculty and Component Staff in four separate meetings at Institute of Biosciences and Technology; Houston; College of Pharmacy, Kingsville; College of Medicine and School Rural Public Health, College Station; College of Medicine, Temple; and Baylor College of Dentistry, Dallas. November 2009.

y. New Faculty Orientation presentation given 2009-2012.

2. Continuing Education Courses

b. Numerous CPR courses, Instructor, annually from 1977 - 1995

3. Programs

a. Co-organized the "Mechanisms of Appetite and Obesity" with Dr. M.J. Wayner in San Antonio, TX, a Satellite Symposium of the 1985 Society for Neuroscience Meeting, over 100 participants from nine countries.

b. Co-organizer of "Appetite, thirst and related disorders" in San Antonio, TX with Dr. M.J. Wayner, a Satellite Symposium of the 1987 Society for Neuroscience Meeting, over 100 participants from nine countries.

c. Local Organizing Committee for the American Associate of Dental Research Annual Meeting, held April 2-5, 2008, Dallas, TX.

4. Editorial

a. Advisory Board

Physiology and Behavior 1985-2011

b. Editor


5. Ad-hoc Journal Reviewer (33 different journals)

a. American Journal of Physiology

b. Behavioral and Neural Biology
c. Brain Research

d. Brain Research Interactive

e. Brain Research Bulletin

f. Cell and Tissue Research

g. Endocrinology

h. Endocrine Research

i. European Journal of Neuroscience

j. European Journal of Pain

k. Food and Chemical Toxicology

l. Journal of Appetite

m. Journal of Applied Physiology

n. Journal of the Autonomic Nervous System

o. Journal of Lipid Research

p. Journal of Neurosciences

q. Journal of Nutrition

r. Journal of Orofacial Pain

s. Life Sciences

t. Nature

u. Neuroendocrinology

v. Neuroscience

w. Neuroscience and Biobehavioral Reviews

x. Neuroscience Letters

y. Nutrition
z. Obesity Research

aa. Peptides

bb. Pharmacology, Biochemistry and Behavior

c. Physiology and Behavior

dd. Proceedings of the National Academy of Sciences (U.S.A.)

ee. Psychoneuroendocrinology

ff. Science

gg. Toxicology in Vitro

6. Grant Reviewer

a. Study Section, Review Panel, Special Emphasis Panel


5). National Sciences and Engineering Research Council of Canada. Special Emphasis Panel

b. **Ad hoc**

1). **National Science Foundation**

2). **Louisiana Board of Regents for Higher Education**;

3). **The Wellcome Trust London, England**

4). **Philip Morris External Research Program**.

7. **Related Professional Community Service**

a. **1987 - 1995**  N.I.H. Minority High School Student Research Apprentice Program: Division Research Resources N.I.H. I have had 1-3 students each of the above years for eight weeks over the summer.

b. **SMU gifted and talented program for high school students (1994)**.


d. **Jarvis College, Minority Student Summer Research Program, 2000.**

e. Leah Ellis, an eight grader at Faith Lutheran Church in Plano, won the overall highest award for grades 8-12 at the school’s Science Fair. Later Ms Ellis won the overall highest award for grades 6-8 at the Sate of Texas Lutheran Schools Competition held at Concordia University in Austin, Texas, 2002.

f. **HSC Representative and Scientific Judge at TAMUS Pathways Student Research Symposium, November 7-8, 2008, Commerce, TX.**

B. **Committee Activities and Offices**

1. **Baylor College of Dentistry - Institutional**

   Present:

   a. **Administrative Council, 2004 – present**
b. Biosafety Committee – Advisor

c. CODA Steering Committee 2009-12

d. CODA Standard 6*, 2009-12

e. CODA Graduate Programs*, 2008-12

f. Deans and Directors, 2004 - present

g. Graduate Education Council*, 2004- present

h. Institutional Animal Care and Use Committee, 1978 – 2010*; member 2010-present

i. Institutional Review Board, Ex Official, 2004 – present

j. New Science Building Committee*, 2007-present

k. Planning and Assessment Committee, Advisor, 2004 – present

l. Practice Based Dental Research Network Committee

m. R-25 Steering Committee, 2007-2012

n. Research Advisory Council*, 2004 – present

o. Research Committee, Advisor, 2004 – present

p. T32 Advisory Committee 2007-presen

q. Subcommittee to the Facilities Advisory Committee, 2004 – present

2. Previous:

a. Ad hoc Committee on Academic Standards, 1984

b. Ad Hoc Committee on Applied Research Activity, 1994

c. Ad hoc Committee to Review Research Policies Procedures, 1994
d. Animal Resource Unit, Director, 1978 – 2010


f. Biosafety and Biohazards Committee, 1980-1983

g. Chairperson and Faculty Search Committees, numerous

h. Council on Dental Accreditation Committee - Administration Evaluation, 1977

i. Council on Dental Accreditation Committee Accreditation Committee - Faculty Evaluation, 1987

j. Council on Dental Accreditation Committee - Basic Science Curriculum, 1987

k. Council on Dental Accreditation - Institutional Effectiveness

l. Council on Dental Accreditation, Baylor College of Dentistry Steering Committee), 2002-2005

m. Council on Dental Accreditation Standard III: Faculty, Chairman, 2002-2005

n. Course Evaluation Subcommittee, 2002-2004


q. Graduate Faculty Credentials Committee, Chairman, 1988-1992


s. New Dental Building Committee, 2005-present

t. Research Advisory Council, 1999-2004, member

u. Research Facility Task Force, 2002-2004

v. Search committees Department of Endodontics, 2004-2005
and Department of Orthodontics, 2004-2005


x. Southern Association of Schools and Colleges: Standard, Faculty, Chairman, 2000-2002

y. Southern Association of Schools and Colleges: Institutional Effectiveness, 2000-2002

z. Southern Association of Schools and Colleges: BCD Steering Committee, 2000-2002

aa.. BCD Strategic Planning Committee, Subcommittee: Assessment Team 1997-1999


2. Baylor College of Dentistry - Graduate and Under Graduate Steering

a. Graduate

1). Greg Aponte, MS, 1978

2). Kathy Hill, MS, 1982

3). Philip Richmont, MS, 1982

4). Karen Goaz, MS, 1983

5). Dr. Steven Kolb, MS, 1987

6). Dr. James R. Michaud (mentor), MS, 1987-1988

7). Scott Brown, MS, 1988

8). Dr. Betty Kersten, MS, 1988

9). Shannon Lynn Byrd (mentor), MS, 1988-1989

10). Dr. Robert J. Steelman, MS, 1990
11). Dr. Susan Roberts, MS, 1991
12). Bo Evans (mentor), MS not completed, 1996-1999
13). Carolyn Ann Kerins (mentor), PhD, 1998-2004
14). Dr. Maria Fuentes, PhD, 2001-2002
15). Dr. Anthony McNaught, MS, 2001
16). Robert Spears, PhD, 2001-2002
17). Dr. Douglas Singleton, MS, 2003
18). Dr. Reena Kuba. MS, 2006
19). Jyoti Puri, (Phillip Kramer and LLB co-mentors), PhD, 2007-2011

b. Undergraduate Mentor
1). George Dula, 1992
2). J. Kent Norwood, 1995
4). Brittany Vo, 1996
5). James Lucente, 1996
6). Jason Pavelka, 1996
7). R. Lance Bullard, 2001
8). Karina Marr, 2002-2004
9). Christopher King, 2004-2005
10) Roth Hinkle, 2005-2006

c. Post-doctoral – Dr. Phillip Kramer and I supervised Dr.
Guogiang Guan. Dr. Guan was in our laboratories from 2002-2006 and now is an Assistant Professor and Director of Graduate Clinic in the Department of Orthodontics at S.U.N.Y at Buffalo.

3. Baylor College of Dentistry - Department of Biomedical Sciences
   b. Director of Resources and Environment 1997 to 2004
   c. Graduate Committee 1993 to 2004

4. Local
   Current
   a. Baylor Health Care System, Baylor Research Institute, Research Advisory Committee, 2005-present
   b. Advisory Committee for University of Texas at Arlington's Center of Excellence for the Study of Health and Chronic Illnesses, 2012-present

Previous

Steering Committee for the Merging of Baylor College of Dentistry/Baylor Research Institute Animal Resource Facilities, Chairman

5. The Texas A&M University System Health Science Center
   Current
   a. Research Advisor Council, 2004 – present
   b. Graduate Education Council, 2004 – present
   c. Appointment, Promotion and Tenure Committee College of Pharmacy, Chairman, 2011-2013.
   d. Research Compliance Advisory Committee, 2012 - present

Previous

b. SACS Academic Issues 2001-2002

c. Elected as Faculty Senator 2001-2003

d. Appointment, Promotion and Tenure Committee, Chairman, 2000-2010

e. SACS Standard 3.2 2010-1012

6. The Texas A&M University System

Biosafety Advisory Committee, 2009-present

TAMU/HSC Associate Deans of Research Enhancing Biomedical Research 2011 - present

7. National/International Committees


c. National Dental CTSA Workgroup, 2008-

C. Relevant Educational Activities


6. Use of Animals in Laboratory Research. University of Texas Health Science Center at San Antonio, May 1985, San Antonio, TX.

7. Strengthening Public Understanding of Biomedical Research. April 1987, Washington D.C.


9. Humane Care and Use of Laboratory Animals. N.I.H. (OPRR) and University of Texas Health Science Center at San Antonio, Jan. 1989, San Antonio, TX.


14. Animals in Research - A Miracle at Risk. AMA-TMA-TSBR. Sept. 1992, University of Texas Health Science Center at San Antonio, San Antonio, TX.


16. Animal Space. Charles River Seminar on Animals in Research. Dec. 1992, University of Texas Health Science Center at Dallas, Dallas, TX.


21. Evaluating Health Professions Faculty and Administrators, May 17-19, 1996, Baylor College of Dentistry, Dallas TX.


26. IACUCs and Animal Well-being: Responsibilities, relationships and Training. The Scientist Center for Animal Welfare/Office for Protection from Research Risks/The University of Texas Health Science Center at San Antonio. Dec. 6-7, 1999, San Antonio, TX.

27. Distance Education, Live Interactive Broadcast to University of Texas at Houston and University of Texas at San Antonio, June 14, 2000, Dallas, TX.

28. IACUCs and Animal Well-being. The Scientist Center for Animal Welfare/Office for Protection from Research Risks/The University of Texas Health Science Center at San Antonio. Dec. 4-5, 2000, San Antonio, TX.

29. Advocacy and Neuroscience: A Unified Voice for Animals Research. Society for Neuroscience Committee on Animals in


36. Protocol Noncompliance: Minimizing Risks to Subjects. Barbara Richardson, Baylor University Medical Center Institutional Review Board Series, October 11, 2006, Dallas, TX.


40. NIH Regional Consultation Meeting on Peer Review. October 25, 2007, Parc 55 Hotel San Francisco, CA. Sponsored by NIH.


42. Research Transparency: Proactive Strategies for Community Outreach and Media Relations, presented by Texas Society for Biomedical Research, January 29, 2008, Austin, TX.


45. Texas A&M Health Science Center 2009 Faculty Development Workshop on Pedagogy. Teaching and Learning Strategies for Today's Students, February 20-21, 2009, College Station, TX.


47. University of Texas MD Anderson Cancer Center, October 7, 2009. "Moving Innovative Technologies across the Funding Gaps", speaker Olivier Wenker, Office of Translation Research, University of Texas. Webinar 12:00-1:30.


52. IACUC responsibility and Compliance: New guide Changes. The Scientist Center for Animal Welfare/Office for Protection from Research Risks/The University of Texas Health Science Center at San Antonio/USDA Animal Plant Health Inspection Service/Animal Care. Dec. 5-6, 2011, San Antonio, TX.

53. Use of Non-Pharmaceutical-Grade Chemicals and other Substances in Research with Animals. Office of Laboratory Animal Welfare, Dr. Patricia Brown, Director OLAW; Dr. Carol Clarke, USDA-APHIS; and Dr. Christian Newcomer, AAALAC. March 1, 2012, Webinar.

54. Performance Standards. Office of Laboratory Animal Welfare, Dr. Janet Garber, Garber Consulting; and Susan Silk OLAW. April 19, 2012.


IX  PUBLICATIONS – Peered Review Publications 146 and Abstracts 196 for a total of 342.

A. Research – Peer Reviewed – Papers by my students or others where I am primary author have their name underlined –


Research Chapters – Peer Reviewed


B. Teaching – Peer Reviewed


C. Other Scholarly Publications - Peer Reviewed


D. Abstracts – Abstracts by my students or others where I am primary author have their name underlined; first author gave talk unless my name is underlined in italics, then I gave the talk.


33. Bellinger, L.L. and F.E. Williams. The effect of liver (L) denervation (D) on food intake (FI), meal size (MS), water intake (WI) and body weight (BW) in the rat. The Physiologist 23:54, 1980.


35. Bernardis, L.L. and L.L. Bellinger. Effect of diet in liquid (LD) and powder (PD) form on ingestive behavior, body weight (BW) and


42. **Bellinger, L.L.** and F.E. Williams. Effects of intraperitoneal (IP) injections of 2-deoxy-D-glucose (2DG), insulin (I), and glucagon (G) on food intake (FI) in liver (L) denervated (D) rats. Fed. Proc. 41:1003, 1982.


44. Bernardis, L.L., **L.L. Bellinger**, and G. McEwen. Growth-depressing effect of high fat diet and sucrose solution (HFSUC) in early life in rats with dorsomedial hypothalamic lesions (DMNL) and

45. **Bellinger, L.L.** and F.E. Williams. Food intake (FI) effects of intraperitoneal injections of 2-deoxy-glucose (2DG), insulin (I) and glucagon (G) in liver (L) denervated (D) and sham (S) operated rats. Soc. for Neurosci. Twelfth Annual Meeting, Minneapolis, MN, Vol. 8, pg. 181, 1982.


47. **Bellinger, L.L.**, L.L. Bernardis, F.E. Williams, and D.L. Jones. Dorsomedial hypothalamic lesions (DMNL) in weanling rats attenuates naloxone (NAL) and cholecystokinin (CCK) suppression of food (F) and water (W) intake (I). Fed. Proc. 42:359, 1983.


49. Williams, F.E. and **L.L. Bellinger**. The effect of portal (PORT) and jugular (JUG) glucose (G), mannitol (MAN) and saline (SAL) infusions on food intake, plasma glucose and insulin in dogs. The Physiologist 27:A-106, 1983.


59. Bellinger, L.L. and F.E. Williams. Liver denervation [Hepatic vagal branch (HVB); hepatic artery-portal vein (HAPV); combined (COM)] or sham operation (SCON) on glucagon (GLG) suppression of food intake (FI). Fed. Proc. 44:1164, 1985.

60. Williams, F.E. and L.L. Bellinger. The effects of liver denervation [Hepatic vagal branch (HVB); hepatic artery-portal vein (HAPV); combined (COM) or sham operation (SCON)] on liquid sucrose and fructose intake in male and female rats. In: "Mechanisms of Appetite and Obesity", a Satellite Symposium of the 1985 Soc. for


62. Bellinger, L.L. and F.E. Williams. Glucagon (GLG) and epinephrine (EPI) effects on milk intake (MI) and plasma glucose (GLU) in liver denervated (LD) and sham operated (SHAM) rats. Soc. for Neurosci. Fifteenth Annual Meeting, Dallas, TX, Vol. 11: 61, 1985.


68. Bellinger, L.L. and V.E. Mendel. The effects of repeated intracerebroventricular (ICV) infusions of rat satietin (r-SAT) on food intake, water intake, activity and body weight in the rat. In:


76. Bellinger, L.L. and V.E. Mendel. Human satietin (hSAT) and alpha₁ glycoprotein (AG) effects on food (FI), water intake (WI),


79. Bellinger, L.L. and F.E. Williams. The effects of portally infused epinephrine (EPI) on food intake (FI), Plasma Insulin (INS) and glucose (GLU) in the dog. The FASEB J. 4:A943, 1990.


87. Bernardis, L., A. Awad, C. Fink, and **L.L. Bellinger**. Developmental changes in metabolism of liver and epididymal fat pads (PADS) in rats with lateral hypothalamic lesions. Third IBRO World Congress of Neuroscience, Aug. 4-9, 1991, Montreal, Canada.

88. **Bellinger, L.L.** Lean (LBM) and fat (FBM) body mass measurements using EM-SCAN, model SA-2, The Physiologist 34:248, 1991


94. Bernardis, L.L., A. Ciesla, and **L.L. Bellinger**. Reduced survival and somatic parameters in offspring of rats with dorsomedial


102. Bellinger, L.L. and V.E. Mendel. The effects of HPLC purified...


145. **Marr, K.**, P.J. Wellman and **L.L. Bellinger**. Effects of i.c.v.


147. Marr, K. and L.L. Bellinger. Effect of butorphanol (BUT) on adjuvant induced temporomandibular joint (TMJ) inflammation as determined by feeding behavior. The 2003 Hinman Student Research Symposium, University of Tennessee Health Science Center, College of Dentistry. Peabody Hotel, Memphis, Tennessee October 24-26. 2003


159. Guan, G., S.F. Kramer, L.L. Bellinger, and P.R. Kramer. Estrogen regulates inflammation related to temporomandibular joint (TMJ)


175. Bellinger, L.L., P.J. Wellman, R.B.S. Harris, E.W. Kelso and P.R.


184. Kramer, P.R. and **L.L. Bellinger**. Effect of 17β-estradiol on temporomandibular joint nociception in intact and castrated male


**X. SCIENCE CITATION INDEX**

Google Scholar:

The above articles have been cited 3274 times and 853 since 2008. H = 29; since 2008 = 16
i10-index all = 88; since 2008 = 25

**XI. Courses Taught (*Course Director) 2012-2013**

<table>
<thead>
<tr>
<th>Course Title &amp; Number</th>
<th>Number of Students Taught</th>
<th>Hours of Lectures Given</th>
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NAME: M. Douglas Benson
POSITION TITLE: Assistant Professor

eRA COMMONS USER NAME (credential, e.g., agency login): bensonmd

EDUCATION/TRAINING: (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)

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<td>05/91</td>
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<td>University of Michigan, Horace Rackham Graduate School, Ann Arbor, MI</td>
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<td>UT Southwestern Medical Center, Dallas, TX</td>
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<td>08/07</td>
<td>Developmental Biology</td>
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B. Positions and Employment
1984-1986 Part-time Research Assistant, Indiana University School of Medicine.
1988-1989 Research Assistant, Indiana University School of Medicine.
1991-2000 Graduate Student Research Assistant, Department of Biological Chemistry, University of Michigan School of Medicine.
1992 Graduate Student Teaching Assistant: Biological Chemistry 415/515.
1993 Graduate Student Teaching Assistant: Biological Chemistry 571.
2001-2007 Postdoctoral Research Fellow, Center for Developmental Biology, University of Texas Southwestern Medical Center.
2007-present Assistant Professor, Department of Biomedical Sciences, Texas A&M Health Science Center Baylor College of Dentistry.

Other Experience and Professional Memberships
1993-2000 Member, American Society for Bone and Mineral Research.
2004-2007 Associate member of the Christopher Reeve Foundation International Research Consortium on Spinal Cord Injury.
2010-present Member, American Association of Anatomists.
2010-present Member, Society for Neuroscience.

Honors
1998 ASBMR Travel Award recipient.
2005 UT Southwestern Medical Center Postdoctoral Poster Session and Symposium Grand Prize Award
2011 Jayanthi Lectureship, Academy of Spinal Cord Injury Professionals

C. Peer-reviewed Publications


**D. Research Support**

**Ongoing Research Support**

Christopher and Dana Reeve Foundation Individual Research Grant 2011-2013

Ephrin inhibition of regeneration after spinal cord injury
The goal of this project is to determine the contribution of ephrin-B3 in myelin to lack of axonal regeneration relative to other myelin inhibitors in vivo.
Role: PI

**Completed Research Support**

F32 NS047895 (NINDS) 2004-2006

Ephrins in myelin-based inhibition of axonal regeneration
The goal was to determine if ephrin-B3 in myelin is a significant fraction of myelin’s inhibitory activity toward axonal growth.
Role: PI

Texas A&M Health Science Center Research Development Grant 2008-2009

Eph/ephrin regulation of neuronal gene expression
This project sought to determine if ephrins control specific transcriptional pathways in neurons.
Role: PI

R03DE020119 (NIDCR) 2010-2012
Role of ephrins in osteoblast differentiation
The goal of this project is to determine the mechanism whereby ephrins stimulate bone formation.
Role: PI
APPENDIX B
FACULTY RECORD

A. **Name:** Peter H. Buschang

B. **Rank:** Regents Professor
   Peter H. Buschang Endowed Professor in Orthodontics

C. **Education:** *BA, MA, PhD*

D. **Professional Appointments:** *Tenured*

E. **Area of Contribution/Responsibility**

| Primary Area: Research/Scholarly Activity | Secondary Area: Education/Teaching |

F. **Teaching Performance (2007-2012)**

**Academic Year: 2012-2013**

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## Academic Year: 2008-2009

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<td>Independent Research (Ortho 5428)</td>
<td>Grad</td>
<td>Lab</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Independent Research (Ortho 5428)</td>
<td>Grad</td>
<td>Lab</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Research Design &amp; Methodology (BMS 5221)</td>
<td>Grad</td>
<td>L</td>
<td>2</td>
<td>34</td>
</tr>
<tr>
<td>Applied Biostatistics (BMS 5222)</td>
<td>Grad</td>
<td>L</td>
<td>2</td>
<td>34</td>
</tr>
<tr>
<td>Physical Growth and Maturation (BMS 5V75)</td>
<td>Grad</td>
<td>L</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Postnatal Craniofacial Growth (BMS 5V73)</td>
<td>Grad</td>
<td>L</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
<td>Clinical Specialty Seminar II -Relapse &amp; Retention (Ortho 5125)</td>
<td>Grad</td>
<td>L</td>
<td>3.5</td>
<td>6</td>
</tr>
<tr>
<td>Head &amp; Neck Anatomy (BMS 5204/5V04)</td>
<td>Grad</td>
<td>L</td>
<td>1.5</td>
<td>27</td>
</tr>
<tr>
<td>Introduction to Orthodontics (Ortho 5200)</td>
<td>Grad</td>
<td>L</td>
<td>1</td>
<td>12</td>
</tr>
</tbody>
</table>

**Summary for Year: 2008-2009**

1. Lectures taught  
   2. Laboratories taught  
   3. Clinics taught  
   4. Seminars taught

**Number of Hours**

| Lectures taught   | 104  |
| Laboratories taught | 145  |
| Clinics taught    | 0    |
| Seminars taught   | 34   |

**Academic Year: 2007-2008**

<table>
<thead>
<tr>
<th>Course Number/Title</th>
<th>Level (see above)</th>
<th>Type * L, Lab, Cl, S</th>
<th>Credit Hours</th>
<th>Number Students Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth &amp; Development - Ortho 6660</td>
<td>Dental</td>
<td>L</td>
<td>2</td>
<td>96</td>
</tr>
<tr>
<td>Course Code</td>
<td>Title</td>
<td>Type</td>
<td>Credit Hours</td>
<td></td>
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<tr>
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<tr>
<td>Ortho 8320</td>
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<td>L</td>
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<td>Ortho 7210</td>
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<td>Research Design &amp; Methodology (Ortho 5208)</td>
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<tr>
<td>Principles of Scientific Methodology (Ortho 5143)</td>
<td>Grad</td>
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<td>0.5</td>
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</tr>
<tr>
<td>Craniofacial Growth &amp; Devel II (Ortho 5231)</td>
<td>Grad</td>
<td>L &amp; S</td>
<td>1.5</td>
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<tr>
<td>Scientific Writing: Thesis (Ortho 5147)</td>
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<td>S &amp; Lab</td>
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<tr>
<td>Radiology &amp; Cephalometrics (Ortho 5202)</td>
<td>Grad</td>
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<td>1</td>
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<tr>
<td>Advanced Cephalometrics (Ortho 5108)</td>
<td>Grad</td>
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<td>1</td>
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<tr>
<td>Independent Research (Ortho 5428)</td>
<td>Grad</td>
<td>Lab</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Independent Research (Ortho 5428)</td>
<td>Grad</td>
<td>Lab</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Research Design &amp; Methodology (BMS 5221)</td>
<td>Grad</td>
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</tr>
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<td>34</td>
</tr>
<tr>
<td>Physical Growth and Maturation (BMS 5V75)</td>
<td>Grad</td>
<td>L</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Postnatal Craniofacial Growth (BMS 5V73)</td>
<td>Grad</td>
<td>L</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
<td>Clinical Specialty Seminar II - Relapse &amp; Retention (Ortho 5125)</td>
<td>Grad</td>
<td>L</td>
<td>3.5</td>
<td>6</td>
</tr>
<tr>
<td>Head &amp; Neck Anatomy (BMS 5204/5V04)</td>
<td>Grad</td>
<td>L</td>
<td>1.5</td>
<td>27</td>
</tr>
<tr>
<td>Introduction to Orthodontics (Ortho 5200)</td>
<td>Grad</td>
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<td>12</td>
</tr>
</tbody>
</table>

**Summary for Year:** 2007-2008

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number of Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures taught</td>
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</tr>
<tr>
<td>Laboratories taught</td>
<td>145</td>
</tr>
<tr>
<td>Clinics taught</td>
<td>0</td>
</tr>
<tr>
<td>Seminars taught</td>
<td>45</td>
</tr>
</tbody>
</table>

2. **Quality of Teaching**

3. **Course Coordination**

I am currently the course coordinator (i.e. director) of seven courses, including one first year dental student course (Growth and Development), two core courses (Research Design and Methods; Physical Growth and Maturation), and four Orthodontics courses (Principles of Scientific Methodology; Craniofacial Growth and Development; Radiology and
Cephalometrics; Advanced Cephalometrics). Each of the courses requires administrative oversight, planning, scheduling, and coordination of participating faculty.

4. Curriculum and/or Course Development

Over the years I have made major changes to the courses and lectures that I am responsible for. The core course, Research Design and Methodology was designed from scratch some 10 years ago. It is part of a methodology "stream" of courses, that starts with the methodology course, followed by Applied Biostatistics (for which I provide 8 lecture hours), and Research Ethics. Similarly, I helped to developed a core "stream" of craniofacial growth courses, which begins with a course in Craniofacial Development, followed by Postnatal Craniofacial Growth (for which I provide 4 lecture hours), and Physical Growth and Maturation (which I coordinate and provide 3 lecture hours). I was also primarily responsible for developing the four courses in the Department of Orthodontics that I coordinate.

I also developed a course to prepare our residents for the Phase II exam given by the American Board of Orthodontics. Over the last 20+ years that I have had this responsibility, all of our residents have taken and passed this examination. Our residents attained the highest score on the examination three out of the last five years that the Board officially recognized the highest score. Based on the course that I developed at Baylor College of Dentistry, the College of Diplomats of the American Board of Orthodontics as me to develop a preparatory course for other orthodontists planning to take the Phase II exam. This all-day course was given yearly between 2003-2009 at the annual meetings of the American Association of Orthodontists.

5. Teaching Material Developed

- Powerpoint slides have been developed for each of the courses that I teach.
- Camtasia recording from all lectures
- Handouts of the lectures are provided for each of the courses that I teach.
- I have put together a 230 page manual to for the board preparation course given annually to the orthodontic residents.
- I recently completed a draft of a textbook that I will use for my course Research Design and Methodology.

6. Continuing Education Courses Given

I have also developed CE courses for pertaining to evidence-based dentistry that are given every other year at Baylor College of Dentistry, every year at the national meeting of the American Association of Pediatric Dentistry, and regularly throughout the world.

- Evidence-based Dentistry (EBF) Workshop (8 hour course). American Association of Pediatric Dentistry, 65\textsuperscript{th} Annual Session. Orlando, FL, May 2013
- Evidence-based Dentistry (EBF) Workshop (8 hour course). American Association of Pediatric Dentistry, 64\textsuperscript{th} Annual Session. New York, NY, May 26th, 2012
- Evidence-Based Dentistry (EBD) All Day Workshop: Universidad Nacional Autónoma de México. (8 hours), Jan 23\textsuperscript{rd}, 2012.
- Evidence-Based Dentistry (EBD) Workshop: Strategies for Finding and Critically Appraising the Current Literature. Whole-day CE Course given at Baylor College of Dentistry, Nov 4\textsuperscript{th}, 2011
- Evidence-based Dentistry (EBF) Workshop (8 hour course). American Association of
7. Student/Trainee Supervision

a. Postdoctoral Fellows/Visiting Scientists

Dr. Samuel Roldán, CES University – Medellín, Columbia, October, 2008 to February, 2009
Dr. Helder Jacob, Araraquara College of Dentistry, Araraquara, Brazil, September, 2008 to September 2009.
Dr. Issei Saito, Kagoshima University, Japan, September, 2008 to August 2009.
Dr. Helder Jacob, Araraquara College of Dentistry, Araraquara, Brazil, August 2011 to Present.

b. Thesis/Dissertation Committees

1) Chair/Mentor

<table>
<thead>
<tr>
<th>Student Name or Name of Student Group</th>
<th>Description of Advising Activity</th>
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<tbody>
<tr>
<td>Dr. Roberto Carrillo</td>
<td>PhD Dissertation - mentor</td>
</tr>
<tr>
<td>Dr. Matt McBride</td>
<td>Master’s Thesis - mentor</td>
</tr>
<tr>
<td>Dr. Stephen Ruso</td>
<td>Master’s Thesis - mentor</td>
</tr>
<tr>
<td>Dr. Collin Kraus</td>
<td>Master’s Thesis - mentor</td>
</tr>
<tr>
<td>Dr. Cecilia Cuariran</td>
<td>Master’s Thesis - mentor</td>
</tr>
<tr>
<td>Dr. Aaron Swapp</td>
<td>Master’s Thesis - mentor</td>
</tr>
<tr>
<td>Dr. Lauren Carney</td>
<td>Master’s Thesis - mentor</td>
</tr>
<tr>
<td>Dr. Martin Schellinck</td>
<td>Master’s Thesis - mentor</td>
</tr>
<tr>
<td>Dr. Matthew Brown</td>
<td>Master’s Thesis - mentor</td>
</tr>
<tr>
<td>Dr. Patricia Flemming</td>
<td>Master’s Thesis - mentor</td>
</tr>
<tr>
<td>Dr. Lauren Rennick</td>
<td>Master’s Thesis - mentor</td>
</tr>
<tr>
<td>Dr. Chris Massey</td>
<td>Master’s Thesis - mentor</td>
</tr>
<tr>
<td>Dr. Scott Myser</td>
<td>Master’s Thesis - mentor</td>
</tr>
<tr>
<td>Dr. Ashley Streeter</td>
<td>Master’s Thesis - mentor</td>
</tr>
<tr>
<td>Dr. Eric Vela</td>
<td>Master’s Thesis - mentor</td>
</tr>
</tbody>
</table>
Dr. Jared Corbridge  | Master’s Thesis - mentor  
Dr. Adam Spencer   | Master’s Thesis - co-mentor  
Dr. Cody Moore    | Master’s Thesis – co-mentor  
Dr. Glen Cohen    | Master’s Thesis - mento  
Dr. Hideki Ikeda  | Master’s Thesis – co-mentor  
Dr. David Farnsworth| Master’s Thesis - mentor  
Dr. Sean Lin      | PhD Dissertation  
Dr. Casey Born    | Master’s Thesis - mentor  
Dr. Elizabeth Bauer| Master’s Thesis - mentor  
Dr. Christine Brinley| Master’s Thesis - mentor  
Dr. Ann Nguyen    | Master’s Thesis - mentor  
Dr. John Sherrard | Master’s Thesis - mentor  
Dr. Kelton Stewart| Master’s Thesis - mentor  

<table>
<thead>
<tr>
<th>2) Member</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Name or Name of Student Group</strong></td>
<td><strong>Description of Advising Activity</strong></td>
</tr>
</tbody>
</table>
| Dr. Christophen Chau | Master’s Thesis - committee member  
| Dr. Bryan Hsu | Master’s Thesis - committee member  
| Dr. AJ Ortega | Master’s Thesis - committee member  
| Dr. Elizabeth Russell | Master’s Thesis - committee member  
| Dr. Lauren van Bebber | Master’s Thesis –committee member  
| Dr. Ann Nguyen | Master’s Thesis - committee member  

<table>
<thead>
<tr>
<th>c. Predoctoral Dental Students</th>
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</tr>
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<tbody>
<tr>
<td><strong>Student Name or Name of Student Group</strong></td>
<td><strong>Description of Advising Activity</strong></td>
</tr>
</tbody>
</table>
| Phillip Hurst | Dental Student – research mentor, summer 2013  
| Thomas Lawler | Dental Student – research mentor summer 2013  
| Elisabeth Creasman | Dental Student – research advisor summer 2013  
| Ryan Packard | Dental Student – research advisor summer 2013  
| James Roblee | Dental Student – research mentor summer 2012  
| Seth Harris | Dental Student – research mentor summer 2012  
| Aaron Crossley | Dental Student – research advisor summer 2012  
| Keith Anderson | Dental Student – research mentor summer 2012  
| Nima Deljavan | Dental Student – research mentor summer 2011  
| Steven Shaw | Dental Student – research mentor summer 2010  
| Mike Ross | Dental Student – research mentor summer 2010  
| Dannee Geshay | Dental Student – research mentor summer 2009  
| Matthew Burks | Dental Student – research mentor summer 2009  
| Tamara Carrell | Dental Student – research mentor summer 2008  
| Brandon Brugler | Dental Student – research mentor summer 2008  
| Sara Parker | Dental Student – research mentor summer 2008  
| Brian Ozenbaugh | Dental Student – research mentor summer 2008  

8. **Graduate Faculty Membership**  
Texas A&M University System Health Sciences Center 1996- Present  
Baylor University, Waco, Texas.1988 - 1997  
Saint Louis University 2005-2013
9. **Teaching Awards**
2010 - Robert E. Gaylord Award of Excellence in Orthodontic Education

10. **Other Indices of Teaching**
Invited to lecture and present courses throughout the United States and 11 countries in Europe, Central America, and South America.

In 2008 and 2009 gave a day-long preparatory course for orthodontists planning to take the Phase II exam of the American Board of Orthodontics.

In 2011, was named the first holder of the Peter H. Buschang Endowed Professorship for Orthodontic Research. This endowed professorship required a minimum of $500,000 in pledges from former residents.

Served as an adjunct Professor at Saint Louis University from 2005-2013

G. **Research and Scholarly Activities**
1. **Areas of Research and Scholarship**
My research areas of interest pertain to craniofacial growth, the evaluation of treatment effects and motor-oral function. Following my doctoral work in somatic growth, I developed expertise in longitudinal craniofacial growth assessment during my postdoctoral fellowships at the Universities of Connecticut and Montreal. Expertise in growth provided the background for my strong interests in clinical studies evaluating the short- and long-term morphological consequences of orthodontic and surgical treatments. More recently, my clinical research interests have focused on optimizing and understanding the effects distraction ostogenesis, especially dentoalveolar distraction. Over the past 10 years, great research efforts have been made to enhance the application of miniscrew implants for orthodontic and orthopedic treatments. To understand how form and function are related, I have also developed research interests in various aspects of motor-oral function, including masticatory performance, jaw excursions, jaw kinematics, jaw muscle forces, and jaw muscle physiology. Various clinical studies have been conducted to evaluate function of different populations, assess the effects of therapy on function, and relate morphological changes with changes in motor-oral function.

2. **Invited Presentations:**
Skeletal Anchorage to Assist High Angle Class II Correction. Edward H. Angle Society - Northwest
Component. Portland, OR, Feb 1, 2013
Series of five - 2 hour lectures presented to the orthodontic residents and faculty at the Academic Centre of Dentistry, Amsterdam, The Netherlands, Oct 15-19th, 2012.
A Novel Approach for Treating Vertical Class II Adolescents. Paul P. Taylor Association of Pediatric Dentists, Dallas, TX, Sep 29, 2012
Three lectures including: Miniscrews: experimental evidence and clinical application; What's up with corticotomies and distraction osteogenesis; Fact, beliefs and prejudices in orthodontics. Louisiana Association of Orthodontists, New Orleans, LA, Apr 14, 2012
The development of malocclusions/the experimental evidence supporting the use of miniscrew implants/novel approaches for accelerating and decelerating orthodontic tooth movements. Quebec Association of Orthodontists, Mar 25th, 2011 (all day course).
The effects of latency and rate on bone produced by dentoalveolar transport distraction osteogenesis. University of Texas Southwestern Medical Center, Dallas, Texas, Sep 15th, 2010
Using MSIs to orthopedically correct mandibular deficient, hyperdivergent, patients. Boston, MA, 4th Annual World Mico Implant Congress, Boston, MA, Apr 30th, 2010
Mitos y realidades en el crecimiento y desarrollo craneofacial. XVII Congreso Internacional Asociación Iberoamericana de Orthodoncistas, Cartagena, Colombia, March 20th, 2010.
Methodology and Research Design. (6 hour; 3 day hands-on course) Medellin, Colombia, CES University, June 22\textsuperscript{nd}-24\textsuperscript{th}, 2009.

Craniofacial Growth and Development: Clinical Applications (22 hour; 5 day course) Medellin, Colombia, CES University, June 22\textsuperscript{nd}-26\textsuperscript{th}, 2009.

Beliefs and prejudices in orthodontics (3 hr lecture). 15\textsuperscript{th} Annual meeting of the CES orthodontic alumni Association, Medellin, Colombia, June 24\textsuperscript{th}, 2009.

Clinically oriented orthodontic research involving mineralized tissues. Mineralized Tissues Course, Baylor College of Dentistry, Dallas, TX, June 17\textsuperscript{th}, 2009

CDABO Phase II Preparatory Course American Board of Orthodontics (4 hour course). Boston, MA, May 1\textsuperscript{st}, 2009

Experimental evidence supporting the use of miniscrew implants in orthodontics. 4\textsuperscript{th} Annual World Mico Implant Congress, Boston, MA, May 1\textsuperscript{st} 2009


External reviewer of graduate research activities. Department of Orthodontics, Academic Centre of Dentistry, Amsterdam, The Netherlands, Jan 18\textsuperscript{th} – Jan 21\textsuperscript{st}, 2009

Introduction to evidence based orthodontics/fundamentals for a critical review of the literature (3 hr course). Academic Centre of Dentistry, Amsterdam, The Netherlands, Jan 21\textsuperscript{st}, 2009.

Facts, beliefs, and prejudices in orthodontics. 2 hr lecture Academic Centre of Dentistry, Amsterdam, The Netherlands, Jan 22\textsuperscript{nd}, 2009.

Masticatory function and performance, and associated dental and skeletal adaptations. 1.5 hr lecture. Academic Centre of Dentistry, Amsterdam, The Netherlands, Jan 23\textsuperscript{rd}, 2009.

Long-term stability of orthodontic treatment. 1.5 hr lecture. Academic Centre of Dentistry, Amsterdam, The Netherlands, Jan 23\textsuperscript{rd}, 2009.

Efficient orthodontics using miniscrew implants & increasing the transverse dimension of the mandible with distraction osteogenesis. Encuentro Internacional de Centros Medicos, Mexico City, Mexico, Jul 10\textsuperscript{th}, 2008


Clinical Decision Making – a.k.a. Evidence Based Dentistry. Alpha Omega Dental Fraternity, Dallas, TX, Mar 5\textsuperscript{th}, 2008

Miniscrew implants – experimental studies at Baylor College of Dentistry. UCLA School of Dental Medicine, Los Angeles, CA, Feb 29\textsuperscript{th}, 2008

3. **Non-invited talks**

Experimental Effects of Alveolar Corticotomies on Tooth Movements, 37\textsuperscript{th} Annual meeting of the AADR. Dallas, March 2, 2008.

4. **Grants**

a. Funded

A Randomized-Controlled Trial Comparing the Effectiveness of Invisalign and Traditional Orthodontic Treatments. July 2012-June 2013, $25,000, PI.

The Efficiency and Effectiveness of Clear Aligners for the Treatment of Class I Malocclusions. Grant awarded by Align Technology Inc., July 2011-June 2012, $25,000, PI.

A Comparative Analysis of Endodontic Retreatment and Single Implant Supported Restoration; Grant #: 480170 American Association of Endodontics Foundation, $667,842. Co-investigator. Dr. J. He (PI).
An Implementation and Biobehavioral Study of TMJMD. NIH/NIDCR U01 DE 010713-12A2 (subcontract), $278,557; 2008-2013, PI.

A Novel implant based approach for treating retrognathic hyperdivergent patients. NIDCR RFA-DE-06-007, Sept 2006-Sept 2008, $377,723, PI

b. Pending – N/A

c. Not Funded
An implementation and biobehavioral study of TMJMD – NIH R01, $118,382, Co-investigator.

5. Manuscript Review
   a. Journals Refereed
      Annals of Oral Biology, 1987 - Pres
      Annals of Human Biology, 1985 - Pres
      American Journal of Orthodontics, 1984- Pres
      American Journal of Physical Anthropology, 1980 -Pres
      Journal Dental Research, 1990-Pres
      Journal of Oral Rehabilitation, 1995-Pres
      World Journal of Orthodontics, 2007-Present

b. Editorial Boards
   Angle Orthodontist, 2003-2010

6. Grant Reviews
   a. Study Section, Review Panel, Special Emphasis Panel - N/A
      National Institutes of Health
   b. Ad hoc - N/A

7. Scholarly Societies
   American Association of Dental Research (Regular: 1980- Present)
   International Association of Dental Research (Regular: 1980-Present)
   Human Biology Council (Fellow: 1982)
   American Association of Physical Anthropologists (Regular: 1978-Present)

8. Contribution to professional organizations (e.g. committee and offices held)
   Local Arrangements Committee for the 66th General Session of the IADR in Montreal.
   All- day phase II preparatory course given annually for the College of Diplomats of the American Board of Orthodontists
   All-day evidence-based dentistry course provided annually to the American Academy of Pediatric Dentists
   Chair, ad-hoc committee for developing standards for American Association of Orthodontists

9. Participation on national or regional board examination, certification, or accreditation committee - NA
10. **Meeting where chaired session (invited only)**
Session Chairman, General Session of the AADR/IADR, Miami, 2008, 2009, 2011

11. **Programs and symposiums you organized (Give title, dates, location, affiliations, approximate number of attendees, and whether you were the primary organizer or a co-organizer).**

   2014 Southwest Dental Meeting - Lectures for Orthodontic Session of Meeting

12. **Awards**
2013 Texas A&M University Regents Professor Award
2013 Mentor, Cecilia Cuairan, Thomas M. Graber Award of Special Merit awarded by the American Association of Orthodontists.
2013 Mentor, Colin Kraus, Harry Sicher Research Award, awarded by the American Association of Orthodontists for best clinical research.
2011 Mentor, Matthew Burks, 2nd place, Student Competition, 38th Annual Research Day, Baylor College of Dentistry
2011 Mentor, Dr. Sean Liu, Beni Solow awarded by European Association of Orthodontists for the best article publish in the European Journal of Orthodontics in 2010
2011 Mentor, Dr. CC Massey, Harry Sicher Research Award, awarded by the American Association of Orthodontists for best clinical research
2011 Co-mentor, Dr. AJ Ortega, Thomas M. Graber Award of Special Merit awarded by the American Association of Orthodontists.
2010 Mentor, Dr. Hideki Ikeda, Thomas M. Graber Award of Special Merit awarded by the American Association of Orthodontists.
2010 Co-mentor, Dr. Cody Moore, Thomas M. Graber Award of Special Merit awarded by the American Association of Orthodontists.
2009, Honorary Member of the Edward H. Angle Society of Orthodontics (one of seven such memberships ever bestowed)
2008, The Earl E and Wilma S Shepard Special Recognition Award
2008 Mentor, Dr. Carmen Briceno, Milo Hellman Award, awarded by the American Association of Orthodontists for best research (top research award in orthodontics)

13. **Other Indices of Scholarly Performance**

H. **Institutional Service to the HSC**
1. **Component Committees**
Member, Internal planning committee, NIH R24 grant (2003-Present)
Member, Faculty Development Committee (2002-Present)
Member, BMS Graduate Committee (2001-Present)

2. Other Component Service - **Foundation Support Solicitation**

3. **HSC Committees**

4. **Other HSC Service**

5. **Texas A&M University System Committees**
6. Other Texas A&M University System Service

7. Patient Care

8. Consultant to accrediting and other educational review boards, industry, health care

9. Outreach programs for college students (*career counseling, recruitment, mentoring*)

10. Outreach programs for high school, junior high school, and elementary school students (*career counseling, recruitment, mentoring*)

11. Awards

12. Other Indices of Service

J. Patents or Commercialization of Research

K. Publications


2. Non-refereed Papers

3. Review Articles

4. Abstracts


9. Carrell T, Liu S, Opperman LA, Buschang PH. Does Bone around 3-mm miniscrew implants adapt to various forces? J of Dent Research 88 (Special Issue A) #0270 2009


32. Roblee JD, Jacob HB, Buschang PH. Does lip bumper lead the molar to Class II malocclusion. J Dent Res 92 (Special Issue A) #2753, 2013.

34. Anderson KA, Crossley AM, Campbell PM, Buschang PH. White spot lesions incidence with banded and bonded orthodontic appliances. J Dent Res 92 (Special Issue A) #1510, 2013.

5. **Books Authored**


6. **Book Chapters**


7. **Books Edited**

8. **Manuscripts Already Submitted**

   **In Press**


Submitted


9. Table Clinics
CURRICULUM VITAE

YI-SHING LISA CHENG

WORK ADDRESS:
Diagnostic Sciences,
Baylor College of Dentistry-Texas A&M University Health Science Center,
3302 Gaston Ave, Room 222,
Dallas, TX 75246
TEL: 214-8288912
FAX: 214-8288306
E-mail: ycheng@bcd.tamhsc.edu

HOME ADDRESS:
4411 Mckinney Ave, #18
Dallas, TX 75205
TEL: 214-5228680

EDUCATION
1995 – 1999 Ph.D. Biomedical Studies, Baylor University, Waco, Texas.
1993 – 1995 M.S. Biomedical Studies, Baylor University, Waco, Texas.
1984 – 1990 D.D.S. School of Dentistry, Kaohsiung Medical University, Kaohsiung, Taiwan,

PROFESSIONAL EXPERIENCE
Sep 2008 – Present Associate Professor, Department of Diagnostic Sciences, Texas A&M University Health Science Center- Baylor College of Dentistry, Dallas, Texas
Apr 2002 – Aug 2008 Assistant Professor, Department of Diagnostic Sciences, Texas A&M University Health Science Center- Baylor College of Dentistry, Dallas, Texas
May 2000 - Aug 2000 Research Instructor, Habitat for Science- Small Group Science Education of Dallas Inner City Youth. Baylor College of Dentistry, Dallas, Texas
May 1995 - May 1999 Research Assistant, Department of Biomedical Studies, Baylor University, Waco, Texas.

Aug. 1993 - May 1995 Teaching Assistant, Human Anatomy and Physiology, Department of Biology, Baylor University, Waco, Texas.

May 1991 - Jul. 1993 Resident, School of Dentistry, China Medical University Medical Center at Pei-Kang, Taiwan.

Aug. 1990 - Jul. 1993 Teaching Assistant, Complete Denture, Removable Partial Denture, School of Dentistry, China Medical University, Taiwan.

BOARD CERTIFICATION

2005 Western Regional Dental Examiner Board, Board certification.
2004 National Dental Board, Part II.
2003 American Board of Oral & Maxillofacial Pathology, Board certification.
1997 National Dental Board, Part I.
1990 National Dental Board, Taiwan, Board certification.

SCHOLARLY SOCIETIES

Fellow of American Academy of Oral and Maxillofacial Pathology
Member of International Association of Oral Pathologists
Member of International Association for Dental Research
Member of American Association of Dental Research-Dallas Chapter
Member of Dallas County Dental Society
Member of American Dental Association
Member of the Academy of Oral Pathology, Republic of China
Member of the Association for Dental Sciences of The Republic of China

RESEARCH GRANT AWARDS

1 “Validation of microRNA-27b as a potential salivary biomarker for early oral cancer detection.”
   ($50,000, August 1, 2013- July 31, 2014)
   Principal Investigator, funded by Texas A&M Health Science Center, Office of the Vice President for Research, Faculty Bridge Grant.

2 “Multiresolution FLIM and Reflectance Confocal Microscopy to Detect Dysplasia”
   ($ 1,561,662, December 10, 2009 – November 30, 2014)
   Co-investigator, funded by National Institute of Dental and Craniofacial Research.
   R01CA138653 - 01A2
3. “Does chronic periodontitis affect salivary biomarkers for oral cancer detection?” ($50,000, August 1, 2012- July 31, 2013)
   **Principal Investigator**, funded by Texas A&M Health Science Center, Office of the Vice President for Research, Faculty Bridge Grant.

4. “Salivary biomarkers for oral cancer in lichen planus patients”.
   ($381,086, May 1, 2009-April 30, 2012)
   **Principal Investigator**, funded by National Institute of Dental and Craniofacial Research, Exploratory and Developmental Grant.
   1R21DE018757-01A2

5. “Fullerene-based photosensitizers for PDT of dysplastic oral keratinocytes.”
   ($141,414, July 15, 2007-August 31, 2008)
   **Subcontractor/Co-PI**, funded by National Institute of Dental and Craniofacial Research, Small Business Innovation Research Program.
   1R43DE018070-01
   Principal Investigator: Tim Wharton, Lynntech, Inc.

   **Collaborator**, funded by Vice President for Research Development Grant, Texas A&M University Health Science Center.
   Principal Investigator: Feng Wang, Institute of Biosciences and Technology-TAMHSC.

7. “The role of FGFR2(IIIb) in epithelial mesenchymal interaction during tooth development.” ($5,000, December 1, 2006-December 1, 2007)
   **Principal Investigator**, funded by National Institute of Dental and Craniofacial Research, U24 grant to TAMHSC-Baylor College of Dentistry.

8. “New nanoparticles for antimicrobial therapy of dental plaque related diseases.”
   ($145,998, August 1, 2006-January 31, 2007)
   **Subcontractor**, funded by National Institute of Dental and Craniofacial Research, Small Business Innovation Research Program. 1R43DE017505-01
   Principal Investigator: Tim Wharton, Lynntech, Inc.

9. “E-cadherin and snail messenger RNA expression in tobacco associated oral lesions.” ($10,000, June 1, 2005-June 1, 2007)
   **Principal Investigator**, funded by Clay Weed Memorial Cancer Fund Trust, Texas

    **Co-investigator**, funded by National Science Council, Taiwan

11. “Aromatase expression in oral mucosa and squamous cell carcinoma.” ($10,000, 10/1/02-9/30/04).
**Principal Investigator**, funded by Clay Weed Memorial Cancer Fund Trust, Texas

12. New faculty start-up fund. ($10,000, 4/16/02).
   **Principal Investigator**, Funded by Baylor College of Dentistry-TAMHSC, Dallas, Texas

   **Principal Investigator**, funded by Department of Diagnostic Sciences, Baylor College of Dentistry-TAMHSC, Dallas, Texas

**PUBLICATIONS**

**Journal Articles**


7. Gorugantula L, Rees T, Plemons J, Chen HS and **Cheng YSL**. 2012, Salivary basic fibroblast growth factor in patients with oral squamous cell carcinoma or


**Book Chapters**


**PRESENTATIONS**


CURRICULUM VITAE

NAME: Jerry (Jian) Q. Feng
OFFICE ADDRESS: Baylor College of Dentistry
Department of Biomedical Sciences
3302 Gaston Avenue
Dallas, TX 75246
2007

EDUCATION:
Undergraduate: University of Qindao, Medical College
Qindao, China, 1976
B.S. (Medicine)

Graduate: University of Qindao, Medical College
Qindao, China, 1979-1982
M.S. (Physiology)

University of Connecticut,
Ph.D. (Physiology)

Post-Graduate: University of Michigan
Departments of Physiology, Medicine
Ann Arbor, Michigan, 1985-1987
UT Health Sciences Center at San Antonio
Department of Medicine, 1991-1995

Professional Awards and Recognition
2011 Distinguished Scientist Award in Pulp Biology and Regeneration, International Association of Dental Research (IADR) Annual Meeting at San Diego, CA (March 16-19, 2011)
2006 Keynote speaker of AADR Annual Meeting
2005 William Gies Award, IADR/AADR
1998 Research Day Winner (Faculty Category), UT Health Sciences Center at San Antonio, TX
1991 Excellent Research Award (Student Category, kidney), American Physiological Society

Professional Memberships
1991- Member, American Society of Bone and Mineral Research
1995- Member, International Association of Dental Research
1999- Board member of International Chinese Hard Tissue Society
2008-2011 Editorial Board Member of Journal of Dental Research
2009- Editorial Board Member of Int. J. Biol. Sci
2011- Editorial Board Member of *International Journal of Oral Science*,
2011-2012 President, IADR/AADR Mineralized Tissue Group
2005- NIH Peer Review Committee: ad hoc reviewer

**EMPLOYMENT**

Professor with tenue Baylor College of Dentistry
Department of Biomedical Sciences
3302 Gaston Avenue
Dallas, TX 75246
2007-present

Professor with tenue Department of Oral Biology
University of Missouri-Kansas City
2006-2007

Associate Professor Department of Oral Biology
University of Missouri-Kansas City
1998-2006

Research Assistant Professor Department of Pediatric Dentistry
School of Dentistry of UT Health Sciences Center
at San Antonio, TX, 1996-1998

Research Assistant Professor Departments of Medicine,
Division of Endocrinology
School of Medicine of UT Health Sciences Center
at San Antonio, TX, 1997-1998

Assistant Instructor Department of Pediatric Dentistry
School of Dentistry of UT Health Sciences Center
at San Antonio, TX, 1996-1997

Postdoctoral Fellow Departments of Physiology and Medicine
Medical School
University of Michigan
Ann Arbor, MI, 1985-1987

Instructor Department of Medicine,
Division of Endocrinology
School of Medicine of UT Health Sciences Center
at San Antonio, TX, 1991-1995

University of Qindao, Medical College
Qindao, China, 1982-85

**GRANTS**

<table>
<thead>
<tr>
<th>Award</th>
<th>PI(s)</th>
<th>Source</th>
<th>Title of Project</th>
<th>Dates</th>
<th>Annual Costs (Direct)</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td>R01 DE018486</td>
<td>Feng, Jian</td>
<td>NIH-NIDCR</td>
<td>DMP1 Mutations: Defects</td>
<td>09/30/08-</td>
<td>$232,500</td>
<td>Active</td>
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<tr>
<td>Q.</td>
<td>Title</td>
<td>Institution</td>
<td>Funding Source</td>
<td>Start Date</td>
<td>End Date</td>
<td>Budget (year)</td>
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<td>427411</td>
<td>A preclinical study proposal: Effects of Sci-Ab on rodent periodontal disease model-Periostin-Dmp1 null mice</td>
<td>Amgen Inc</td>
<td>NIH-NIDCR</td>
<td>11/20/09-11/20/2014</td>
<td>$118,500/year</td>
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<td>R01 DE021493-01</td>
<td>Tooth Root Formation: An Emerging Signaling Pathway</td>
<td>NIH-NIDCR</td>
<td>NIH-NIDCR</td>
<td>09-2013-08-2014</td>
<td>$200,000/year</td>
<td>Active</td>
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<tr>
<td>2R01DE005092-32A1</td>
<td>Studies of the Roles of DMP1 and DSPP in Osteogenesis and Dentinogenesis</td>
<td>NIH-NIDCR</td>
<td>NIH-NIDCR</td>
<td>09/01/08 to 06/30/14</td>
<td>$218,250/year 10 % effort</td>
<td>Active</td>
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<tr>
<td>1R01DE022549-01A1</td>
<td>The Roles of FAM20C (DMP4) in Odontogenesis and Osteogenesis</td>
<td>NIH-NIDCR</td>
<td>NIH-NIDCR</td>
<td>12/01/2012-11/30/2017</td>
<td>$250,000/year 5% effort</td>
<td>Pending 5 percentile</td>
</tr>
<tr>
<td>1R01DE022032-01A1</td>
<td>LOAD-MEDIATED ADAPTATION OF THE BONE-PDL-TOOTH COMPLEX IN VERTEBRATES</td>
<td>NIH-NIDCR</td>
<td>NIH-NIDCR</td>
<td>12/01/2012-11/30/2014</td>
<td>$60,000/yr for Feng lab</td>
<td>active</td>
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</table>

1. 1R01DE022032-01A1 NIH-NIDCR Administration supplementary Ho, Sunita (PI) Feng, Jian Q (CO-PI)
LOAD-MEDIATED ADAPTATION OF THE BONE-PDL-TOOTH COMPLEX IN VERTEBRATES 12/01/2012-11/30/2014
Direct cost: $120,000/yr ($60,000 for Dr. Ho and $60,000 for Dr. Feng)

PI (J. Feng)
October 25, 2012- September 24 2013
Total $71,000

3. Amgen Education Grant: “A preclinical study proposal: Effects of Sci-Ab on rodent periodontal disease model-Periostin-Dmp1 null mice”
PI (J. Feng)
December 31, 2012- November 30, 2013
Total $81,000

1. Afasaneh Rangiani, Zhengguo Cao, Ying Liu, Anika Rodgers, Chunlin Qin and Feng JQ. DMP1 and Phosphate Homeostasis are Critical for Postnatal Pulp, Dentin and Enamel Formation Int J Oral Sci in press
PAST 5 year FUNDING
1. R01 AR051587-01 (PI, Feng) 07/01/2004 – 06/30/2008
   NIAMS/NIH
   ROLES OF DMP1 in MINERALIZATION

2. P01 AR046798-06 (PI, Bonewald) 04/01/06 – 03/31/2011 NIAM/NIH
   Effects of Mechanical Strain on Osteocyte Function
   Project 3 Roles of DMP1 in Osteocytes (PI, Feng)

3. Disturbance of phosphate homeostasis changes in osteocyte morphology and function
   Genzyme Renal Innovations Program 2008-2011 (PI, Feng)

4. R29 DE13480 (PI, Feng) 02/01/1999 – 01/31/2004
   NIDCR/NIH

5. K02 DE00455-01 (PI, Feng) 04/01/2000 – 03/31/2006 (extend)
   NIDCR/NIH

6. P01 DE13221-01 (MacDougall) 04/01/2000 – 03/31/2005
   Project #1 (PI, Feng)
   NIDCR/NIH

PATENT
Harris, SE., Ghosh-Choudhury, N., Feng, JQ, and GR., Mundy Methods and compositions for
identifying osteogenic agents. No. 6,083,690. July, 2000
Two more in preparation in which I am the major player.
Feng, JQ Dmp1-Cre mice licensing to Norvarti Com. December, 2006
Feng, JQ Dmp1-lacZ knock-in mice licensing to Norvarti Com. March, 2009

MENTORSHIP

Four Junior Faculty Members who are in USA
Hector Rios  Assistant Professor at tenure-track, Department of Periodontics, University of
             Michigan Dental School
Ling YE,     Assistant Professor at tenure-track, Department of Orthodontics, UMKC Dental
             School
Bob Lu,      Assistant Professor, Department of Biomedical Sciences, Baylor College of
             Dentistry
Jianghong Zhang  Research Faculty, Vanderbilt University

Faculty Members who went back to China
Zhi Chen  
Professor and Associate Dean for Research, Wuhan University Dental School

Zhubin Li  
Professor and Chair of Department of Oral Surgery, Wuhan University Dental School

Qi Zhu  
Associate Professor of Department of Endodontics, Wuhan University Dental School

Zhengguo Cao  
Professor and Chairman of Department of Periodontics, Wuhan University Dental School

Rong Zhang  
Associate Professor of Department of Operative Dentistry and Endodontics, School of Stomatology, Fourth Military Medical University, Xi’an

Haiyang Huang  
Professor of Department of Orthopedics, Daping Hospital, Third Military Medical University, Chongqing

Dedong Ma  
Associate Professor of Qí Lu Hospital, Shandong University, Medical School, Jinan

Baichun Jiang  
Associate Professor, Genetic Institute, Shandong University, Medical School, Jinan

Xianglong Han  
Associate Professor of Department of Orthodontics, Assistant Dean, Huaxi Dental School, Sichuan University, Chengdu China

Zhaowen Zong  
Associate Professor and Vice Chairman of Department of Orthopedics, Daping Hospital, Third Military Medical University, Chongqing, China

Qi Zhang  
Professor and Associate Dean for Research in Dental School, Tongji University, Shanghai, China

RECOGNITIONS FOR STUDENTS and POSTDOCTORAL FELLOWS FROM MY LAB

Yong Jiang  
IADR Pulp biology/Tissue regeneration, Travel Award ($1,000) April, 2013

Rene Ren  
ICCBMT Travel Award, ($1,000), November 1st, 2013
AAA regional meeting Dallas, First place Oral Award ($200), October 12, 2013
ASBMR Young Investigator Travel Award, October 1 2013, ($500)
AADR Hatton Competition First Place (Senior Student section) in the Annual meeting of the AADR/CADR at Tampa FL, March 2012, $500

Jacky Jing  
ASBMR Young Investigator Travel Award, October 1 2013, ($500)

Yan Jing  
AAA regional meeting Dallas, Second place Poster Award ($100), October 12, 2013

Anika Voisey  
AADR Hatton Competition Second Place (Student section) in the Annual meeting of the AADR/CADR at Washington DC, March 2010, $500
ICCBMT Travel Award, ($750 + registration free), 2010
AADR Bloc Travel Grant Recipient ($1,150), 2011
President Award, Tx A&M Health Science Center, 2012 ($2,500)

Shuxian Lin  
Yong Investigator, Annual meeting of ASBMR, Minineapolis, October 12-15, 2012, $1,000,

Hua Zhang  
Postdoctoral travel award from the American Association of Anatomists for Extracellular Matrix in Health and Disease Symposium (EMHDS), 2011 ($500)

Xianglong Han  
ASBMR Young Investigator Travel Award, 2010, ($500)
Web Jee Young Young Investigator Award 2010, ($400)
Rangiani, Afsaneh  travel award from the American Association of Anatomists for Extracellular Matrix in Health and Disease Symposium (EMHDS), 2011 ($500)
ICCBMT Travel Award, ($750 + registration free), 2010

Amatey Wensel  AADR Travel Award for Mineralized Group ($500), Annual meeting of the AADR/ Annual meeting of the CADR at Washington DC, March 2010

Baichun Jiang  ASBMR Young Investigator Award ($1,000), 2008
Web Jee Young Young Investigator Award ($400), 2008

Bob Lu  ASBMR John Haddad YI Awards ($1,600), 2011
ASBMR Yong Investigator Award ($1,000), 2006
Chancellor’s Fellowship (~$11,000), UMKC (2006-2007)
Dean’s Fellowship ($6000), UMKC (2005-2006)
AADR Hatton Competition Finalist (Student section) 32nd annual meeting of the AADR/27th annual meeting of the CADR at San Antonio, March 12-15, 2003

Ling Ye  ASBMR Young Investigator Award ($1,000), 2004

Hector Rios  Web Jee’s Young Investigator ($800), ASBMR/Sun Valley International Symposium, 08-2004
ASBMR Book Award (The ASBMR President’s Book Award is given to the highest ranking abstract by a student. The award includes a $1,000 honorarium and a book. One award is given per year, Annual Meeting of American Society for Bone and Mineral Research) 2004

Haiyang Huang  Travel Award ($500), First annual meeting of the American society for matrix biology at Houston, November 6-9, 2002

Trainees who went for Medical or Dental or Pharmacy Schools

Kevin Chuang  DDS Candidate at Baylor College of Dentistry (2013)
Jingwen Wang  BS Candidate at California Institute of Technology (2012)
Leben Tefera  MD candidate at Pittsburg University Medical School (2012)
Nour Nowar  Pharma D Candidate at UT Houston (2011)
Kevin Yan  BS Candidate at Columbia University (2011)
Omar Ashraf  DMD Candidate at Western University of Health Sciences, CA (2009)

PUBLICATIONS:

PAPERS (since 1987)


27. Dedong Ma, Rong Zhang, Yao Sun, Hector F. Rios, Naoto Haruyama, Xianglong Han, Ashok B. Kulkarni, Chunlin Qin and Jian Q. Feng. A novel role of periostin in postnatal tooth formation and
mineralization J Biol Chem. 286: 4302-9, 2011 PMID: 21131362


29. Yongbo Lu, Baozhi Yuan, Chunlin Qin, Yixia Xie, Sarah L. Dallas, Marc D. McKee, Marc L. Drezner, Lynda F. Bonewald, and Jian Q. Feng The Biological Function of DMP1 in Osteocyte Maturation is Mediated by its 57 kDa C-terminal Fragment J Bone Mineral Res 26: 331–340, 2011 PMID: 20734454 PMC3179348


34. Zhengguo Cao, Baichun Jiang, Yixia Xie, Chuan-ju Liu and Jian Q. Feng GEP, a Local Growth Factor, is Critical for Odontogenesis and Amelogenesis Int. J. Biol. Sci. 6:719-729 2010

35. Kun Lv, Haiyang Huang, Yongbo Lu, Chunlin Qin, Zubing Li, and Jian Q. Feng Circling behavior developed in Dmp1 null mice is due to bone defects in the vestibular apparatus Int. J. Biol. Sci. 6: 537-545, 2010


41. Zhu Q, Sun Y, Prasad M, Wang X, Yamoah AK, Li Y, Feng JQ, Qin C: Glycosaminoglycan Chain...


61. JQ Feng, G Scott, D Guo, B Jiang, M Harris, T Ward, M Ray, LF Bonewald, SE Harris and Y Mishina Generation of a conditional null allele for Dmp1 in mouse. *Genesis* 2008 Feb;46(2):87-91


71. J Zhang, He XC, Tong WG, Johnson T, Wiedemann LM, Mishina Y, Feng JQ, and L Li BMP signaling inhibits hair follicle anagen induction by restricting epithelial stem/progenitor cell activation and expansion. *Stem Cells* 2006;0: 2005-0544v1


75. Yongbo Lu, Shubin Zhang, Yuli Pi, Yixia Xie, and Jian Q. Feng. Differential Regulation of DMP1 Expression during Odontogenesis *Cells Tissues Organs* 181 (3-4): 241 – 247, 2005


77. Ling Y, Rios, H, Myers ER, Lu Y, Feng JQ, and Boskey A. DMP1 Depletion Decreases Bone Mineralization In Vivo *J Bone Miner Res* 20 (12): 2169-77, 2005


83. Wei Zheng, Yixia Xie, Gang Li, Juan Kong, Feng JQ, and Yan Chun Li Critical role of calbindin-D28k in calcium homeostasis revealed by mice lacking both vitamin D receptor and calbindin-D28k *J. Biol. Chem*. 279: 52406 – 52413, 2004

84. Jiwang Zhang, Chao Niu, Haiyang Huang, Ling Ye, Xi He, Weigang Tong, Jason Ross, Jeff Haug, Teri Johnson, Feng JQ, Stephen Harris, Leanne Wiedemann, Yuji Mishina, and Linheng

Feng JQ, L Xing, J Zhang, M Zhao, D Horn, J Chan, BF Boyce, SE. Harris, GR. Mundy, and D Chen. NF-kB specifically activates BMP-2 gene expression in growth plate chondrocytes in vivo and in a chondrocyte cell line in vitro. J Biol Chem 278:29130-29135, 2003


Feng JQ, J. Zhang, A. Dallas, Y. Lu, S. Chen, X. Tan, M. Owen, S.E. Harris, M. MacDougall. Dentin Matrix Protein-1, a Target Molecule for Cbfa 1 in Bone, is a Unique Bone Marker gene. J Bone Miner Res 17:1822-1831, 2002


Hirst KL, Simmons D, Feng JQ, Aplin H, Dixon MJ, MacDougall M Elucidation of the sequence
and the genomic organization of the human dentin matrix acidic phosphoprotein 1 (DMP1) gene: exclusion of the locus from a causative role in the pathogenesis of dentinogenesis imperfecta type II. *Genomics* 42:38-45 1997


99. Feng JQ, Chen D, Ghosh-Choudhury N, Mundy GR and Harris SE Bone morphogenetic protein 2 transcripts in rapidly developing deer antler tissue contain an extended 5' non-coding region arising from a distal promoter. *Biochim Biophys Acta* 1350: 47-52 1997


102. Feng JQ, Chen D, Esparza J, Harris MA, Mundy GR, Harris SE Deer antler tissue contains two types of bone morphogenetic protein 4 mRNA transcripts. *Biochim Biophys Acta* 1263:163-168 1995


108. Feng JQ, Harris MA, Ghosh-Choudhury N, Mundy GR, Harris SE: Structure and sequence of mouse bone morphogenetic protein 2: Comparison of the structures and promoter regions of BMP2 and BMP4 genes. *Biochim Biophys Acta* 1218:221-224 1994


111. Harris SE, Bonewald LF, Harris MA, Sabatini M, Dallas S, Feng JQ, Ghosh-Choudhury N, Wozney J, Mundy GR. Effects of TGFβ on bone nodule formation and expression of bone...


Book Chapters


5. Susan C. Schiavi and Jian Q. Feng Osteocytes and Mineral Metabolism In K. Olgaard, I. Slausky and J. Silver (Eds) The Spectrum of Renal Osteodystrophy and vascular calcifications in uremia, Oxford University Press 2010


PROCEEDINGS
1. SE. Harris, D Guo, W Yang, Y Xie, J Zhang, HC Anderson, MA. Harris , B. Kream, A. Lichtler, B. Hogan, H. Kulesa, and Feng JQ. Conditional knock-out of BMP4 in Collagen 1a1 expression domains using the 3.6 Col 1a1-Cre and 2.3 Col1a1-Cre mice: BMP4 is Necessary for Bone and Dentin Formation Postnatally. Proceedings of 8th International Conference on the Chemistry and Biology of Mineralized Tissues, Banff Center, Alberta, Canada. University of Toronto Publisher Editors: Landis, W.L. Sodek. P35-38, 2004

2. L Ye, H Huang, Y Lu, L Bonewald, M MacDougall, and Feng JQ. Dentin Matrix Protein 1 (DMP1) is Essential for Normal Development of Both Endochondral and Intramembranous Bone during Craniofacial Development. Proceedings of 8th International Conference on the Chemistry and Biology of Mineralized Tissues, Banff Center, Alberta, Canada. University of Toronto Publisher Editors: Landis, W.L. Sodek. P204-207, 2004

GENE SEQUENCES PUBLISHED IN GENBANK

1. Lu, Yongbo, Maries Harris, Zhang, Jianghong, Harris, Stephen E., Bonewald, Lynda, and Feng, JQ. Mus musculus E-11 gene, 50,000 bp, AY115493, 2002
2. Feng JQ., Shuo Chen, Luan, X., Traianedes, K., Dallas, S., Unterbrink, A., Yongbo Lu, Harris, S.E., and MacDougall, M., Mus musculus Dmp-1 gene, exons 1-6. LOCUS MMU242625 16162 bp DNA, ACCESSION AJ242625, 1999, expended to 30,000 bp, updated 2002
4. Feng, JQ, Harris MA, Ghosh-Choudhury N, Mundy GR, Harris SE: Mus musculus bone morphogenetic protein 2 (BMP-2) gene, complete cds. LOCUS MUSBMP2A 11605 bp DNA, ACCESSION L25602, 1996
5. Feng, JQ, Chen D, Cooney A, Tsai MJ, Harris MA, Dallas SJ, Tsai SY, Feng M, Mundy GR, Harris SE Mus musculus BMP-4 gene, complete cds. LOCUS MUSBMP4 9299 bp DNA ACCESSION L47480, 1996
6. Feng, JQ, Chen D, Esparza J, Harris MA, Mundy GR, Harris SE Bone morphogenetic protein 4B [Texas Fallow deer, antlers, mRNA,2324 nt].LOCUS S79174 2324 bp mRNA, ACCESSION S79174, 1995

INVITATIONS SINCE 2005

2013
1. Invited Speaker, “Osteocytes in bone mineralization, osteoporosis and osteoarthritis” in Texas Scottish Rite Hospital for Children, February 19, 2013
2. Invited Speaker, “It is the Osteocyte that builds mineralized bone” in NIDCR Bethesda, MD February 20, 2013
3. Invited Speaker, “Osteocytes and bone mineralization” in UT Southwestern Medical Center at Dallas, Department of Pharmacology, April 4th, 2013
4. Invited Speaker, “Roles of Osteocytes in bone mineralization, Osteoporosis and Osteoarthritis” in University of Michigan School of Dentistry, Ann Arbor, MI April 18, 2013
5. Invited Speaker, “Why Osteocytes?” in Department of Orthopaedics and Traumatology, The Chinese University of Hong Kong, Hong Kong, May 13, 2013
8. Invited Speaker, “Osteocytes in bone mineralization” in 4th Military Medical University Dental School, Xian, China, May 17, 2013
10. Invited Speaker, “Osteocytes, instead of osteoblasts, are key bone mineralization” in Harvard School of Dental Medicine, Department of Oral Biology, Boston, July 3rd, 2013
11. Invited Speaker, “Osteocytes and bone mineralization” in NYU School of Medicine, Department of Orthopedics, New York City, July 5th, 2013
12. Featuring Keynote Speaker: “The Life and Fate of Osteocytes in Health and Disease”, AAA Regional Meeting in Dallas, October 12, 2013

2012

13. Invited Speaker, “Tooth Root Formation: BMP-OSX-DSPP Axis” in Dental School of UCSC February 16, 2012
14. Invited Speaker, “PDL is Critical for Alveolar Bone Formation” in Dental School of Wuhan University, Wuhan, China May 16, 2012
15. Invited Speaker, “Pathological changes of osteocytes in osteoarthritis” in The 6th Shanghai International Congress on Orthopaedic Advanced Techniques and Clinical Translational Research, Shanghai, China May 20, 2012
16. Invited Speaker, “Think beyond dogma” in Dental School of Jiaotong University, Shanghai, China May 23, 2012
17. Invited Speaker, “Pathological Roles of Wnt/b-catenin Signaling Pathway in Hypophosphatemic Rickets” in Daping Hospital, Third Military Medical University, Chongqing, China July 5, 2012
18. Organizer, Chair and Speaker of “International Symposium on Tooth Development”, Chengdu, China July 10, 2012: “Background on genetically engineered animal models and applications”
19. Speaker of “International Symposium on Tooth Development”, Chengdu, China, 2012 July 11: “BMPR1A is the Key Molecule for Determination of Tooth Root Formation”
20. Invited Speaker, “The signal from mesenchymal derived pulp cells is the key for root formation” in Dental School of USC, Los Angeles August 2, 2012
22. Invited Speaker, “Osteocytes but not osteoblasts are responsible for bone mineralization” in Pittsburg University Dental school, September 5th, 2012
23. Invited Speaker, "A Novel Role of PDL in Alveolar Bone Formation during Physiological and Pathophysiological processes" in College of Medicine, Medical University of South Carolina, Charleston, SC, September 19th, 2012

24. Invited Speaker, Meet-the-Professor Session: Osteocytes, Mezzanine Level-Room M100D, ASBMR Annual Meeting, Minneapolis, Minnesota, USA, OCTOBER 12, 2012

25. Keynote Speaker in the Texas Association of Biological Anthropologists Annual Meeting, “What’s new with the Osteocytes” November 2, 2012

26. Invited Speaker, “A Buried Cell, Osteocyte, is the Key Bone Builder” in University of Texas at Dallas, November 15, 2012

27. Invited Speaker, “Osteocyte is the real Bone Builder” in UT Southwestern Medical Center at Dallas, Internal Medicine/Division of Mineral Metabolism, November 16, 2012

2011

1) Invited Speaker, “Application of Genetically Engineered Mouse Models in Basic and Translational Studies” in Dental School of Indiana (March 02, 2011)

2) Organizer and Chair of Symposium: Amelogenesis: From Signaling Pathway to Cyclical Movements, IADR/AADR San Diego, California (March 19, 2011)

3) Invited Speaker, “Origin of dental stem cells and dentin development: BMPR1A is the key” in First International Conference on Dental and Craniofacial Stem Cells April 26-28, 2011, New York City, NYC

4) Invited Speaker, “Osteocytes”, New York University School of Medicine and NYU Hospital for Joint Diseases, New York City, NYC04-29-2011

5) Invited Speaker, “Tooth Root Formation: BMP Receptor 1A-OSX Pathway is The Key”, West China College of Stomatology, Sichuan University, Chengdu, China-5-30-2011

6) Invited Speaker, “Generation and Application of Engineered Animal Models in Biomedical Research”, School & Hospital of Stomatology, Wuhan University, Wuhan, CHINA, 6-1-2011


8) Invited Speaker and Discussion Leader, "Molecular Mechanism of Osteocyte Maturation and its Impact on Periodontal Diseases" in Gordon Research Conferences-Periodontal Diseases, Davidson, NC, July 17-22-2011

9) Invited Speaker, "Osteocyte and Bone Health" in School of Dentistry and Oral Health - Griffith University, Southport QLD, Australia , 08-24-2011
10) Invited Speaker, "Osteocyte is essential for Bone Health" in School of Dentistry and Oral Health - Griffith University, Southport QLD, Australia, 08-25-2011

11) Invited Speaker, “Why Osteocytes?”, Institute of Health and Biomedical Innovation, Queensland University of Technology, Brisbane, Queensland, Australia 08-25-2011

12) Invited Speaker and Session Chair, “Bone and Osteocytes” in Annual Meeting in the Australia and New Zealand Orthopaedic Research Society, Brisbane, Australia 09-01-02-2011

13) Invited Speaker, “Osteocyte: Beyond a Mechanosensor” in Materials Science and Engineering, University of Arlinton, Nov. 11, 2011

14) Invited Speaker, “Osteocytes and beyond” in Rochester Medical Center, Rochester, NY, 12-12-2011

2010

1) Invited Speakers in Harvard Dental Medicine (February 2010);
2) Invited Speaker and Chair of Symposium of Phosphate Homeostasis AADR Annual Meeting in Washington, DC (March 2010);
3) Invited Speaker in Shangdong University School of Medicine (Jinan, May 24, 2010)
4) Co-Chair and Invited Speaker of International symposium on Craniofacial Research in Wuhan, China (May 27, 2010)
5) Keynote Speaker in Annual Meeting of Qingdao Physiological Society (May 28-29, 2010)
6) Invited Speaker in Mini symposium on Bone and Teeth in 9th People’s Hospital, Shanghai (May 31, 2010)
7) Lunch with Professor on animal research model in IADR Annual Meeting in Barcelona, Spain (July, 2010)
8) Invited Speaker in ASBMR Annual meeting for “The CKD: MBD Working Group” Osteocytes, FGF23 and Mechanotransduction
9) Invited Speaker in Huaxi Dental School, Chengdu China (Nov. 29, 2010)
10) Invited Speaker in 1st World Chinese Dental Meeting in Xia-men (December, 2010)

2009

1) Invited Speakers in The 2nd Joint Meeting of the International Bone & Mineral Society and the Australian and New Zealand Bone and Mineral at Sydney (March 2009);
2) Invited Speakers in The Symposium of the Annual Meeting of the International Association of Dental Research at Miami (April, 2009);
3) Invited Speakers in Global Center of Excellence 3rd International Symposium on Frontiers in Bone Biology in Tokyo, Japan (Tokyo, June 2009).
4) Co-organizer and Invited Speaker of Symposium in the 2nd Meeting of the International Association for Dental Research Pan Asian Pacific Federation and the 1st Meeting of the IADR Asia/Pacific Region (Wuhan, September 2009)
5) Invited speaker in the Rolanette and Berdon Lawrence Bone Disease Program of Texas Seminar Series, Houston, Tx (September-2009)
6) Invited speaker in the University of Wichita at Wichita, Kansas, (October-2009)
7) Invited speaker in the Sichuan University at Chengdu, China (September-2009)
8) Invited speaker in the University of Illinois School of Dentistry at Chicago, Illinois, (November-2009)
9) Invited speaker in Reconstructive Surgery Summit sponsored by Intramed Health and the World Craniofacial Foundation, Dallas, Tx (November-2009)

2008
1) Raine Visiting Professor Lecture of Raine Medical Research Foundation, University of Western Australia (Perth, Australia, March 2008);
2) Invited Speakers in Annual Meeting of American Association of Anatomists in San Diego (San Diego April 2008);
3) Co-organizer and Invited Speaker in Chongqing International Symposium on Bone Development, Diseases and Regeneration (Chongqing, October 2008),
4) Invited Speaker in the International Conference on Frontiers of Dental and Craniofacial Research (Beijing, November 2008);

2007
1) Invited Speaker in Annual Meeting of American Association of Anatomists, Gordon Research Conference on Bone and Teeth (July 2007);
2) Invited Speaker in Gordon Research Conference on Small Integrin-Binding Proteins (August, 2007)
3) Invited Speaker in International Sun Valley Workshop On Skeletal Tissue Biology (August 2007)

2006
1) Invited Speaker in Craniofacial Biology International Symposium (October, 2006; Kansas City)
2) Keynote Speaker of Annual Meeting of American Dental Research (Baltimore, March, 2006)

2005
1) Invited Speaker in Annual Meeting of American Association of Anatomists (San Diego, March 2005)
2) Invited speakers in Gordon Research Conference on Small, Integrin-Binding Proteins (Big Sky, July, 2005)
3) Invited speakers in International Sun Valley Workshop On Skeletal Tissue Biology (July 2005)

ABSTRACT (since 1993)
1. J. Jing, C. Liu, N. Kamia, Y. Liu, X. Zhou, and J.Q. Feng An Essential Role of Bmp Receptor1A (ALK3) in Postnatal Skeleton Formation ASBMR 2013 Annual Meeting, October 4-7, 2013 at the Baltimore Convention Center in Baltimore, Maryland, USA. Oral Poster

2. Y. Ren, S. Lin, X. Han, B. Yuan, Y. Jing, Y. Liu, MK. Drezner, P. Dechow, M. Liu, and J.Q. Feng Osteocytes are Key to the Formation and Maintenance of Mineralized Bone ASBMR 2013 Annual Meeting, October 4-7, 2013 at the Baltimore Convention Center in Baltimore, Maryland, USA. Plenary Poster Session


Periostin Gene Knockout on Orthodontic Tooth Movement 2013 IADR/AADR/CADR General Session and Exhibition (Seattle, Washington, March 20-23, 2013) ID# 177200


27. L. Lieben, K. Moermans, L. Bonewald, JQ Feng, G. Carmeliet Vitamin D Signaling in Osteoblasts/Osteocytes Is Required to Shift Calcium from Bone to Serum.

28. S. Harris, M. Harris, Y. Cui, L. Bonewald, JQ. Feng, J. Gluhak-Heinrich Load responsive Genes and Inflammation-Associated Genes are elevated in Dmp1 null Osteocytes while Genes associated with Bone Formation are Suppressed. Journal of Bone and Mineral Research 26: S328, 2011


32. A. Voisey, M. Liu, X. Han, P. Dechow, R D'souza, HZ. Ke and J Feng Roles of DKK1 in Cranial Osteogenesis and Angiogenesis IADR/AADR 2011 San Diego 21011 Abstract ID#146980 (Oral)

33. A. Rangiani, Z. Cao, B. Yuan, T. Gao, L Smith, C. Qin, Makoto Kuro-o and JQ. Feng Intrinsic Roles of DMP1 in Tooth Formation IADR/AADR 2011 San Diego 21011 Abstract ID# 148093

34. H. Zhang, Z. Cao, X Zhou, T. Gao, C. Qin, B. de Crombugghe, R D'Souza, and JQ. Feng Osterix is Essential for Root Formation IADR/AADR 2011 San Diego 21011 Abstract ID# 147507 (Oral)

35. K. Verdelis, X. Han, J.Q. Feng, C. Qin, E. Atti, S. Tetradis, A.L. Boskey Redefining Roles of DMP1 in Early Dentin and Enamel Mineralization IADR/AADR 2011 San Diego 21011 Abstract ID#148302 (Oral)

36. D Nguyen, S Lin, Z Cao, Y. Lu and J.Q. Feng DMP1 Functions as an Extracellular Matrix Protein IADR/AADR 2011 San Diego 21011 Abstract ID# 150571 (Oral)

37. X. Han, M. Liu, A. Voisey, R. D'souza, P. Dechow, HZ. Ke and J. Feng Role of DKK1 in Tooth formation during Postnatal Development IADR/AADR 2011 San Diego 21011 Abstract ID#147486 (Oral)

38. Z. Zong, A. Voisey, LA. Wu, Y. Qing, Chuanju Liu, S. Chen, and JQ. Feng Antagonistic Roles of BMPRIA in Control of Mineralization IADR/AADR 2011 San Diego 21011 Abstract ID#146980 (Oral)


41. B. Yuan, JQ Feng, M. Drezner Hexa-D-Arginine Reversal of Osteoblast 7B2 Dysregulation in Hyp-mice Normalizes the HYP Biochemical Phenotype Journal of Bone and
42. B. Yuan, JQ Feng, M. Drezner Evidence that the Mineralization Defect in hyp-mice Results from the Uncoupled Effects of SOST/sclerostin on Osteoblast Mineralization and Proliferation Journal of Bone and Mineral Research 25, S48, 2010 (Oral)


45. A. Voisey, L. Ye, Q. Tian, H. Qin, S. Shi, R. D’Souza, C. Liu, and JQ. Feng ALK3 controls the cell fate of tooth/bone via TGF-β signaling pathway 10th International Conference on the Chemistry and Biology of Mineralized Tissues P35, Carefree, Az, USA 2010 (Oral)

46. Y. Sun, M. Prasad, X. Wang, Q. Zhu, JQ Feng C. Qin Failure to Process Dentin Matrix Protein1 (DMP1) into Fragments Leads to the Loss of its Function in Osteogenesis and Dentinogenesis 10th International Conference on the Chemistry and Biology of Mineralized Tissues P35, Carefree, Az, USA 2010 (Oral)

47. A Rangiani, R Zhang, O Ashraf, B Yuan, C Qin, Y Xie, C Qin, M Kuro-o and JQ. Feng Unique Roles of DMP1 and Phosphate in Hard Tissues 10th International Conference on the Chemistry and Biology of Mineralized Tissues P51, Carefree, Az, USA 2010 (Oral)

48. X. Han, M. Liu, S.E. Harris, P. Dechow, L. Robert, Y. Sun, T. Gao, Gluhak-Heinrich J W. Yang, MA. Harris, L.F. Bonewald, H. Ke, Jian Q. Feng A Marrow ‘Guardian’ Cell Inhibits Marrow Space Mineralization and Trabecularization through SOST/Sclerostin Expression 10th International Conference on the Chemistry and Biology of Mineralized Tissues P51, Carefree, Az, USA 2010 (Oral)

49. Q Zhu, Y Sun, Y Lu, X Wang, M Prasad, A Yamoah, JQ. Feng, C. Qin Proteolytic processing of dentin sialophosphoprotein (DSPP) were blocked by substitutions of amino acid residues at cleavage site 10th International Conference on the Chemistry and Biology of Mineralized Tissues Poster, Carefree, Az, USA 2010

50. X Wang, Q Zhu, Y Sun, M. Prasad, M Prasad, A Yamoah, JQ. Feng, C. Qin The expression of FAM20C (DMP4) in the tooth and skeleton indicates a quique role of this protein in odontogenesis and osteogenesis 10th International Conference on the Chemistry and Biology of Mineralized Tissues Poster, Carefree, Az, USA 2010

51. Y Sun, M Prasad, X Wang, Q Zhu, M. Prasad, A Yamoah, JQ. Feng, C. Qin Detection of small integrin-binding ligand, N-linked glycoprotein (SIBLING), family members in the rat brain 10th International Conference on the Chemistry and Biology of Mineralized Tissues P35, Carefree, Az, USA 2010 (Oral)

52. M Prasad, Y Sun, X Wang, Q Zhu, M. Prasad, A Yamoah, JQ. Feng, C. Qin Role of the NH2-terminal fragment of dentin sialophosphoprotein (DSPP) in mineralization 10th International Conference on the Chemistry and Biology of Mineralized Tissues Poster, Carefree, Az, USA 2010


56. Z. CAO, B. JIANG, Y. LU, Y. XIE, C. QIN, and J. FENG. Newly Generated DMP1 Mutant Model Mimics Human ARHR Disease. AADR/CADR Annual Meeting, Washington, DC, March 3-6, 2010 #99


58. A. VOISEY, K. LV, L. YE, Y. XIE, R. D’SOUZA, and J. FENG. BMPR1A Controls Tooth/bone Cell Fate through Wnt/β-catenin Signaling via SOST. AADR/CADR Annual Meeting, Washington, DC, March 3-6, 2010 #1290


60. Feng, JQ. Novel endocrine roles of DMP1 in phosphate homeostasis. J Dent Res 87 (Spec Iss A): presentation # 114183, 2009

61. Stephen Harris, Marie A. Harris, Yong Cui, Wuchen Yang, Lynda F Bonewald, Paola Divieti Pajevic, Jian Feng. Ivo Kalajzic PTH Regulation of Osteocyte Function: Comparison of Gene Expression Patterns in Wild-type and Osteocyte Specific Conditional Knock-out of Mef2c after Treatment with PTH. JBMR Abstract # A09002155 dayong Guo, Hong Zhao, Yuji Mishina, J Feng, Stephen Harris, Lynda Bonewald. Mice with Targeted Deletion of E11/gp38 in Late Osteoblasts Have Reduced Canaliculi per Osteocyte Which May Be Responsible for The Enhanced Trabecular Bone Volume. JBMR Abstract # A09003012, 2009

62. Kevin J Barry, Irena Tulum, Raquel C Monasterios Velasquez, Rajaram Manoharan, Tatsuya Kobayashi, Stephen Harris, Mary Bouxsein, Jian Feng, F. Richard Bringhurst, Paola Pajevic Divieti. Mice lacking PTH receptors in Osteocytes failed to respond to Intermittent Administration of PTH. JBMR Abstract # A09001607, 2009

63. Baozhi Yuan, Jennifer Meudt, Rong Zhang, Yina Xing, Jian Feng, Marc Drezner. Increased SOST Production: A Factor Underlying Abnormal Bone Mineralization in X-linked Hypophosphatemia. JBMR Abstract # A09003025, 2009


68. Z. CAO, B. JIANG, Y. XIE, R. ZHANG, C.-J. LIU, and J.Q. FENG GEP, a Novel Growth Factor, is critical for odontogenesis J Dent Res 88 (Spec Iss A): Abstract # 3039, 2009


Jerry (Jian) Feng, MD, Ph.D.
Curriculum Vitae


92. JQ FENG, Y. LU, BC. JANIK, S. LAUZIERE, K. WHITE, and LM WARD, DMP1 Mutations Leads to Defects in Odontogenesis. IADR Annual Meeting 85th General Session (ORAL March 21-24, 2007)

93. B. JIANG, Y. LU, D. GUO, L Bonewald, S. HARRIS, and JQ FENG Targeted Deletion of Dentin Matrix Protein 1, DMP1, in Odontoblasts and Osteocytes. IADR Annual Meeting 85th General Session (March 21-24, 2007)


95. L. Ye, N. Kamiya, Y. Mishina, and JQ. Feng BMP Receptor1A Positively Controls Odontogenesis IADR Annual Meeting 85th General Session (ORAL, March 21-24, 2007)

96. H. Rios, Z. Chen, L. Bonewald and JQ FENG Periostin expression changes in response to mechanical stretch of PDL fibroblasts IADR Annual Meeting 85th General Session (ORAL, March 21-24, 2007)

97. C. LEWIS, J. GLUHAK-HEINRICH, JQ FENG, D. HORN, H.L. CARDENAS, D.
RILEY, Y. CHEN, M. MACDOUGALL, and S. ABBOUD WERNER Nek1 Protein Kinase Deficiency in kat2J Mice Alters Odontogenesis IADR Annual Meeting 85th General Session (March 21-24, 2007)


100. T. PENG, B. HUANG, Y. LU, L.F. BONEWALD, W.T. BUTLER, JQ FENG, and C. QIN Key Site Mutations Block Cleavage and Glycosylation of Murine DMP1 IADR Annual Meeting 85th General Session (ORAL, March 21-24, 2007)


103. H.F. RIOS, Z. CHEN, V. DUSEVICH, L.F. BONEWALD, S. CONWAY, and J.Q. FENG Periostin Is Essential for Periodontium Integrity under Mechanical Stress (Abstract # 924) ADEA/AADR/CADR Meeting 84th General Session (March 8-11, 2006)

104. L. YE, N. KAMIYA, V. DUSEVICH, D.J. EICK, Y. MISHINA, and J. FENG BMP Receptor1A Determines the Fate of Dentin, Cementum and Bone (Oral Presentation, # 43) ADEA/AADR/CADR Meeting 84th General Session (March 8-11, 2006)

105. N. KIM-WEROHAXI, Y. E, S. YU, L. YE, and J.Q. FENG Beta-Catenin is Required for Early Craniofacial and Tooth Development (AADR/Pfizer Hatton Awards competition, # 1746) ADEA/AADR/CADR Meeting 84th General Session (March 8-11, 2006)

106. Y. LU, S. YU, Y. XIE, L. YE, S. ZHANG, and J. FENG DMP1 Accelerates Odontogenesis and Mineral Propagation in Vivo (Abstract #595) ADEA/AADR/CADR Meeting 84th General Session (March 8-11, 2006)


119. Feng, JQ, L. Ye, D. Chen, Y. Yan, Y. Xie, and F. Long Beta-Catenin is Essential for Early Tooth Development Abstract #0031 IADR/AADR/CADR 83rd General Session (March 9-12, 2005)

120. H. F. Rios, Z. Chen, Y. Xie, L.F. Bonewald, S. Conway, and Feng, JQ, Early Onset Periodontitis and Enamel Defects in Mice lacking Periostin Abstract #1116 IADR/AADR/CADR 83rd General Session (March 9-12, 2005)

121. L. Ye, Y. Xie, S. Zhang, H. Rios, V. Dusevich, and Feng, JQ, BMPR1A is Essential for Dentin, Cementum Formation and PDL Morphology Abstract #0334 IADR/AADR/CADR 83rd General Session (March 9-12, 2005)

122. Y. Lu, S. Zhang, L. Ye, Y. Xie, J. D. Eick, and Feng, JQ, Re-Expression of DMP1 Rescues Dentin Defects in DMP1 Null Mice (Oral) Abstract #0197IADR/AADR/CADR 83rd General Session (March 9-12, 2005)

123. K. Zhang, K. Shiva, L. Ye, M. Dallas, Feng, JQ, L. F. Bonewald The Osteocyte-


127. D. Guo, S. Harris, W. Yang, M. Harris, J. Zhang, Feng, JQ, C. Anderson, B. Kream, A. Lichtler, B. Hogan, H. Kulessa BMP4 Is Necessary for Bone Formation: Conditional BMP4 Knock-out Using the 3.6kb and 2.3kb Collagen 1a1 Promoter-Cre and BMP4 Floxed Mice Journal of Bone and Mineral Research 19: S14, 2004 (Young Investigator Award)

128. I. Ye, Y. Mishina, J. Zhang, S. Zhang, Y. Xie, N. Kamiya, V. Dusevich, L. Li, D. Eick, L. Bonewald, and Feng, JQ Ectopic Bone Formation in Tooth Pulp, Absence of Cementum, Hyperplastic Periodontal Ligament and Reduced or no Dentin in Mice lacking Bone Morphogenetic Protein Receptor type 1A (BMPR1A) Journal of Bone and Mineral Research 19: S46, 2004 (Young Investigator Award)


133. J. Zhang, S. Harris, J. D. Eick, D. Vladimir, L. Bonewald, M. MacDougall, and Feng, JQ. Transgenic Targeting of Bmp4 to Ameloblast Disrupts Enamel Maturation. Journal of Dental Research Abstract #2975, 2004


2003


139. H. Huang, S. L. Dallas L. Ye, D. Chen, J. Zhang, Y. Lu, S. E. Harris, L. Bonewald, Y. Mishina, and Feng JQ Mice with null mutation in Dentin matrix protein-1 exhibit chondrodysplasia, early onset osteoarthritis and profound abnormalities in mineralization First annual meeting of the American society for matrix biology at Houston November 6-9, 2002 (travel award)

140. P. Papagerakis, Feng JQ, and M. MacDougall, Unique and Overlapping Functions of Cbfa-1-activated Tcf/Lef transcription Factors during Tooth and Periodontal Tissue Development 32nd annual meeting of the AADR/27th annual meeting of the CADR at San Antonio, March 12-15, 2003 (AADR Hatton Award, Postdoctoral section)

141. L. Ye, Q. Zhu, P. Tartaix, H. Huang, J. Zhang, A. Boskey, S. Dallas Y. Mishina, S. Harris, L. Bonewald and Feng JQ, Deletion of the Dentin Matrix Protein (Dmp-1) gene results in severe craniofacial defects during postnatal development 32nd annual meeting of the AADR/27th annual meeting of the CADR at San Antonio, March 12-15, 2003 (AADR and IADR Hatton Competition Finalist, Postdoctoral section)

142. Y. Lu, H. Huang, V. Dusevich, Y. Wang, S. Dallas, P. Spencer, Y. Mishina, S. Harris, L. Bonewald and Feng JQ, Dentin Matrix Protein-1 (Dmp-1) is not essential for initiation of apatite crystal formation but is critical for formation of normal mineral structure 32nd annual meeting of the AADR/27th annual meeting of the CADR at San Antonio, March 12-15, 2003 (AADR Hatton Competition Finalist, PhD Student section)

143. J. Zhang, V. Dousvich, S.E. Deben, Q. Zhu, Y. Wang, P. Spencer, S. Dallas, S. Harris, L. Bonewald and J.Q. Feng, Overexpression of human Bone Morphogenetic Protein-4 (BMP4) results in defects and reduced mineralization in the developing tooth 32nd annual meeting of the AADR/27th annual meeting of the CADR at San Antonio, March 12-15, 2003

144. Abbas, M. MacDougall, Q. Zhu, L. Ye, J. Zhang, Y. Wang, P. Spencer, Y. Mishina, S. Harris, and Feng JQ, The Dmp-1 gene is essential for normal postnatal tooth development 32nd annual meeting of the AADR/27th annual meeting of the CADR at San Antonio, March 12-15, 2003 (Oral Presentation)

146. D. Chen, **Feng JQ**, J. Zhang, M. Zhao1, D. Horn, J. Chan, S. E. Harris, G. R. Mundy, B. F. Boyce, L. Xing. Specific Regulation of BMP-2 Gene Expression by NF-κB in Growth Plate Chondrocytes. Journal of Bone and Mineral Research 17, S179, 2002

147. M. Zhao, J. Zhang, **Feng JQ**, B. Oyajobi, S. E. Harris, G. R. Mundy, D. Chen β-Catenin Directly Activates Bone-Specific Genes in Osteoblasts and Chondrocytes. Journal of Bone and Mineral Research 17, S182, 2002 (Oral Presentation)


149. Tan, Y. J. Zhang, X. Lu, L. Bonewald, and **Feng JQ**. Dentin Matrix Protein (Dmp1) is Regulated by Different Mechanisms in Tooth compared to Bone. (Oral Presentation) Journal of Dental Research. 81: A-41, 2002

150. J. Zhang, X. Tan, Y. PI, S.E. Harris, and **Feng JQ**. The plasma membrane E11 gene is highly expressed during tooth formation Journal of Dental Research. 81: A360, 2002


155. J. Zhang, X. Tan, Y. PI, S.E. HARRIS, **Feng JQ**. The plasma membrane E11 gene is highly expressed during tooth formation. Journal of Dental Research. 81: A360


161. **Feng JQ**, Luan, X., Traianedes, K., Dallas, S., Unterbrink, A., Dai, J., Harris, S.E., and MacDougall, M., Gene Structure Regulation, and Functional Roles of Mouse Dentin Matrix
Protein 1. (Oral Presentation) Journal of Dental Research, 78:292, 1999


165. Feng JQ., Li, X., Luan, X., Dai, J., MacDougall, M., Characterization of Mouse Dentin Matrix Protein 1 Gene and Promoter Study in Odontoblasts and Osteoblasts. (Oral Presentation) Sixth International Conference on the Chemistry and Biology of Mineralized Tissues, Vittel, France, November, 1998


172. MacDougall, M., Gu, T., Feng JQ. and Harris S.: Expression of BMPs by immortalized dental pulp & odontoblast cell lines, Journal of Dental Research 74:82, 1995


NATIONAL PEER REVIEW PANELS:

**National Institutes of Health**

i) Review grant for Special Emphasis Panel NIDCR, March 1, 2011

ii) Training grant review NIDCR 03-02-03 2010

iii) Special Emphasis Panel/Scientific Review Group 2009/05 ZRG1 MOSS-K (09) F meeting, 02/25/2009

iv) Training grant review NIDCR 06-12-09

v) Dental and Enamel: Developmental Biology NIDCR- March and June 2008


viii) SEPA Study Section (NCRR) – July 2005

ix) RFA SPECIAL EMPHASIS PANEL (NIAM) – March 2005

x) Center of Biomedical Research Excellece in Protein Structure and Function – September 2004

xi) R03 Study Section Panel (NIAMS) – July 2004

xii) SEPA Study Section (NCRR) – October 2004

University Research Board 2005

Other grant reviews:

John Sealy Memorial Endowment Fund for Biomedical Research James W. McLaughlin Fellowship Fund, The University of Texas Medical Branch (UTMB) 2003 – 2008

The Whitehead Fellowships for Junior Faculty in Biomedical and Biological Sciences, New York University March 2006

AO CMF Research Grant (Clinical Priority Program): Imaging and planning of surgery 03-2010

JOURNAL REVIEWS:

1. Development
2. Developmental Biology
3. Journal of Dental Research
4. Journal of Biological Chemistry
5. Calcified Tissue International
6. Archives of Oral Biology
7. Bone
8. Journal of Histochemistry & Cytochemistry
10. Anatomical Record
11. Matrix Biology
12. Microscopy
13. International Journal of Biological Sciences

Abstract reviews for European Calcified Tissue Society 2012

SERVICE

AT PROFESSIONAL SOCIETIES
1. President of IADR/AADR Mineralized Tissue Group of IADR/AADR Mineralized Tissue Group 2011
2. Co-Chair of Mineralized Tissue Symposium Annual Meeting of IADR, Barcelona, Spain, July, 2010
3. Co-Chair of Mineralized Tissue Symposium Annual Meeting of AADR, Washington DC, March 2010
4. Co-Chair of Mineralized Tissue Annual Meeting of IADR, Miami, April, 2009
5. CO-organizer of Chongqing 2008 International Symposium on New Frontier of Skeletal Research, Chongqing, China October 2008
6. CO-chair of symposium in the 3rd International Conference on Osteoporosis and Bone Research Shanghai, China October 2007
8. Organizer for Symposium of Annual Meeting of American Association for Dental Research, Orlando, FL 2006
9. Chair of Stem Cells and Factors Annual Meeting of International Association for Dental Research, Baltimore, March, 2005
10. Chair of Mineralized Tissues Annual Meeting of International Association for Dental Research, Chinese Division, Wuhan, China, June 2004
11. Chair of Mineralized Tissue Annual Meeting of American Association for Dental Research, Chicago, March 2001
12. Chair of Mineralized Tissue Annual Meeting of International Association for Dental Research, Chiba, Japan, June 2001

SERVICE AT TEXAS A&M HEALTH SCIENCE CENTER
Senate Caucus Leader- Graduate School of Biomedical Sciences (2009-2011)

SERVICE AT BAYLOR COLLEGE OF DENTISTRY, TEXAS A&M HEALTH SCIENCE CENTER
New Faculty Search Committee (member).
Post tenure Review committee (Chair).
Vice Chair of IACUC (Institutional Animal Care and Use Committee).

SERVICE AT UNIVERSITY OF MISSOURI-KANSAS CITY:
Institutional Animal Care and Use Committee (member)
1999-2006
Faculty Development Committee (Dental School)
2004-2006
Risk Management and Safety Committee (Dental School)
2002-2004
Research Support Committee (co-chair, Dental School)
2000-2002

TEACHING

Undergraduate:
1987 – 1991 Physiology and Anatomy, University of Connecticut (Teaching Assistant)
1979 - 1985 Human Physiology, Qingdao University-Medical College (Course Director)

Graduate:
Baylor College of Dentistry
2007- present 5244 Advanced Biology of Mineralized Tissues (Course Director)
- with 30 hr lectures

UMKC-Dental School
1999 - 2006 Dent 752 Special Topics in Oral Biology (Instructor)
1999 - 2006 Dent 751 Elements of Scientific Method (Instructor)
1999 - 2006 Dent 760 Physiology of Oral Hard Tissue (Course Director)
2000 – 2001 Dent 806 Oral Microbiology (Course Director)
1999 – 2000 Dent 730 Biology of the Periodontium (Instructor)
FACULTY RECORD (MODIFIED CURRICULUM VITAE)
12.01.99.Z1.01 Appendix B (Form Version 06/06/11)

Use your computer to complete this form and utilize as much space as necessary, below each heading, to provide the requested information. If you have no information for a topic, write "None" or "NA" under the heading. Whenever dates are requested throughout the document, list them in chronological order, beginning with the first and ending with the most recent. Do not double list accomplishments, but rather place them in the category you deem most appropriate. The Faculty Record plus attachments are to be submitted as a single PDF file.

The electronic version of this form can be found on-line at: at http://www.tamhsc.edu/facultystaff/rules/index.html, 12.01.99.Z1.01 Appendix B

Name: Jay C. Groppe
Date: 6. August 2012

HSC Component: Baylor College of Dentistry
Component Department/Unit: Biomedical Sciences

Present Rank (Check one of the following):

___ Assistant Professor
___ Clinical Assistant Professor
___ Adjunct Assistant Professor

X Associate Professor
X Clinical Associate Professor
X Adjunct Associate Professor

I am applying for promotion to: (Check one of the following): NA

___ Associate Professor
___ Clinical Associate Professor
___ Adjunct Associate Professor

___ Professor
___ Clinical Professor
___ Adjunct Professor

Present Tenure Status: Tenure in Title

X Tenure Track
___ Only Track

___ Tenured
___ Tenured In Title Only

*Non-Tenure Track:

___ Educator
___ Research

Professional Service

Applying for tenure? Yes

No

Applying for tenure in title only? Yes

No

¹ Tenure in Title Only is only available in the College of Medicine.

Primary Academic Area (if Tenured or Tenure Track):

Education

Research

Professional Service

Secondary Academic Area (if Tenured or Tenure Track):

X Education

Research

Professional Service

I have read The Texas A&M University System Health Science Center Internal Policies concerning Faculty Appointment, Promotion and Tenure located under Section 12 Faculty, 12.01.99.Z1.01 of the HSC Institutional Rules and Policies, URL http://www.tamhsc.edu/facultystaff/rules/

X Yes

No

I understand that the deliberations of the Component and the Health Science Center Appointment, Promotion and Tenure Review Committees are confidential. I understand that I should not solicit any information about those deliberations from any member of those committees or anyone involved in the deliberations. I also understand that the results of the Component committee deliberations serve as recommendations to the Component Dean/Director and the results of the Health Science Center Appointment, Promotion and Tenure Review Committee deliberations serve as recommendation to the Health Science Center Vice President for Academic Affairs, with the final decision on promotion made by the Health Science Center President. I understand that the granting of tenure is made by The Texas A&M University System Board of Regents.

X Yes

No

Page 1 of 22
General Information

A. Education
List all earned and honorary college degrees that you have received (B.S., M.S., M.D., Ph.D., etc.) and the dates. Give the name of degree, date of degree, field of degree, and institution and location degree awarded for each.

<table>
<thead>
<tr>
<th>Year</th>
<th>Degree</th>
<th>Field</th>
<th>Institution and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>B.A.</td>
<td>Biochemistry – Molecular Biology</td>
<td>University of California, Santa Barbara</td>
</tr>
<tr>
<td>1991</td>
<td>Ph.D.</td>
<td>Biochemistry – Molecular Biology</td>
<td>University of California, Santa Barbara Interdepartmental Program, Chemistry-Biological Sciences</td>
</tr>
</tbody>
</table>

B. Postdoctoral Education (Including Residencies and Fellowships)
List the postdoctoral education that you have completed. Give the title of your position (e.g., Postdoctoral Fellow), the beginning and ending dates, the source of funding (e.g. American Heart Association, Texas Affiliate), field, name of mentor, and name of institution and location for each. Underline those positions for which the applications were peer reviewed.

<table>
<thead>
<tr>
<th>Year</th>
<th>Position</th>
<th>Institution and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-1993</td>
<td>Postdoctoral Researcher, Department of Chemistry; Thomas C. Bruice</td>
<td>University of California, Santa Barbara</td>
</tr>
<tr>
<td>1993-1999</td>
<td>Postdoctoral Researcher, Department of Cell Biology; Markus Affolter Biocenter, University of Basel, Switzerland</td>
<td></td>
</tr>
<tr>
<td>2000-2003</td>
<td>Visiting Scientist, Structural Biology Laboratory; Senyon Choe Salk Institute for Biological Studies, La Jolla, CA</td>
<td></td>
</tr>
</tbody>
</table>

C. Positions Held
List each position (teaching, administrative, and other) you have held subsequent to completion of your postdoctoral education. Give beginning and ending dates and the institution and location for each position. If you were a member of the graduate faculty at another institution, give the dates of appointment and the name of the institution and location. If you held an academic appointment, give the appropriate dates and the name and location of the institution. Underline your academic appointments at Texas A&M Health Science Center.

<table>
<thead>
<tr>
<th>Year</th>
<th>Position</th>
<th>Institution and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-2007</td>
<td>Assistant Professor/Research, Department of Biochemistry</td>
<td>University of Texas Health Science Center, San Antonio</td>
</tr>
<tr>
<td>2007-present</td>
<td>Associate Professor, Department of Biomedical Sciences</td>
<td>Texas A&amp;M Health Science Center, Baylor College of Dentistry, Dallas</td>
</tr>
</tbody>
</table>

D. Honors
List the honors you have received and the dates (for example, Phi Beta Kappa, 1985; American Heart Association Established Investigator, 2001).
List dates in chronological order, beginning with the first and ending with the most recent.

E. Specialty and Sub-Specialty Board Certifications

List the name of each board or other professional organization by which you have been certified/recertified. Also, give the original date of certification for each and expiration date(s) for each (e.g. American Board of Ophthalmology, 1990, exp. 2010; American Board of Microbiology, 1992, exp. 2010).

F. Society Memberships

1. College or academic fellowships or memberships and effective dates (American and/or foreign)
   (e.g., American College of Physicians, 1995; American Academy of Microbiology, 1996)

2. Elective societies and effective dates
   (e.g., American Physiological Society, 1985; Health Science Communication Association, 1988)

3. Other memberships (not elected) and effective dates
   (e.g., American Medical Association, 1980; American Society for Microbiology, 1982)

Union of the Swiss Societies for Experimental Biology, 1993-1999
American Society for Cell Biology, 2002
American Association for Dental Research, 2008
Association of Biochemistry Course Directors, 2012
Teaching

A. Local Teaching Activities

1. Lectures, small group conferences, laboratories and seminars for professional students, graduate students, residents and fellows

| Year: 2007 | DDDS 6510 *Biochemistry, Cell & Molecular Biology*; Dental Lectures, 2 hours; 100 D1 students PowerPoint presentations, six slide/page print out for manual; Camtasia recording > Blackboard Individual / All Faculty Mean Rating: 4.14 / 4.46 out of 5 |
| Year: 2008 | MSCI 612 *Current Topics in Cell Signaling*; Graduate Lecture/Seminar, 1.5/1.5 hours; 6 students PowerPoint presentation, seminar article, relevant literature posted on TAMHSC course website. Overall rating: no analysis performed, only two students responses to questionnaire DDDS 6510 *Biochemistry, Cell & Molecular Biology*; Dental Lectures, 7 hours; 104 D1 students PowerPoint presentations, six slide/page print out for manual; Camtasia recording > Blackboard Individual / All Faculty Mean Rating: 4.64 / 4.445 out of 5 |
| Year: 2009 | MSCI 612 *Current Topics in Cell Signaling*; Graduate Lecture/Seminar, 1.5/1.5 hours; 2 students PowerPoint presentation, seminar article, relevant literature posted on TAMHSC course website. Overall rating: Good (Very Good, Good, Neutral, Poor, Very Poor); no mean values calculated DDDS 6510 *Biochemistry, Cell & Molecular Biology*; Dental Lectures, 13 hours; 106 D1 students PowerPoint presentations, six slide/page print out for manual; Camtasia recording > Blackboard Individual / All Faculty Mean Rating: 4.54 / 4.32 out of 5 |
| Year: 2010 | MSCI 612 *Current Topics in Cell Signaling*; Graduate Lecture/Seminar, 1.5/1.5 hours; 10 students PowerPoint presentation, seminar article, relevant literature posted on TAMHSC course website. Individual / Other Faculty Mean Rating: 2.71 / 1.96 (Note: COM course evaluation scale inverted) BMS 5V40 *Cell Mol Bio Oral Cranio Tissues*; Graduate Lecture/Seminar, 2/1.5 hours; 10 students PowerPoint presentations, six slide/page print out for manual; Camtasia recording > Blackboard Individual / All Faculty Mean Rating: 4.1 / 4.2 out of 5 DDDS 6510 *Biochemistry, Cell & Molecular Biology*; Dental Lectures, 13 hours; 106 D1 students PowerPoint presentations, six slide/page print out for manual; Camtasia recording > Blackboard Individual / All Faculty Mean Rating: 4.7 / 4.4 out of 5 |
| Year: 2011 | BMS 5V40 *Cell Mol Bio Oral Cranio Tissues*; Graduate Lecture/Seminar, 2/1.5 hours; 6 students PowerPoint presentations, six slide/page print out for manual; Camtasia recording > Blackboard Individual / All Faculty Mean Rating: 4.7 / 4.3 out of 5 DDDS 6510 *Biochemistry, Cell & Molecular Biology*; Dental Lectures, 20 hours; 105 D1 students PowerPoint presentations, six slide/page print out for manual; Camtasia recording > Blackboard Individual / All Faculty Mean Rating: 4.7 / 4.3 out of 5 (Rating amongst Course Directors) |
| Year: 2012 |
List dates in chronological order, beginning with the first and ending with the most recent.

| BMS 5V40 Cell Mol Bio Oral Cranio Tissues; Graduate Lecture/Seminar, 2/1.5 hours; 9 students PowerPoint presentations, six slide/page print out for manual; Camtasia recording > Blackboard Individual / All Faculty Mean Rating: 4.2 / 4.2 out of 5 |

2. **Clinical teaching for professional students, residents and fellows**

   List for each the topic of instruction/supervision; number of hours of direct instruction or supervision per year; approximate number of students, residents or fellows impacted; brief description of educational materials developed (slides, handouts, etc.). For Attachment A (1), attach teaching evaluations that are to be from the previous five years, not to exceed ten evaluations, which are felt to best exemplify your pedagogy. You may include peer teaching reviews as well as student evaluations.

---

**B. Non-Credit Instruction**

1. **Continuing Medical Education**

   List for each the topic of instruction; number of hours of direct instruction per year; approximate number of professionals impacted; brief description of educational materials developed (slides, handouts, etc.). For Attachment A (2), attach evaluations of CME activities presented by you that are to be from the previous five years, not to exceed ten evaluations, which are felt to best exemplify your pedagogy.

---

2. **Educational activities for the lay public**

   List for each the topic of instruction; number of hours of direct instruction per year; approximate number of individuals impacted; brief description of educational materials developed (slides, handouts, etc.).

---

**C. Mentoring and Advising**

1. **Graduate students**

   Are you a member of the graduate faculty? X Yes No

   If so, Date of Appointment: June, 2008

   List the name of each graduate student for whom you served as a member of the thesis or dissertation committee. Underline the names of students for whom you served as Chairperson. Give the name of each student, the degree earned, the field of the student, the name of the department and institution where the degree was earned, and the date the degree was earned. Asterisk (*) those students who did not complete writing their dissertation under your supervision. Give each student's current title/position and location (if known).

   Yao Sun, BDS, PhD- PhD Thesis (2011)
   Dentin Matrix Protein Structure-Function
   Biomedical Sciences, Baylor College of Dentistry
Current position: Associate Professor, Vice Director of Hard Tissue Regeneration Institute, Harbin Medical University, China

*Dentin Matrix Protein Structure-Function*
Biomedical Sciences, Baylor College of Dentistry

2. Postdoctoral fellows, research associates, residents, fellows and visiting scientists

List the name and beginning and ending dates of each person for whom you served as a research advisor or faculty mentor. Give each person's current title/position and location (if known).

<table>
<thead>
<tr>
<th>Name</th>
<th>Years</th>
<th>Title/Position</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jin gfeng Wu, MD</td>
<td>2008-2010</td>
<td>Research Assistant</td>
<td>Rochester, NY</td>
</tr>
<tr>
<td>Shruti Konda, MS</td>
<td>2011-2012</td>
<td>Research Associate</td>
<td>Houston, TX</td>
</tr>
<tr>
<td>Anupama Pathi, MS</td>
<td>2011-2012</td>
<td>Research Associate</td>
<td>Hyderabad, India</td>
</tr>
<tr>
<td>Mary Tandang, PhD</td>
<td>2011</td>
<td>Postdoctoral Research Associate</td>
<td></td>
</tr>
</tbody>
</table>

3. Professional students

List the name and beginning and ending dates of each student for whom you served as a research advisor or faculty mentor, and the name of the program (e.g., Medical Student Summer Research Program). Give the person's current title/position and location (if known).

2008 Mentored one predoctoral summer research student:
Jacquetta Davis
“Expression of Ectodin for Structure/Function Studies”

2009 Mentored three predoctoral summer research students:
Roddy Castells, Howard Price, Jamie Wong
“Mutant BMP Receptor Kinases Linked to FOP”

2010 Mentored four predoctoral summer research students:
Chris Larrow, Bennett Larsen, Jon Widdig, Ryan Wilkinson
“Dysregulation of BMP Receptor Kinase Activity Linked to Heterotopic Bone”
Poster presentation IADR/AADR/CADR San Diego, CA March 2011

2011 Mentored four predoctoral summer research students:
Ryan Parnell, Michael Nguyen, David Harney, Art Salinas
“Dysregulation of BMP Receptor Kinase Activity Linked to Heterotopic Bone”

2012 Mentored three predoctoral summer research students:
Stephanie Vera, Katelyn Kennedy, Kirmal Masih
“Activity of Dentin Matrix Protein 4/FAM20C, an Atypical Protein Kinase”

4. Undergraduate students, high school students and other individuals

List the name, beginning and ending dates, and approximate number of hours/week of each undergraduate student, high school student or other individual for whom you served as a research advisor, and the name of the program (e.g., Prairie View Undergraduate Medical Academy Student). Give the person's current title/position and location (if known).
List dates in chronological order, beginning with the first and ending with the most recent.

D. **Other Teaching Activities**

List lectures or Grand Rounds you have given. Underline those you presented at other institutions or at national meetings or symposia; include the topics and dates.

<table>
<thead>
<tr>
<th>Date</th>
<th>Presenter</th>
<th>Topic</th>
</tr>
</thead>
</table>

E. **Enhancement of Teaching Skills**

List teaching academy programs, continuing education programs and workshops you have attended and include the dates.

**Fall 2007 – Fall 2008 Office of Academic Affairs BCD: Teaching Scholars Program**

*(per directive of Department Chair upon arriving at Baylor College of Dentistry Fall 2007)*

Initiated by a remote weekend retreat in Fall 2007 followed by regular course meetings throughout the year. Summer 2008 included a nearby off-campus retreat and a BCD course:

- **June 2008** Dr. Lavern Holyfield: *Teaching Scholars Program, Summer Retreat Classes*
- **July-Aug 2008** Dr. Ernie S. Lacy: *HPE 5225 Teaching Skills for Health Professions Educators*

Other associated Baylor College of Dentistry workshops attended:

- **February 2008** Dr. Nancy Simpson, TAMU Center for Teaching Excellence: *Portfolio Workshop*
- **March 2008** Scott Fredrick: *Making Your Lectures Available Using Camtasia*
- **April 2008** Bob Hutchins, PhD: *Using Audience Response Systems in the Classroom*
- **April 2008** Carmina Castro: *Using Blackboard in Classroom Teaching*
- **October 2008** John D. Rugh, PhD: *Assessment of Student Search and Critical Appraisal Skills*
- **October 2008** Linda Behar-Horenstein, PhD: *Strategies for Developing Critical Thinking*

F. **Education Administration**

List courses, clerkships, graduate programs, residency programs and fellowship programs you have directed and include the dates.

<table>
<thead>
<tr>
<th>Date</th>
<th>Presenter</th>
<th>Topic</th>
</tr>
</thead>
</table>

G. **Education Committees**

List state, regional and national *education* committees on which you have served (e.g., residency review committees, National Board of Medical Examiners), the dates of your membership, and any offices you have held (e.g., Secretary).

<table>
<thead>
<tr>
<th>Date</th>
<th>Committee Name</th>
<th>Position</th>
</tr>
</thead>
</table>

H. **Innovations in Education**

List new courses, residency programs, fellowship programs, workshops, laboratory exercises and other educational components you have developed and the dates they were initiated.

<table>
<thead>
<tr>
<th>Date</th>
<th>Innovation</th>
<th>Details</th>
</tr>
</thead>
</table>
List dates in chronological order, beginning with the first and ending with the most recent.

I. Education Awards

List teaching awards you have received and the dates.

Nominated by Department Chair for “2012 Distinguished Teaching Award” in D1 dental courses.

Nominated by dental students for Baylor College of Dentistry “2012 Dental Teacher of the Year”. Selected by Student Council members, Alumni Association chairperson, student representatives as one of five finalists.
List dates in chronological order, beginning with the first and ending with the most recent.

Research and Scholarship

A. Summary of Research and Scholarly Activity

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Publication</td>
<td>Potentiation of Ca²⁺ release by cADP-ribose in the heart is mediated by enhanced SR Ca²⁺ uptake into the sarcoplasmic reticulum. Circ. Res. 89, 614-622.</td>
</tr>
</tbody>
</table>

B. Publications

1. Published articles and case reports

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Publication</td>
<td>Potentiation of Ca²⁺ release by cADP-ribose in the heart is mediated by enhanced SR Ca²⁺ uptake into the sarcoplasmic reticulum. Circ. Res. 89, 614-622.</td>
</tr>
</tbody>
</table>

[77 Citations; Early study of DNA conformation by AFM. Collaborative work with UC Santa Cruz Chancellor Emeritus (RLS); credited with idea of human genome project]


[119 Citations; Reverse genetics revealed role of the conserved transcription factor in morphogenesis of insect airway and later mammalian lung and circulatory system]


ordered in the unbound form and its flanking prolines are essential for binding. *J. Mol. Biol.* 412, 601-618.


2. Articles and case reports in press

Use the same format as above, but give the date the article was accepted for publication. Place an asterisk (*) before those that received peer review.

3. Articles and case reports submitted

Use the same format as above, but give the date the article was submitted for publication. Place an asterisk (*) before those that received peer review.


4. Books, chapters in books, and monographs

Give the complete citation of each book, chapter in a book, or monograph for which you are an author or co-author (chronological order, ending with the most recent). Give the authors’ names exactly as they appear in the literature, print your name in bold, and underline the corresponding author. Use the format of the following examples for books and chapters:


5. **Abstracts**

Give the complete citation of each abstract for which you are an author or co-author (chronological order, ending with the most recent). Give the authors' names exactly as they appear in the literature, print your name in bold, and underline the presenter's name. Use the same format as that for published articles and case reports. **Place an asterisk (*) before those that received peer review.** Note if presentation given in conjunction with submission.


6. **Exhibits and productions**

Describe any exhibits and productions for which you have been responsible (chronological order, ending with the most recent). Indicate which of these have won awards (e.g., the AMA Billings Silver Medal). **Place an asterisk (*) before those that received peer review.**

C. **Presentations**

1. **Invited**

List the invited research presentations you have given at international or national meetings, symposia, workshops or conferences, and invited research lectures (chronological order, ending with the most recent). Underline those presented at other institutions. Give the title of your presentation, the name of the meeting, symposium, workshop, conference or institution, and the date. **Place an asterisk (*) before those that received peer review.**

**1998 – 2007: Structural basis of extracellular regulation of BMP signaling**

1998    Regeneron Pharmaceuticals, Tarrytown, NY

**2007 – 2012: Focus shifted to cytoplasmic kinase of dysregulated BMP receptor**

1998    Salk Institute for Biological Studies, La Jolla, CA

2001    Regeneron Pharmaceuticals, Tarrytown, NY

2002    Regeneron Pharmaceuticals, Tarrytown, NY

2002    University of Medicine and Dentistry of New Jersey, Department of Biochemistry and Molecular Biology, Newark, NJ
List dates in chronological order, beginning with the first and ending with the most recent.

<table>
<thead>
<tr>
<th>Year</th>
<th>Institution / Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Columbia University College of Physicians &amp; Surgeons, Biochemistry and Molecular Biophysics, New York, NY</td>
</tr>
<tr>
<td>2002</td>
<td>University of Pennsylvania School of Medicine, Dept of Orthopaedic Surgery, Philadelphia, PA</td>
</tr>
<tr>
<td>2003</td>
<td>Fox Chase Cancer Center, Biomolecular Structure &amp; Function Section, Philadelphia, PA</td>
</tr>
<tr>
<td>2003</td>
<td>University of Texas HSC, Department of Biochemistry, San Antonio, TX (presentation as invited guest from Salk Institute Structural Biology Laboratory)</td>
</tr>
<tr>
<td>2004</td>
<td>University of Texas HSC, Department of Biochemistry, San Antonio, TX (presentation as Assistant Professor/Research UTHSCSA Biochemistry)</td>
</tr>
<tr>
<td>2006</td>
<td>University of Pennsylvania School of Medicine, Dept of Orthopaedic Surgery, Philadelphia, PA</td>
</tr>
<tr>
<td>2007</td>
<td>BMP and TGF-β signal transduction, inhibition and dysregulation: Unanticipated mechanisms revealed by structures of protein-protein complexes</td>
</tr>
<tr>
<td>2007</td>
<td>Faculty position presentation; Biomedical Sciences TAMHSC/BCD, Dallas, TX</td>
</tr>
<tr>
<td>2007</td>
<td>Brown University, Dept of Mol Biol., Cell Biol. &amp; Biochemistry, Providence, RI</td>
</tr>
<tr>
<td>2008</td>
<td>Wyeth Research, Pharmaceuticals, Cambridge, MA</td>
</tr>
<tr>
<td>2008</td>
<td>Regeneron Pharmaceuticals, Tarrytown, NY</td>
</tr>
<tr>
<td>2008</td>
<td>TAMHSC/College of Pharmacy, Dept of Pharmaceutical Sci, Kingsville, TX</td>
</tr>
<tr>
<td>2008</td>
<td>University of North Texas HSC, Cell Biology and Genetics, Fort Worth, TX</td>
</tr>
<tr>
<td>2009</td>
<td>BMP and TGF-β signal transduction: Unanticipated mechanisms revealed by structures of ligand-receptor complexes</td>
</tr>
<tr>
<td>2009</td>
<td>TAMHSC/COM Dept of Molecular and Cellular Medicine, College Station, TX</td>
</tr>
<tr>
<td>2009</td>
<td>BMP and TGF-β signal transduction: Unanticipated mechanisms revealed by structures of ligand-receptor complexes and implications for activin and myostatin assembly</td>
</tr>
<tr>
<td>2011</td>
<td>Mechanisms of dysregulation of BMP receptor kinase activity linked to EndMT and heterotopic ossification in FOP</td>
</tr>
<tr>
<td>2011</td>
<td>Symposium on Extracellular Matrix in Health and Disease</td>
</tr>
<tr>
<td>2011</td>
<td>Harvard School of Dental Medicine</td>
</tr>
<tr>
<td>2013</td>
<td>Mechanisms of dysregulation of BMP receptor kinase activity linked to heterotopic ossification in FOP</td>
</tr>
<tr>
<td>2013</td>
<td>FASEB Summer Research Conference</td>
</tr>
<tr>
<td>2013</td>
<td>TGF-β Superfamily: Signaling &amp; Development, Steamboat Springs, CO</td>
</tr>
<tr>
<td>2013</td>
<td>By invitation of the organizer, Peter ten Dijke, Leiden, Netherlands</td>
</tr>
</tbody>
</table>
2. Non-invited Without Published Abstract

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Third European Conference on Bone Morphogenetic Proteins</td>
<td>Zagreb, Croatia</td>
</tr>
<tr>
<td>2002</td>
<td>American Society of Cell Biology Meeting</td>
<td>San Francisco, CA</td>
</tr>
<tr>
<td>2002</td>
<td>4th International Conference on Bone Morphogenetic Proteins</td>
<td>Sacramento, CA</td>
</tr>
<tr>
<td>2007</td>
<td>TGFβ receptor assembly: Unanticipated diversity for a conserved superfamily</td>
<td>FASEB Summer Research Conference</td>
</tr>
<tr>
<td>2007</td>
<td>Homology Modeling of ACVR1 Mutations Linked to Atypical &amp; Variant FOP Syndromes</td>
<td>9th International Conf. Chemistry &amp; Biology of Mineralized Tissues, Austin, TX</td>
</tr>
<tr>
<td>2007</td>
<td>Cooperative Assembly of BMP and TGF-β Signaling Complexes</td>
<td>7th International Conference on Bone Morphogenetic Proteins, Lake Tahoe, CA</td>
</tr>
</tbody>
</table>

D. Patents or Commercialization of Research

<table>
<thead>
<tr>
<th>Invention disclosure</th>
<th>A High Throughput Assay for Inhibitors of TGF-β Family Ligand Binding to Receptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Wisconsin-Madison No. P07092US, filed October 24, 2006</td>
<td></td>
</tr>
<tr>
<td>Inventors: Hoffman, Hinck and Groppe</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patent application</th>
<th>Crystal Structure of BMP Signaling Inhibitor Noggin in Complex with BMP-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Provisional Patent Application No. 60/310,061, filed August 3, 2001</td>
<td></td>
</tr>
<tr>
<td>Inventors: Choe and Groppe</td>
<td></td>
</tr>
</tbody>
</table>

E. Extramural Professional Service

1. Manuscript reviewer for the following journals

<table>
<thead>
<tr>
<th>Journal</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry</td>
<td>American Chemical Society</td>
</tr>
<tr>
<td>Chemistry &amp; Biology</td>
<td>Cell Press</td>
</tr>
<tr>
<td>Journal of Molecular Evolution</td>
<td>Springer</td>
</tr>
</tbody>
</table>
2. Consultant to government agencies, private industry, or other organizations

<table>
<thead>
<tr>
<th>Pharmaceutical Industry Collaboration/Consulting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regeneron Pharmaceuticals, Tarrytown, NY</td>
</tr>
<tr>
<td>Dr. Aris Economides, Collaboration since 1995</td>
</tr>
<tr>
<td>Noggin crystal structure; related cystine knot antagonists</td>
</tr>
<tr>
<td>Wyeth/Pfizer Osteogenics Program, Cambridge, MA</td>
</tr>
<tr>
<td>Drs. Howard Seeherman, John Wozney; 2008-2011*; $10,000/yr</td>
</tr>
<tr>
<td>Paid consultant for BMP ligand, receptor, antagonist, proregion structure-function</td>
</tr>
<tr>
<td>*Genetics Institute/Wyeth/Pfizer Bone Morphogenetic Protein Program terminated December 2011</td>
</tr>
</tbody>
</table>

3. Officer or committee member of scientific or professional organizations

4. Member of research grant study sections (e.g., NIH, AHA Western Review Consortium)

<table>
<thead>
<tr>
<th>Ad hoc reviewer:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wellcome Trust (London)</td>
</tr>
<tr>
<td>Medical Research Council (MRC, Britain)</td>
</tr>
<tr>
<td>National Health &amp; Medical Research Council (NHMRC, Australia)</td>
</tr>
<tr>
<td>- Three proposals on extracellular regulation of TGF-β superfamily signaling</td>
</tr>
</tbody>
</table>

5. Member of editorial boards (e.g., Circulation Research)

6. Editor
F. Grants and Contracts to Support Scholarly Work

Under the categories listed below, list each grant or contract on which you were a principal investigator or co-investigator (not consultant) obtained to support your current scholarly activities or interests including research, contributions to education, and/or patient care. Include the granting agency, grant number, beginning and ending dates, name of the principal investigator, title of the grant/contract, percent effort, and total direct costs for the duration of the grant. Place an asterisk (*) before any grant or contract that was peer-reviewed. Please use the format of the following example:

NIH R01 HL 34567; 07/01/98 - 06/30/03; John Doe (PI); Bill Smith (Col) Mechanisms of cardiac arrhythmias; 30% effort; $1,000,000.

1. Intramural awards (e.g., seed grants)

2. Extramural awards

   a. Local but not from HSC

   b. State and/or regional

      *Specificity Determinants and Binding Mechanisms of Noggin, a Potent BMP Antagonist and Inhibitor of Vasculogenesis
      American Heart Association Beginning Grant-in-Aid 0565042Y; $112,728; 2005-2007; PI

   c. National and/or international

      Structural Basis of ACVR1 Dysregulation in Fibrodysplasia Ossificans Progressiva
      Center for Research in FOP and Related Disorders, UPenn School of Medicine; $150,000; 2006-2013 (two years w/NC extension and one year renewal); PI

      *Mechanisms of BMP Receptor Kinase Dysregulation in Skeletal Dysplasias
      NIH NIAMS 1 R03 AR056838-01; $150,000; 2008-2012 (w/NC extension); PI
      National Institute of Arthritis and Musculoskeletal and Skin Diseases
      Special Emphasis Panel ZAR1 EHB-H (M1) Small Research Grants Review
      Priority Score: 127; funded upon first submission

3. Grants submitted and pending approval

Give the date of submission.

Other grant proposals submitted as of August 2012:

Molecular Recognition by Inhibitors of BMP and Nodal Signaling
NIH NIGMS 1 R01 GM076111-01; $875,000; 2005-2010; PI;
Macromolecular Structure and Function C (MSFC) Study Section- not discussed

Molecular Recognition by Inhibitors of BMP and Nodal Signaling
List dates in chronological order, beginning with the first and ending with the most recent.

NIH NIGMS 1 R01 GM076111-01A1; $875,000; 2006-2011; PI;
Macromolecular Structure and Function C (MSFC) Study Section- not discussed

Structural Basis of Bone Morphogenetic Protein Receptor Kinase Dysregulation in Skeletal Dysplasias
THECB NHARP 000089-0037-2007; $150,000; 2008-2010; PI; preproposal not continued

Introduction of a pH-Sensitive Conformational Switch into Ion Pairs of a Receptor Kinase Superfamily
Welch Foundation, Houston (Basic Chemical Research); $150,000; 2008-2011; PI;

Introduction of a pH-Sensitive Conformational Switch into Ion Pairs of a Receptor Kinase Superfamily
Welch Foundation, Houston (Basic Chemical Research); $150,000; 2009-2012; PI;
Head of scientific advisory board at Rice not contacted for specifics, economy weak

Bio-Rad ProteOn XPR36 High-throughput SPR Optical Biosensor
ARRA Funds) NIH NCRR 1 S10 RR027644-01; $284,500; 2010-2011; PI; not discussed

Structural Basis of Bone Morphogenetic Protein Receptor Kinase Dysregulation in Skeletal Dysplasias
THECB NHARP 000089-0055-2009; $200,000; 2010-2012; PI; preproposal not continued

pH-Sensitive Conformational Switch Mechanism of an Aberrant Ion Pair
Welch Foundation, Houston (Basic Chemical Research); $100,000; 2010-2012; PI;

BMP Receptor Kinase Inhibitor- to Substrate-binding Switch
NIH NIAMS 1 R01 AR061636-01; $1,150,000; 2011-2016; PI;
Macromolecular Structure and Function B (MSFB) Study Section- not discussed

Mechanism of Activation of Activin-like Receptor Kinases
NIH NIAMS 1 R01 AR061636-01A1; $1,150,000; 2012-2017; PI;
Molecular and Integrative Signal Transduction (MIST) Study Section- not discussed

4. Grants approved but not funded

Give the priority scores and percentile scores (if available).

Grant proposal competitively scored but not formally funded as of August 2012:
The Roles of FAM20C (DMP4) in Odontogenesis and Osteogenesis
NIH 1 R01 DE022549-01A1; $1,250,000; 2012-2017;
Chunlin Qin (PI), Jian Feng (Co-I, 5% effort), Jay Groppe (Co-I, 5% effort)
Skeletal Biology Development and Disease (SBDD) Study Section
Priority score: 20; Percentile: 5; NIDCR Council Meeting Fall 2012

G. Sponsored Clinical Trials and Drug Studies

Supply the same information and use the same format as above for research grants
Administrative Service

A. Elected, Appointed or Voluntary Positions

For each of the following categories, list the organizations, task forces, committees or programs on which you have served, the beginning and ending dates of your service, any offices you held, and whether you were elected, appointed or volunteered for that service (e.g. Admissions Committee, 1999-present, appointed).

1. Institutional (HSC or Texas A&M University System)

2. Component

   Chemical Hazards Subcommittee, Biosafety Committee, 2007-present, appointed.
   CODA Self-Study Ad Hoc Committee, Research Advisory, 2009-2011, appointed;
   Met with site visitors to discuss Biomedical Sciences Teaching Outcomes (Oct 2011).
   Graduate Program in Biomedical Sciences (GSBS) Committee, 2009-present, appointed.
   Research Committee, 2011-present, appointed; elected Vice Chair.
   TAMHSC-BCD Strategic Planning Subcommittee- Goal 2: Research; 2012, appointed.

3. Department/Unit

   Organizing Committee- Biomedical Sciences Research Seminar Series, appointed.
   Regular Volunteer- Presentations to Dental Applicant Groups on Research Opportunities

4. Hospital/Clinic

5. State and Regional

6. National and International

B. Recognition

List service awards you have received and the dates.

C. Innovation

List organizations, task forces, committees or programs you have initiated and the dates of establishment.
List dates in chronological order, beginning with the first and ending with the most recent.

Public Service

A. Elected, Appointed or Voluntary Positions

For each of the following categories, list the organizations, task forces, committees or programs on which you have served, the beginning and ending dates of your service, any offices you held, and whether you were elected, appointed or volunteered for that position (e.g., Bryan/College Station Chapter, American Heart Association, 1995-present, voluntary).

1. Local

2. State and Regional

3. National and International

B. Recognition

List public service awards you have received and the dates.

C. Innovation

List public organizations, task forces, committees or programs you have initiated (e.g., Temple Task Force for a Smoke-Free Environment) and the dates of establishment.
Other Information

Briefly provide any other information that is pertinent to your professional or public activities. This may include items such as your involvement in religious organizations, former or current military experience, and awards or other pertinent information not mentioned above.
Curriculum Vitae

Personal:

Name: Allen L. Honeyman
Work Address: Texas A&M University Health Science Center
Baylor College of Dentistry
Department of Biomedical Sciences
3302 Gaston Avenue
Dallas, TX 75246
Telephone: (214) 370-7225
Fax: (214) 370-7298
E-mail: AHoneyman@bcd.tamhsc.edu

Current Position:
Associate Professor, Texas A&M University Health Science Center, Baylor College of Dentistry, 2008 - present
Director, Comprehensive Dental Monitoring Service, Texas A&M University Health Science Center, Baylor College of Dentistry, 2005 - present
Chairman, BCD Biosafety Committee, Texas A&M University Health Science Center, Baylor College of Dentistry, 2002 - present
Director, BMS Resources Committee, Texas A&M University Health Science Center, Baylor College of Dentistry, 2008 - present

Previous Positions:
Assistant Professor, Texas A&M University Health Science Center, Baylor College of Dentistry, 2002 - 2008
Assistant Professor, University of South Florida College of Medicine, 1997-2002
Research Assistant Professor, Washington University in St. Louis, 1994 - 1997

Education:
Undergraduate: Kansas State University, Department of Biology, 1978-80, B.S.
Graduate: Kansas State University, Department of Biology, 1981-83
University of Kansas, Department of Microbiology, 1983-88, Ph.D.
Allen L. Honeyman, *Curriculum Vitae*, 2

Postdoctoral:
- Washington University, Department of Biology, 1988-94
- Cold Spring Harbor Laboratory, Advanced Bacterial Genetics Laboratory, 1992

Research Training:
- 1981-83, Kansas State University, Dr. Thomas C. Currier, The molecular biology and molecular genetics of the ascomycete *Gaeumannomyces graminis var. tritici*
- 1983-88, University of Kansas, Dr. George C. Stewart, Molecular analysis of the *rodC* operon of *Bacillus subtilis*; the molecular genetics of cell division
- 1988-94, Washington University, Dr. Roy Curtiss III, The molecular genetics and molecular biology of the sugar phosphotransferase system of *Streptococcus mutans*

Previous Grant Support:
- NIH NIDCR F32 DE05518, National Research Service Award, Regulation of the *S. mutans* phosphotransferase system, Principal Investigator, Total direct costs - $63,996, 1988-1991, Washington University, St. Louis
- NIH NIDCR R29 DE10890, First Independent Research Support and Transition Award, Regulation of the *S. mutans* phosphotransferase system, Principal Investigator, Total direct costs - $124,082, 9/1/1994 to 6/30/97, Washington University, St. Louis
- NIH NIDCR R29 DE10890, Regulation of the *S. mutans* phosphotransferase system, Principal Investigator, Total direct costs - $225,918, 9/1/1997 to 8/30/2000, University of South Florida College of Medicine
- NIH NIDCR R01 DE10890, Regulation of the *S. mutans* phosphotransferase system, Principal Investigator, Total direct costs - $105,749, 9/1/2001 to 07/31/2002, University of South Florida College of Medicine
- NIH NIDCR R01 DE10890, Regulation of the *S. mutans* phosphotransferase system, Principal Investigator, Total direct costs - $321,751, 08/1/2002 to 07/31/2005, TAMUS HSC Baylor College of Dentistry

Bibliography:

Publications:


Cote, C. K., and A. L. Honeyman. 2003. The LicT protein acts as both a positive and a negative regulator of loci within the bgl regulon of *Streptococcus mutans*. Microbiol. 149:1333-1340.


Abstracts:


**Honeyman, A. L., and R. Curtiss III.** 1992. Characterization of the *Streptococcus*


Genbank Submissions:

X15200. 1989. Bacillus subtilis rodC operon, gi|40098|emb|X15200.1|BSRODC[40098].


AF132127. 2000. *Streptococcus mutans* sorbitol phosphoenolpyruvate:sugar phosphotransferase operon, complete sequence and unknown gene, gi|4928279|gb|AF132127.1|AF132127[4928279].

AF206272. 2000. *Streptococcus mutans* beta-glucosidase-specific phosphotransferase system regulon, complete sequence, gi|9622918|gb|AF206272.1|AF206272[9622918].

AF210133. 2000. *Streptococcus mutans* mannitol PTS EII (*mtlA*), putative transcriptional regulator (*mtlR*), mannitol-specific enzyme III (*mtlF*), and mannitol-phosphate dehydrogenase (*mtlD*) genes, complete cds; and PhnA (*phnA*) gene, partial cds, gi|9622943|gb|AF210133.1|AF210133[9622943].

AF405696. 2001. Reporter vector pALH109, complete sequence, gi|22595306|gb|AF405696.1|22595306.

AF405697. 2001. Reporter vector pALH122, complete sequence, gi|22595311|gb|AF405697.1|22595311.

AF405698. 2001. Reporter vector pVA838, complete sequence, gi|22595316|gb|AF405698.1|22595316.

**Research Collaborations/Interactions with Clinical Faculty:**

Streptococcal Induction of Allergy, Dr. Frank Vasey, Department of Internal Medicine, University of South Florida College of Medicine, 1999.

Effectiveness of Silver Grafts, Dr. Dale Schmacht and Dr. Dennis Bandyk, Department of Surgery, University of South Florida College of Medicine, 2000.

Fecal Lactococci and Allergy, Dr. Richard Crockett, Department of Internal Medicine, University of South Florida College of Medicine, 2001.

*Enterococcus faecalis* and Endodontic Treatment, Dr. Rusty Dunavant, TAMUS HSC, Baylor College of Dentistry, 2003-2005.

The Effect of Ozone on Various Endodontic Treatments, Dr. Steven Schwartz, TAMUS HSC, Baylor College of Dentistry, 2003-2005.


Genetic and metabolic characterization of cariogenic bacteria in smokers vs non-smokers, Dr. Dan Jones, TAMUS HSC, Baylor College of Dentistry, 2008-2009.


The Determinants of Enamel Decalcification During Simulated Orthodontic Treatment, Dr. Elizabeth Hess, TAMUS HSC, Baylor College of Dentistry, 2009-2010.
Photodynamic Therapy against Enterococcus faecalis in Extracted Human Teeth, Dr. Alex Rios, TAMUS HSC, Baylor College of Dentistry, 2010-2011.
The Effect of Various Sonic Treatment on Endodontic Treated Teeth Infected with Enterococcus faecalis, Dr. John Haycock, 2011-2012.

Awards:

The William Arnold Graduate Fellows Award, University of Kansas, 1988
NIH National Research Service Award, Regulation of the *S. mutans* phosphotransferase system, 1988-1991

Teaching Experience:

Kansas State University
Spring 1981, Teaching Assistant, Microbiology 555
Fall 1981-Spring 1983, Examination Coordinator, Principles of Biology 198

University of Kansas
Fall 1983-Spring 1987, Teaching Assistant, Introduction to Microbiology 103 and 502, Pathogenic Microbiology 506, Genetics of Microorganisms 510

Washington University
Fall 1989, Instructor, Laboratory on DNA Manipulations 437
Fall 1991, Instructor, Microbiology and Survival 225A

Washington University School of Medicine
Spring 1989, Instructor, Medical Microbiology Laboratory
Summer 1992, Instructor, Minority High School Student Research Apprentice Program

University of South Florida College of Medicine
Medical Education:
BMS 6300 Medical Microbiology and Immunology, 1997-2002
BMS 6832 Clinical Problem Solving, 2001-2002

Graduate Education:
GMS 6100 Medical Microbiology and Immunology, 1997-2002
GMS 6110 Host-Parasite Interactions, 1999
GMS 6182 Microbiology Laboratory Rotation, 1997, 1999-2002
GMS 6940 Supervised Teaching, 1997-2002
GMS 7418 Directed Research, 1998-2001
GMS 7930 Selected Topics, 1998-2000
GMS 7939 Graduate Seminar, 1997-2002
GMS 7980 Dissertation: Doctoral, 1999-2002

Undergraduate:
IDH 3350 National Science Honors, 1997-2000
MCB 4910 Microbiology Undergraduate Research, 1999-2002
ISC 4930 Selected Topics in Interdisciplinary Science, 1999

Texas A&M University System HSC, Baylor College of Dentistry
Dental Education:
BMS 3250 Biomedical Sciences, 2009-2012
BMS 3325 Dental Hygiene Microbiology, 2004-2012
BMS 3340 Biomedical Sciences, 2012-2012
BMS 3430 Dental Hygiene Microbiology, 2002-2004
BMS 6510 Biochemistry, Cell, and Molecular Biology, 2008-2012
BMS 6740 General Microbiology, 2002-2012
BMS S092 Dental Craniofacial Research, 2003-2009
END 5V98 Master Thesis Research, 2003-2005
END 5V99 Master Thesis Preparation, 2005

Graduate Education:
BMS 5190 Graduate Student Colloquium, 2002-2012
BMS 5350 Oral Microbiology, 2004-2012
BMS 5208 Microbiology, 2005-2006
BMS 5210 Microbiology Lab, 2005-2006

Undergraduate

Teaching Enhancements:
Office of Curriculum and Medical Education, Useful applications of educational
technology by medical faculty, January 2001
Office of Curriculum and Medical Education, Evidence based medicine 101, February
2001, January 2002
HSC Information Services, Introduction to Blackboard, July 2001
HSC Information Services, Advanced Blackboard Instruction, July 2001
TAMUS HSC Baylor College of Dentistry Faculty Retreat, 2003-2012

Awards to Students:
Award for Outstanding Student Presentation, University of South Florida Institute for
University of South Florida College of Medicine Association of Medical Sciences
Award for Superior Presentation, University of South Florida Health Sciences Center
First Place Award for Oral Presentation, Annual Meeting of the Florida Branch of the
American Society for Microbiology, 1999 and 2000.
First Place Award for Poster Presentation, Annual Meeting of the Florida Branch of the
American Society for Microbiology, 1999.
Outstanding Graduate Student Award for Academic Excellence, University of South
Florida College of Medicine, 1999.
Edith Wright Hartley Medical Research Scholarship, Daughters of the American
Second Place Award for Oral Presentation, Annual Meeting of the Florida Branch of the
Outstanding Dissertation Award, University of South Florida, 2002.
Second Place Award for Poster Presentation, TAMUS HSC, BCD Student Research
American Dental Association Caulk/Dentsply Student Clinician Research Competition,
Baylor College of Dentistry representative.

Service Activities:

University - USF College of Medicine:
Association of Medical School Graduate Students, Counselor, 1997-1998
Liaison Committee on Medical Education Committee X, 1997-1998
Liaison Committee on Medical Education Committee X, chairman of research
subcommittee, 1997-1998
College of Medicine Academic Computer Committee, member, 1997-2002
Associate Dean's Committee on Student Affairs, 1998
College of Medicine Academic Computer Committee, chairman of research
subcommittee, 1998-1999
College of Medicine Faculty Council, member, 1998-1999, 2001-2002
College of Medicine Faculty Council, Secretary, 1999-2001
HSC Executive Committee on Strategic Planning, 2000
USF Institute for Biomolecular Science Lecture Series, organizer and host, 2001
College of Medicine Committee on Committees, 2001-2002

University - TAMUS HSC, Baylor College of Dentistry
Institutional Planning Committee, 2002-2004
Graduate Program Committee, 2002-2009
Biosafety Committee, Chairman, 2002-2012
   Infectious Agents Subcommittee, Chairman, 2002-2012
   Chemical Hazards Subcommittee, Member, 2002-2012
   Radiation Safety Subcommittee, Chairman, 2002-2012
Research Advisory Committee, 2002-2012
BMS Senate Representative to the TAMUS HSC Senate, 2002-2005
Allen L. Honeyman, *Curriculum Vitae*, 12

Cell and Molecular Biology Course Task Force, 2003
Microbiology and Immunology Reorganization Task Force, 2003
CODA Self Study Standards 2.12-2.15 Advisory Committee, 2003-2004
Comprehensive Dental Monitoring Service, Director, 2005-2012
Student Promotions Committee, Member, 2007-2012
Institutional Biosafety Committee Executive Committee, 2009-2010

Community:
Great American Teach-in, participant, 1998-2000
Boy Scouts of America, Assistant Scoutmaster or Committee Member, 1991-2002
Dallas Morning News Science Fair Judge, 2003-2007

National:
Ad Hoc Manuscript Reviewer, 1997-2012, Antimicrobial Agents and Chemotherapy,
Applied and Environmental Microbiology, Biochemical Journal, Biotechniques,
Clinical and Diagnostic Laboratory Immunology, Clinical Microbiology Reviews,
DNA and Cell Biology, FEMS Microbiology, Infection and Immunity, Journal of
Bacteriology, Journal of Biotechnology, Journal of Clinical Microbiology,
Microbiology, Microbiology and Molecular Biology Reviews, Vaccine,
NIH NIAID Ad Hoc F32 Study Section, 1998-1999
Florida Branch of the American Society for Microbiology, Counselor, 1999-2002
NASA Ad Hoc Study Section Reviewer, 2000
Editorial Board, Clinical and Diagnostic Laboratory Immunology, 2001-2012
NIH NIAID Ad Hoc Molecular Biology and Transcription Study Section Reviewer, 2003
The United States-Israel Binational Agricultural Research and Development Fund,
Ad Hoc Grant Reviewer, 2003
Editorial Board, Journal of Bacteriology, 2004-2010

Professional Societies:
American Society for Microbiology, 1982-2012
American Association for the Advancement of Science, 1988-2012
Institute for Biomolecular Science, 1997-2002
Florida Society for Microbiology, 1997-2002
International Association for Dental Research, 2000-2012
American Association for Dental Research, 2000-2012
American Society for Microbiology, Texas Branch, 2002-2012
Research Summary:

My main area of research has involved the genetics and physiology of Gram-positive organisms, particularly the oral pathogen, *Streptococcus mutans*. This organism’s main pathogenic effect, the formation of dental caries, is caused by the basic metabolic process of carbohydrate utilization. This organism transports carbohydrates into the bacterial cell via the PTS (phosphoenolpyruvate-dependent phosphotransferase system) and this is where I have concentrated my efforts over the years. These efforts have resulted in the development of over 850 different bacterial strains and of over 200 different plasmids. I have been funded by some mechanism of the National Institutes of Health for 13 years. My most recent research has developed the concept that *S. mutans* has multiple PTS transport systems that display substrate cross-specificity. In genetic terms, a knockout of any of these systems does not lead to a distinct phenotype because each PTS system has redundant/cross-specific backup systems. This phenomenon appears to be unique to this organism and appears to have evolved due to the unique niche that this organism lives in. This concept has resulted in the scientific basis for my R01 continuation proposal to NIDCR. It is my intention to continue studies on the *S. mutans* PTS transport system using a heterologous host to serve as the recipient of the cloned PTS operons to determine their range of substrate specificity. Investigations into the concept of redundancy and cross-specificity of PTS transport systems will also be expanded to include the related organism *Streptococcus pyogenes*, which is responsible for soft tissue infections and strep throat.

I have recently expanded my research efforts to include the development of a three-dimensional model system for periodontal ligament cells (PDLs). This model will be used for the in vitro infection of the PDLs by various oral pathogens. The technique of cell growth used in this model was developed by NASA and has resulted in very unique and exciting results with other cell types and other bacterial pathogens. The initial results using this technique for cell growth has resulted in a new RFA from NIH for proposals to further develop in vitro models using this system. I feel that I am in a good position with my preliminary results to receive funding in this second area of research.

I have recently initiated a clinically relevant project to compare the oral flora isolated from smokers and non-smokers. This is based upon reports that nicotine stimulates the growth of oral bacteria, which may be the cause of the increased caries level found in patients who smoke or use smokeless tobacco.

My research in these three areas has the potential to significantly impact the field of oral biology and medicine. I am confident that I will receive significant funding for these projects in the near future. These projects are directed at decreasing the effects of oral pathogens on the human host.
References:

Dr. Cheryl Nickerson  
Center for Infectious Diseases  
PO Box 875401  
The Biodesign Institute, Arizona  
Tempe, AZ 85287-5401  
(480) 727-7520  
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Chair of Oral and Maxillofacial Surgery  
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McKee Professor of Microbial Pathogenesis  
Department of Veterinary Pathobiology  
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Dr. Steven Specter, Ph.D.  
Professor, Department of Medical Microbiology and Immunology  
Associate Dean for Student Affairs and Admissions  
University of South Florida College of Medicine  
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Streptococcal geneticist

Dr. Dennis Cvitkovitch  
University of Toronto  
Room 449A, 124 Edward Street  
Toronto, M5G 1 G6  
Ontario, Canada  
(416) 979-4917 ex 4592  
dennis.cvitkovitch@utoronto.ca
Streptococcal geneticist, must be contacted by e-mail

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Department of Oral Biology  
College of Dentistry UIC  
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Chicago, IL 60612-7213  
(312) 355-4077  
ltao@uic.edu
Streptococcal geneticist
Dr. Meg Vickerman
223 A Foster Hall
3435 Main St
University of Buffalo
Buffalo, NY  14214-3029
(716) 829-2195
mmv4@buffalo.edu
Streptococcal geneticist

Dr. Jeffrey A. Banas
Dows Institute for Dental Research
Department of Pediatric Dentistry
College of Dentistry
The University of Iowa
N436 Dental Science Building
Iowa City, IA 52242
(319) 335-9911
jeffrey-banas@uiowa.edu
Streptococcal geneticist
EDUCATION
June, 2010  Postdoc  Biologic and Materials  University of Michigan
July, 2002  PhD  Materials Sciences  Tsinghua University
July, 1997  BS  Chemical Engineering  Tsinghua University

ACADEMICAL APPOINTMENT
July 2010 - Current  Assistant Professor  Biomedical Sciences  Texas A&M University
                                      Baylor College of Dentistry

RESEARCH INTERESTS
Biomaterials, Biomimetic scaffolds, Bone and tooth tissue engineering, Nanotechnology, Drug delivery,
Cell-material interactions

HONORS AND AWARDS
• National Aeronautics and Space Administration (NASA) Patent Application Initial Award (2010)
• Changxing Graduate Scholarship (2000-2001)
• GuangHua Graduate Scholarship (1998-1999)
• Aptitude Student Award of Tsinghua University (Top 5% outstanding undergraduate students campus-wide, 1993-1997)

PEER-REVIEWED PUBLICATIONS


MANUSCRIPTS (Submitted or in Preparation)
BOOK CHAPTERS


PATENTS


INVITED PRESENTATIONS


2. “Novel biodegradable materials and controlled drug release for tissue regeneration” Department of Molecular Cell Biology, Weizmann Institute of Science (Israel), August 21, 2013
3. “Injectable synthetic biomaterials for cartilage and bone regeneration” Biomaterials Interest Group (BIG) Luncheon and Meeting, University of Texas Southwestern Medical Center, Dallas, TX, May 17, 2013
4. “Injectable nano-biomaterials and controlled biomolecules delivery for tissue regeneration” Biomedical Engineering Department, Texas A&M University, College Station, TX, November 26, 2012
5. “Nano-biomaterials and Bioactive Molecular Delivery for Tissue Regeneration” Bioengineering Department, University of Texas at Arlington, Arlington, TX, November 7, 2012
7. “Nano-biomaterials and tissue engineering” School of Stomatlogy, Jilin University, June 7, 2012
8. “Biomaterial and tissue regeneration in dental medicine” West China School of Stomatlogy, Sichuan University, June 4, 2012
9. “Nanofiber for tissue regeneration” School of Stomatlogy, Wuhan University, Wuhan, China, May 31, 2012
10. “Nano-biomaterials and molecular delivery for tissue regeneration” Institute seminar, Institute of Polymer Science and Engineering, Tsinghua University, Beijing, China, May 29, 2012
12. “Nano-biomaterials and bioactive molecular delivery for tissue regeneration” Department seminar, Department of Orthopaedic Surgery, UT Southwestern Medical Center, Dallas, TX, Dec 2, 2011
14. “Biomimetic materials and controlled drug delivery” Biomaterials Interest Group (BIG) Luncheon and Meeting, Texas Scottish Rite Hospital, Dallas, TX, Sept 9, 2011

SELECTED ORAL PRESENTATIONS

03/2013 “Nano-structured gelatin/silica hybrid scaffolds for dental regeneration” 91st IADR and 42nd AADR Annual Meeting, March 20-23, 2013, Seattle, WA.
09/2012 “Poly(L-lactic acid) nano-structured microspheres for dental tissue engineering” 3rd Tissue Engineering and Regenerative Medicine International Society (TERMIS) World Congress, September 5-8, 2012, Vienna, Austria.
06/2012 “Biomimetic engineering of nanofibrous gelatin scaffolds for bone regeneration” 9th World Biomaterials Congress, June 1-5, 2012, Chengdu, China.
03/2011 “Development of injectable microparticles for the controlled release of lidocaine” 2011 Southern Biomedical Engineering Conference, April 29-May 1, 2011, UT Arlington, TX, USA
05/2008 “Biomimetic nano-fibrous gelatin/apatite composite scaffolds for bone tissue engineering” 8th World Biomaterials Congress. May 28-June 1, 2008, Amsterdam, Netherlands.
04/2007 “Pulsatile release of parathyroid hormone from an implantable delivery system.” 2007 Annual Meeting of Society for Biomaterials. April 18-21, Chicago, IL, USA.


CONFERENCES


2. Y Yang, F Mohamed, and X Liu “Engineering core/shell structured biodegradable microspheres for controlled delivery” (Abstract# S3178) IADR/AADR Annual Meeting, March 20-23, 2013, Seattle, WA.


5. S Wojciechowski, A Arora, and X Liu “Fluorescent biodegradable polymers as injectable cell carriers” (Abstract#S530) IADR/AADR Annual Meeting, March 20-23, 2013, Seattle, WA.


9. Y Sun, T Gao, JQ Feng, P Dechow, RN D’Souza, C Qin, and X Liu “Biomimetic engineering of nanofibrous gelatin scaffolds for bone regeneration” (Abstract#119), 9th World Biomaterials Congress, June 1-5, 2012, Chengdu, China.


19. X. Liu, “Scaffolding design for bone tissue engineering” HSC Research Symposium. November 11-12, 2010, College Station, TX.


23. X. Liu, LA Smith, and PX Ma, “Nano-fibrous composite scaffolds for bone regeneration” 33rd Annual Symposium of Macromolecular Science & Engineering. October 29, 2009, University of Michigan, Ann Arbor, MI. USA


25. J. Hu, K. Feng, X. Liu, and PX Ma, “Chondrogenesis on nano-fibrous scaffolds with designed network” 33rd Annual Symposium of Macromolecular Science & Engineering. October 29, 2009, University of Michigan, Ann Arbor, MI. USA

26. X. Liu, and PX Ma, “An implantable delivery system for the pulsatile release of PTH” University of Michigan (School of Dentistry) Research Day, February 9, 2009. Ann Arbor, MI. USA

27. L. Smith, X. Liu, and PX Ma, “Enhancing osteogenic differentiation of embryonic stem cells by nanofibers” Tissue engineering and regenerative medicine international society (TERMIS), December 7 - 10, 2008, San Diego, CA. USA


**RESEARCH FUNDING**

**Ongoing Research Support**

NIH 5P30DE20742-2 Liu (PI) 7/1/2010 - 8/31/2013
Research Initiation Funds
This grant is aimed to set up the PI’s Laboratory and fund preliminary studies needed to become competitive for extramural research support.
Amount: $200,000

NIH/NIDCR 1R03DE22838-01A1 Liu (PI) 6/1/2013-5/31/2015
Grant title: Nanofibrous hollow microspheres for bone regeneration
This grant is aimed to develop new biomaterials and delivery systems for bone tissue engineering.
Amount: $219,000

TAMU-Weizmann Institute of Science Collaborative Program (Israel) Liu (PI) 9/1/2012 - 8/31/2014
Grant title: Development of biomimetic three-dimensional scaffolds for regulating cell behavior and fate
This grant is aimed to initiate research ties and facilitate staff and student exchange between Texas A&M University and Weizmann Institute of Science (Israel).
Amount: $200,000

Texas A&M University and (NSFC) Research Grant (China) Liu (PI) 9/1/2013 - 8/31/2014
Grant title: Alveolar bone regeneration for dental implant placement
This research grant is aimed to initiate the research ties between Texas A&M University and National Natural Science Foundation of China (NSFC). The preliminary data produced from this grant is used for the application of US-China Program for Biomedical Collaborative Research (R01), which is aimed to stimulate collaborative biomedical sciences research between United States (U.S.)-based researchers and Chinese researchers.
Amount: $25,000

Completed Research Support

B-BEST Intramural Research Grant Liu (Co-PI) 10/1/2010 - 9/30/2011
Grant title: Visualizing cell scaffold interactions in real time
PI: Kathy Svoboda
Amount: $20,000

B-BEST Intramural Research Grant Liu (Co-PI) 10/1/2010 - 8/31/2011
Grant title: Drug loaded microspheres and TMJ pain treatment
PI: Philip Kramer
Amount: $30,000

B-BEST Intramural Research Grant Liu (Co-PI) 10/1/2010 - 4/30/2012
Grant title: DMP1 and biomimetic nano-structured scaffold in osteogenesis
PI: Chunlin Qin
Amount: $25,000

B-BEST Intramural Research Grant Liu (Co-PI) 10/1/2010 - 8/31/2011
Grant title: Innovative endodontic inter-canal medication for open apex permanent teeth using an intelligent release system of calcium hydroxide
PI: Takashi Komabayashi
Amount: $5,000

B-BEST Intramural Research Grant Liu (Co-PI) 11/1/2010 - 8/31/2012
Grant title: BMP receptor 1A null osteoblast cells accelerate bone/tooth repair
This grant is aimed to build a stronger base for translational research and tissue engineering at Baylor College of Dentistry.
PI: Jerry Feng  
Amount: $10,000

TEACHING

A. Course instructor  
   - BIMS/5V93 (course director)  *Nano-biomaterials and Regenerative Medicine*  
     Fall 2011 - Current  
   - BIMS/5V42 (course co-director)  *Bioengineering of Oral Diseases*  
     Spring 2012 – Current  
   - DM 5200 (course instructor)  *Advanced Dental Materials*  
     Fall 2012 - Current

B. Graduate student mentor/co-mentor  
   1. Ashneet Sachar (co-mentor)  
      Thesis title: *Cell-matrix and cell-cell interactions on 3D nanofibrous gelatin scaffolds*
   2. Akshi Arora (mentor)  
      PhD candidate, 09/2010 – Present  
      Thesis title: *Development of novel fluorescent injectable microcarrier for dentin-pulp regeneration*

C. DDS student mentor  
   - Naveen Karim  
     DDS candidate, 06/2011- 03/2012  
     Project title: *Endodontic release system for apexification with calcium hydroxide microspheres*  
     Her research work received the 2*nd* place at the BCD research and scholar’s day, and was presented at the AADR annual meeting in Tampa 2012.
   - Yi Yang  
     DDS candidate, 06/2012- 08/2012  
     Project title: *Core/shell structured novel microspheres system with controlled drug/growth factors release for tissue regeneration*  
     His research work was presented at the IADR/AADR annual meeting in Seattle 2013.
   - Sarah Wojciechowski  
     DDS candidate, 06/2012- 08/2012  
     Project title: *fluorescent biodegradable microparticles for dental regeneration*  
     Her research work received the 2*nd* place at the BCD research and scholar’s day, and was presented at the IADR/AADR annual meeting in Seattle 2013.
   - Stephanie Ganter  
     DDS candidate, 06/2013- 08/2013  
     Project title: *Effect of scaffolding stiffness on dental pulp stem cell: synthesis of biomaterials*
   - Carla Hugus  
     DDS candidate, 06/2013- 08/2013  
     Project title: *Effect of scaffolding stiffness on dental pulp stem cell: characterization of biomimetic 3D scaffolds*

D. High school student mentor  
   - Blake Osborn, The Hockaday School (Dallas), 06/2011 – 08/2011
E. **Postdoctoral mentor**
   - Tracy Amanda Strom, 09/2010 - 06/2012
     Project title: *Syntheses, characterizations, and biomedical applications of functional poly(alpha-hydroxy acid)-based biodegradable polymers*
   - Tiejun Qu, 08/2012 - Current
     Project title: *Cell-inductive scaffolds for dentin/pulp regeneration*
   - Chen Ding, 11/2012 - Current
     Project title: *Novel dual release system for bone tissue engineering*
   - Zhe Li, 01/2013 - Current
     Project title: *Development of injectable biomimetic materials for soft tissue regeneration*

**PROFESSIONAL ACTIVITIES**

A. **Professional memberships**
   - Tissue Engineering and Regeneration Medicine International Society (TERMIS)
   - Society For Biomaterials (SFB)
   - Material Research Society (MRS)
   - American Association of Anatomists (AAA)
   - International Association for Dental Research/American Association for Dental Research (IADA/AADA)
   - American Dental Education Association (ADEA)

B. **Editorial board**
   - PLOS ONE 2013 – Current
   - American Journal of Tissue Engineering 2013 - Current

C. **Conference session chair**
   - Southern Biomedical Engineering Conference (SBEC) 2011
   - IADR/AADR Annual Meeting in Seattle 2013

D. **Conference manuscript reviewer**
   - The 2nd International Conference on Biomedical Engineering and Biotechnology (iCBEB2013) 2013

E. **Journal reviewer**
   - ACS Applied Materials & Interfaces
   - Acta Biomateriaia
   - Annals of Biomedical Engineering
   - Biomaterials
   - Chemical Communications
   - Colloids and Surfaces B: Biointerfaces
   - Journal of Biomaterials Applications
   - Journal of Biomedical Materials Research, Part A
   - Journal of Biomedical Materials Research, Part B
- Journal of Biomedical Nanotechnology
- Journal of Dental Research
- Journal of Materials Chemistry
- Journal of Materials Chemistry B
- Journal of Tissue Engineering and Regenerative Medicine
- Osteoarthritis and Cartilage
- PLOS ONE
- Polymer Chemistry
- RSC Advances
- Soft Matter

F. Services (BCD Campus)

- Faculty development Committee Member 2010 - 2012
- Research Committee Member 2010 - Current

G. Services (Community)

- Dallas Regional Science and Engineering Fair Judge 2011- Current
CURRICULUM VITAE

I. GENERAL INFORMATION

A. PERSONAL INFORMATION

Place of Birth: Shandong Province, People’s Republic of China

Home Address: 4112 Donnington Dr.
Plano, TX 75093

Cell Telephone: 972-333-1838

Work Address: Department of Biomedical Sciences
Texas A&M Baylor College of Dentistry
3302 Gaston Ave.
Dallas, TX, USA 75246

Work Telephone: 214-828-8277

Work FAX: 214-874-4538

Email: ylu@bcd.tamhsc.edu

B. EDUCATION

2002 – 2007 Ph.D. in Oral Biology/Molecular Biology & Biochemistry
School of Dentistry,
University of Missouri-Kansas City, Kansas, USA
(Ph.D. obtained in May, 2007)

1994 – 1997 Master Degree in Medical Microbiology
Qindao Medical College, Qingdao, CHINA
(Master Degree obtained in July, 1997)

1989 – 1994 M.D. Qingdao Medical College, Qingdao, CHINA
(M. D. obtained in July, 1994)

C. POSTGRADUATE TRAINING

2007 – 2008 Postdoctoral Fellow — Department of Oral Biology,
School of Dentistry, University of Missouri-Kansas City.
Study the role of fibronectin in bone development and the dynamics
of fibronectin fibril assembly; Investigate the dynamics of type I
collagen fibril formation during biomineralization.

1999 – 2002 Postdoctoral Fellow — Department of Oral Biology,
School of Dentistry, University of Missouri-Kansas City.
Study the mechanisms that control the expressions of Bmp4, Dmp1
and Cbfa1.
D. ACADEMIC APPOINTMENTS

2012 – Present  Assistant Professor (Tenure-track)
Department of Biomedical Sciences
Texas A&M Baylor College of Dentistry, Dallas, TX, USA

2009 – 2012  Assistant Professor (Research)
Department of Biomedical Sciences
Baylor College of Dentistry, Texas A & M Health Science Center, Dallas, TX, USA

1997 – 1999  Instructor
Department of Medical Microbiology,
Medical college of Qingdao University, Qingdao, CHINA

E. HONORS, AWARDS, FELLOWSHIPS

2011  Recipient of John Haddad Young Investigator Award, AIMM/ASBMR
(Advances in Mineral Metabolism and the American Society for
Bone and Mineral Research), Snowmass, Colorado, USA

2007  Recipient of New Investigator Awards, 9th International Conference on
the Chemistry and Biology of Mineralized Tissues, Austin, Texas, USA

2006  Recipient of Young Investigator Award, 28th American Society for
Bone and Mineral Research (ASBMR) Annual Meeting, Philadelphia,
Pennsylvania, USA

2006 – 2007  Recipient of Chancellor’s Doctoral Fellowship
University of Missouri-Kansas City, Kansas, Missouri, USA

2005 – 2006  Recipient of Dean’s Doctoral Scholar Fellowship
University of Missouri-Kansas City, Kansas, Missouri, USA

2005  Recipient of Webster Jee Young Investigator Award, American
Society for Bone and Mineral Research – International Chinese Hard
Tissue Society (ASBMR-ICHTS)

II. RESEARCH

A. BOOK CHAPTERS

1. Ye L, Lu Y, Qin C and Feng JQ. DMP1 in vivo function: Studies of Dmp1 LacZ
knock-in mice. Editor Michel Goldberg Phosphorylated Extracellular Matrix Proteins

2. Lu Y, Xie Y and Feng JQ. Visualizing Gene Products: Immunohistochemistry, In situ
Hybridization and Staining for β-galactosidase Activity. A Practical Manual for


**B. REFEREED ARTICLES IN JOURNALS (Published/Accepted, Since 1998)**


C. NON-REFEREED ARTICLES


D. MANUSCRIPTS SUBMITTED

**E. REVIEW ARTICLES**


**F. ABSTRACTS (Published/Accepted)**

1. Wang S, Qin C, D’Souza R, **Lu Y**. Internal ribosome entry site (IRES) mediates the translation of nuclear DMP1 (nuDMP1). ASBMR Annual Meeting in Baltimore, Maryland, USA on October 4-7, 2013


20. **Lu Y**, Li Y, Cavender A, Mansukhani A, and D'Souza R. Runx2 controls FGF signaling through Twist1 and E12/47 heterodimers. 10th ICCBMT in Scottsdale Arizona, USA 2010


28. Maciejewska I, **Lu Y**, Li Y, Cavender A and D'souza R. Functional Studies on Runx2 and Twist1 Roles in Tooth Morphogenesis. IADR 87th general session in Miami, Fla, USA 2009. Abstract #: 1493

29. Sun Y, **Lu Y**, Prasad M, Wang X, Butler WT and Qin C. Detection of Full-length Dentin Sialophosphoprotein in Rat Dentin-Pulp Complex. IADR 87th general session in Miami, Fla, USA 2009. Abstract #: 1690

30. Snider G, Dallas SL, Veno PA and **Lu Y**. Fibronectin Assembly Dynamics in Osteoblasts is Integrated With Cell Motility. IADR 87th general session in Miami, Fla, USA 2009. Abstract #: 84

31. Ye L, **Lu Y**, Xie Y, Qin C and Feng JQ. 57kDa fragment is key functional domain of DMP1 in odontogenesis. IADR 87th general session in Miami, Fla, USA 2009. Abstract #: 1560

32. Dallas SL, **Lu Y**, Rosser JL, Rowe DW, Kalajzic I, Bonewald LF, Veno PA. Imaging of mineralization kinetics suggests that the transition from osteoblast to osteocyte initiates prior to mineral deposition. ASBMR 30th annual meeting, in Montreal, Quebec, Canada 2008. Abstract #: F062
33. **Lu Y**, Xie Y, Yu S, Qin C, Bonewald LF, and Feng JQ. The DMP1 C-terminal fragment recapitulates all functions of full length DMP1 in odontogenesis and osteogenesis in vivo. 9th international conference on the chemistry and biology of mineralized tissue (9ICCBMT), in Austin, Texas, USA 2007

34. Peng T, Huang B, **Lu Y**, Bonewald LF, Butler WT, Feng JQ, and Qin C. Blocking of proteolytic processing and deletion of glycosaminoglycan side chain of mouse DMP1 by substituting critical amino acid residues. 9th international conference on the chemistry and biology of mineralized tissue (9ICCBMT), in Austin, Texas, USA 2007


38. Jiang B, **Lu Y**, Guo D, Bonewald LF, Harris SE, and Feng JQ. Targeted deletion of DMP1 in odontoblasts and osteocytes. IADR 85th general session in New Orleans, Louisiana, USA 2007. Abstract #: 1089


44. **Lu Y**, Zhang S, Ye L, Xie Y, Eick JD, Feng JQ. Re-expression of DMP1 rescues dentin defects in DMP1 null mice. IADR 83rd General Session in Baltimore, Maryland, USA 2005. Abstract #: 0197


47. **Lu Y**, Dallas SL, Mishina Y, Harris SE, Bonewald LF, Feng JQ. Dentin matrix protein-1 (Dmp-1) is not essential for initiation of apatite crystal formation but is critical for formation of normal mineral structure. **AADR 32**nd Annual Meeting in San Antonio, TX, USA. 2003. Abstract #: 1593


51. Tan X, Zhang J, **Lu Y**, Bonewald LF, Feng JQ. Dentin matrix protein (Dmp1) is regulated by differential mechanisms in tooth compared to bone. **IADR 80**th Annual Meeting in San Diego, California, USA 2002. Abstract #: 0098


**G. ABSTRACTS SUBMITTED**

**H. INVITED ORAL PRESENTATION**

March 23, 2013

Nuclear DMP1 (nuDMP1) is generated by alternative initiation of translation. The 91st Annual Meeting of the International Association for Dental Research (IADR), Seattle, Wash., USA, March 20-23, 2013
March 21, 2012  Functional redundancy of Twist1 and Twist2 in mouse development. The 41st Annual Meeting of the American Association for Dental Research (AADR), Tampa, Fla., USA, March 21-24, 2012

March 4, 2010  Runx2 regulates FGF3/10 through controlling E12/47 expression in dental mesenchyme. The 39th Annual Meeting of the American Association for Dental Research (AADR), Washington, DC, USA, March 3-6, 2010

November 7, 2007  The DMP1 C-terminal fragment recapitulates all functions of full length DMP1 in odontogenesis and osteogenesis in vivo. The 9th international conference on the chemistry and biology of mineralized tissue (9ICCBMT), Austin, Texas, USA, November 4-8, 2007


March 21, 2007  DMP1 controls odontogenesis partly through osterix. The 85th Annual Meeting of the International Association for Dental Research, New Orleans, La., USA March 21-24, 2007


September 26, 2005  Deletion of DMP1 results in osteomalacia and abnormalities in the osteocyte lacuno-canalicular system - rescue by re-expression of DMP1 in the osteoblast lineage but not by high phosphate diet. The 28th Annual Meeting of the American Society for Bone and Mineral Research (ASBMR), Nashville, Tennessee, USA, 2005.

March 10, 2005  Re-expression of DMP1 rescues dentin defects in DMP1 null mice. The 83rd Annual Meeting of the International Association for Dental Research (IADR), Baltimore, MD, USA, March 9-12, 2005

I.  PATENT APPLICATION PENDING

Dallas SL, Lu Y, Bonewald LF, and Kamel SA. Late osteoblast/early osteocyte-like cell line stably expressing collagen-GFP and collagen-mCherry fusion proteins for visualizing collagen assembly in living cells. 2010 (45% contribution)

J.  AREAS OF RESEARCH INTEREST
1. Roles of Twist1 and Twist2 in tooth morphogenesis

The developing tooth is a valuable paradigm for understanding the genetic and molecular basis for the way in which morphogenesis and terminal differentiation are achieved during organogenesis. Twist1 and Twist2 belong to the evolutionarily conserved Twist family of basic helix-loop-helix (bHLH) transcription factors. They are highly expressed in the dental mesenchyme during tooth morphogenesis. In this project, our goal is to determine the roles of Twist1 and Twist2, along with their heterodimeric binding partner E12, in regulating tooth morphogenesis and odontoblast differentiation using both in vitro and in vivo approaches. The data obtained will not only help us understand the molecular mechanisms that govern tooth morphogenesis, but will also provide useful insights into tooth regeneration.

2. Roles of Dentin Matrix Protein 1 (DMP1) in biomineralization

Dentin matrix protein 1 (DMP1), a non-collagenous protein, was first reported in 1993. It is found predominantly in the matrices of dentin, alveolar bone and long bone. The loss of DMP1 function in humans and mice results in autosomal recessive hypophosphatemic rickets/osteomalacia (ARHR), characterized by the dental and skeletal defects as well as hypophosphatemia (reduced level of phosphate in the blood). However, the way in which the loss of DMP1 function causes these defects remains largely unknown. We have demonstrated that the 57 kDa C-terminal fragment of DMP1 is sufficient to rescue the skeletal defects of Dmp1-deficient mice, and that only the 57 kDa fragment is located in the nucleus. Based on these preliminary findings, we propose that a nuclear form DMP1 (referred to as “nuDMP1”) is translated from an alternative start codon of the same messenger RNA that encodes the secretory DMP1. We further propose that this nuDMP1 is responsible for governing the terminal differentiation of the odontoblast and osteoblast whereas the secretory DMP1 participates in extracellular matrix biomineralization. Successful completion of this proposed research will help elucidate the pathogeneses of hypophosphatemic rickets caused by DMP1 mutations in humans, therefore providing guidance for clinical management of hypophosphatemic rickets.

K. RESEARCH SUPPORT (GRANTS/CONTRACTS)

Awarded:

1R03DE021773-01
Source: NIH/National Institute of Dental and Craniofacial Research
Title: Studies of the Roles of Twist1 and E12 in Tooth Morphogenesis
Time Period: September 05, 2011 – August 31, 2013
Direct Costs: $150,000
Indirect Costs: $69,750
Total Costs: $219,750
Role: Principal Investigator
Goal: to investigate how Twist1/2 and E12 control tooth morphogenesis through regulating FGF signaling in dental mesenchyme.

1R01DE023365-01
Source: NIH/National Institute of Dental and Craniofacial Research
Title: Identification and Function of nuDMP1 in Odontoblast
Differentiation

Time Period: April 01, 2013 – March 31, 2017
Direct Costs: $900,000
Indirect Costs: $414,000
Total Costs: $1,314,000
Role: Principal Investigator
Goal: to identify a nuclear isoform of DMP1 (nuDMP1) and to determine its function in odontoblast and osteoblast differentiation.

L. PROFESSIONAL AND SCIENTIFIC ORGANIZATIONS

2013 – Present  Member, American Society for Bone and Mineral Research
2009 – Present  Member, International Association for Dental Research/American Association for Dental Research (IADR/AAR)
2005 – 2007  Member, American Society for Bone and Mineral Research
2005 – 2007  Member, International Association for Dental Research/American Association for Dental Research (IADR/AAR)
2005 – Present  Member, International Chinese Hard Tissue Society (ICHTS)
2001 – 2003  Member, International Association for Dental Research/American Association for Dental Research (IADR/AAR)

M. JOURNAL REFEREE

1. Odontology: ad hoc (August, 2013)
2. Histology and Histopathology: ad hoc (April, 2013)
3. Journal of Molecular Histology: ad hoc (February, 2012)
5. Journal of Cellular Physiology: ad hoc (September, 2008)
6. Food and Chemical Toxicology: ad hoc (October, 2007)

N. OTHER PROFESSIONAL ACTIVITIES

March 23, 2013  Co-chair, Session of cyto- and histodifferentiation in mineralized tissues, IADR/AADR Annual Meeting, Seattle, Wash, USA
October 18-19, 2012  Reviewer, NIH/NIDCR Special Grants Review Committee, Review of R03, F, and K applications
March 21, 2012  Co-Chair, Session of odontogenesis and root resorption, AADR Annual Meeting, Tampa, FL, USA
March 4, 2010  Chair, Session of odontogenesis: gene regulation and bioengineering, AADR Annual Meeting, Washington, DC, USA
March 10, 2005  Co-Chair, Session of dentin genes and proteins, IADR/AADR Annual Meeting, Baltimore, MD, USA
III. TEACHING ACTIVITIES

A. BASIC SCIENCES IN DENTISTRY

2013 – Present
Lectures on cellular organization, tissue organization, integument, and oral histology.
Dental Hygiene 3250: Biomedical Sciences I.
Dental hygiene students
Texas A&M Baylor College of Dentistry, Dallas, TX, USA
Total Clock **hours: 18/Year**

2013 – Present
Lectures on tooth development and histology of enamel, dentin, pulp and periodontium.
Course SPEP: Human Body.
Texas A&M Baylor College of Dentistry, Dallas, TX, USA
Total Clock **hours: 8/Year**

2013 – Present
Lectures on the development and disease of the periodontal ligament – alveolar bone complex, gingiva and mucosa.
Course 5V42: Cell and Molecular Biology Module 2 – Histology of Craniofacial Tissues.
Postgraduates and residents
Texas A&M Baylor College of Dentistry, Dallas, TX, USA
Total Clock **hours: 2/Year**

2013
Lectures on data processing and web resources.
Course BMS5341: Techniques in Cellular and Molecular Biology.
Graduate students.
Texas A&M Baylor College of Dentistry, Dallas, TX, USA
Total Clock **hours: 1**

2011 – Present
Lectures on cytoskeleton and nucleus.
Course 5V40: Cell and Molecular Biology of Oral and Craniofacial Tissue.
Postgraduates and residents
Baylor College of Dentistry, Texas A & M Health Science Center, Dallas, TX, USA
Total Clock **hours: 3/Year**

2011
Lectures on data processing and web resources.
Course BMS5341: Techniques in Cellular and Molecular Biology.
Graduate students
Texas A&M Baylor College of Dentistry, Dallas, TX, USA
Total Clock **hours: 1**

1997 – 1999
Lectures on Medical Microbiology
Undergraduate students
Medical College of Qingdao University, Qingdao, CHINA
B. SERVICES IN SUPERVISING COMMITTEES FOR MASTERS/Ph.D. DIRECTED DISSERTATIONS AND DENTAL STUDENTS SUPERVISED

Supervising Committees for Ph.D. Students:

2011 – 2012
Yinshi Ren, BS
Ph.D. Degree Student
Department of Biomedical Sciences,
Texas A &M Baylor College of Dentistry,
Supervising Committee Chair: Jerry Feng
Supervising Committee Members: Jerry Feng,
Kathy Svoboda, Paul Dechow, Yongbo Lu, Lisa Cheng

2010 – 2013
Afsaneh Rangiani, DDS
Ph.D. Degree Student
Department of Biomedical Sciences,
Baylor College of Dentistry,
Texas A &M University Health Science Center
Supervising Committee Chair: Jerry Feng
Supervising Committee Members: Jerry Feng,
Chunlin Qin, Yongbo Lu, Makoto Kuro-o, Paul Dechow

Supervising Committees for Master Students:

2011 – 2012
Arwa Siyam, DDS
Visiting Master Degree Student
Department of Endodontology
Kornberg School of Dentistry, Temple University,
Supervising Committee Chair: Roy Stevens
Supervising Committee Members: Roy Stevens,
Yongbo Lu, Roni Nissan

Other Graduate Students Directed:

October, 2011 – Present
Yanyu Huang, DDS
Visiting Ph.D. degree student
School of Stomatology,
Wuhan University,
Wuhan, Hubei Province, China

Research Training of Pre-doctoral/Dental Students:

2012
Juan Omar Mancera, BS
Summer Research Student
2nd year dental student in 2012
Meharry Medical College School of Dentistry,
Nashville, TN, USA

2011
Steven A. Williams
Summer Research Student
1st year dental student in 2011
Baylor College of Dentistry
Texas A&M Health Science Center
Dallas, TX, USA

2011
Shanna Williams
Summer Research Student
Pre-doctoral student in 2011
Baylor College of Dentistry
Texas A&M Health Science Center
Dallas, TX, USA

2010
Man-Yu Moy
Summer Research Student
Columbia University
New York, NY, USA

C. POSTDOCTORAL FELLOWS & RESEARCH ASSOCIATES SUPERVISED

September, 2013 – Present
Tian Meng, DDS, Ph.D.
Postdoctoral Research Fellow
Department of Biomedical Sciences
Texas A &M Baylor College of Dentistry

2011 – Present
Suzhen Wang, DDS
Research Associate
Department of Biomedical Sciences
Baylor College of Dentistry
Texas A &M Health Science Center

IV. SERVICE ACTIVITIES IN UNIVERSITY COMMITTEES

2010 – Present
Member, Research Committee, Baylor College of Dentistry, Texas A &M Health Science Center, Dallas, TX, USA
Curriculum Vitae

Ann Louise McCann, B.S.D.H., M.S., Ph.D.
June, 2013
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Teaching Activity ......................................................................... 36
  Baylor College of Dentistry ....................................................... 36
  University of Detroit Mercy ....................................................... 38
Curriculum Vitae

DR. ANN LOUISE McCANN

October 2012

CONTACT INFORMATION

Address
The Texas A&M Health Science Center
Baylor College of Dentistry
3302 Gaston Ave.
Dallas, Texas 75246-2098

Telephone 214-828-8407

Fax 214-874-4575 (not private)

E-Mail amccann@bcd.tamhsc.edu

EDUCATION

2002-2007 University of Nebraska, Lincoln, Nebraska
Ph.D. in Educational Leadership and Higher Education

1984-1988 Mercy College of Detroit, Detroit, Michigan
M.S. in Allied Health Education

1969-1971 University of Michigan, School of Dentistry, Ann Arbor, Michigan
B.S. in Dental Hygiene

1967-1969 Alma College, Alma, Michigan
Liberal Arts

PROFESSIONAL APPOINTMENTS

Baylor College of Dentistry

2011 Professor

2009 Member of the School of Graduate Studies Faculty (formerly GSBS)
PROFESSIONAL APPOINTMENTS

Baylor College of Dentistry

1999    Director of Planning & Assessment
1999    Awarded Tenure
1996    Member of the Graduate Faculty
1994    Director of Assessment
1992-1999 Project Director, Assessment Center for Health Professions Education (related to HRSA grant activities)
1991-1999 Associate Professor, Dental Hygiene
1988-1991 Clinical Associate Professor, Dental Hygiene

University of Detroit Mercy, School of Dentistry

1988    Associate Professor with Tenure, Dental Hygiene
1984-1988 Chairperson, Dental Hygiene
1977-1988 Assistant Professor, Dental Hygiene
1976-1984 Clinic Coordinator, Dental Hygiene
1974-1977 Instructor, Dental Hygiene
1973-1974 Clinical Instructor, Dental Hygiene

STATE LICENSES

1971-2012 Michigan - Dental Hygiene #002465
1971-2012 California - Dental Hygiene #004098
1981-2012 Michigan - Registered Dental Assistant #000377
1974-1991 Certified Dental Assistant #036790
RESEARCH

Areas of Interest
A current research interest is identifying successful strategies for the implementation of assessment systems. Another is assessing the effectiveness of educational programs. These programs include the R25 CUSPID for Evidence-Based Dentistry (NIDCR grant) and the Comprehensive Minority Dental Faculty Development Program (ADEA grant). My role in the various HCOP grants for disadvantaged students has been to assess the learning of these pre-dental students and the overall effectiveness of the program. My two federal grants from the Bureau of Health Professions focused on developing assessment strategies for health profession programs.

Funded Grants

2012-2017  
*Bridge to Dentistry: Awareness to Practicing/Teaching/Research.*  
Human Resources & Services Administration grant (COE). Grant #: D34HP24458. Awarded $3,418,946 for July 1, 2012- June 30, 2017. Investigator (20%)

2009-2012  
*Bridge to Dentistry: Awareness to Graduation.*  
Human Resources & Services Administration grant (HCOP). Grant #: D18HP13624. Awarded $2,315,713 for September 1, 2009- August 31, 2012. Investigator (5%)

2008-2012  
*Baylor's Scientific Training Program for Dental Academic Researchers: B-STARS.*  
National Institute for Dental & Craniofacial Research grant # 1 T32 DE018380-01A1. Awarded $1.6 million for July 01, 2008 to June 30, 2012. Member of Program Advisory Committee and responsible for the selection and design of multiple assessment tools/instruments for the monitoring and reporting of its outcomes, including trainee statistics and program effectiveness.

2008-2012  
*CUSPID: Baylor's Oral Health Research Education Grant.*  
National Institute for Dental & Craniofacial Research grant # 1R25DE018883-01. Awarded $633,343 in direct costs for April 01, 2008 to March 31, 2012. Collaborator (10%)

2004-2009  
*Comprehensive Minority Dental Faculty Development Program.*  

2004-2007  
*BCD Research Infrastructure Enhancement Program.*  
National Institute of Dental and Craniofacial Research U24 grant # DE016472. Awarded $2,895,192 for September 1, 2004 to August 31, 2007. Investigator (10%)
Funded Grants

2003-2004  
*Research Infrastructure Improvement Planning Award.*  
National Institute of Dental and Craniofacial Research R24 grant #460471. Awarded $145,500 for August 1, 2003 to July 31, 2004. Investigator (10%)

2002-2005  
*Bridge to Dentistry: Awareness to Graduation.*  
Human Resources & Services Administration grant (HCOP) #2D18HP02893. Awarded $1,479,709 for September 1, 2002-August 31, 2005. Investigator (5%)

2000  

1999-2002  
*Preparing Disadvantaged Dentists: Awareness to Graduation.* Human Resources & Services Administration grant (HCOP) #1D18MB02893. Awarded $987,616 for September 1, 1999-August 31, 2002. Investigator (5%)

1997-1998  
*Inherited and Acquired Craniofacial Disorders: Comprehensive Oral Health Research Center of Discovery.* National Institute of Dental Research grant #P20DE12367. Awarded $98,275 from August 1, 1997-July 31, 1998. Investigator (10%)

1996-1999  
*Creating a Culture of Assessment in Health Professions Education.* Bureau of Health Professions grant #5D37AH00529. Awarded $237,639 direct costs and $19,011 indirect costs from September 1, 1996 to August 31, 1999. Principal Investigator. Priority score of 208.

1996-1999  
*Entry and Retention of Disadvantaged Dental Students.* Human Resources & Services Administration grant (HCOP) #1D18MB02669. Awarded $396,090 for September 1, 1996-August 31, 1999. Investigator.

1993-1994  

1992-1995  
*Developing an Outcomes Assessment Model to Expand the Knowledge Base of Dental Hygiene.* Bureau of Health Professions grant #1D37AH00356-1. Awarded $234,000 direct costs and $18,720 indirect costs from October 1, 1992 to September 30, 1995. Principal investigator. Priority score of 175.
PROFESSIONAL MEMBERSHIPS

2010-2012  American Association of Dental Research

1992-2010  American Association of Higher Education

1991-2012  Texas Dental Hygienists' Association

1991-2012  Dallas Dental Hygienists’ Society

1976-2012  American Dental Education Association

1971-2012  American Dental Hygienists’ Association

1971-1989  Michigan Dental Hygienists' Association

1971-1989  Detroit District Dental Hygienists' Association

1976-1988  Michigan Association of Dental Hygiene Educators

HONORS

2011  American Dental Hygienists’ Association Sigma Phi Alpha Journalism Award Competition. First Place. Pettit S, McCann AL, Schneiderman ED, Campbell PR, Farren EA. Dimensions of Oral Care Management in Texas Hospitals.

2011  Olav Alvares Award for Outstanding Articles Published in the Journal of Dental Education by Callis A, McCann A, Schneiderman E, Babler W, Lacy E, Hale D. Application of Basic Science to Clinical Problems by Dental Students in Traditional Versus Hybrid Problem-based Learning Curricula.

2010  Proposal for presentation was selected to be a Presidential Symposium at the 2010 Annual ADEA Meeting in Washington, DC, on February 28. It was entitled Changing Institutional Culture through Planning & Assessment.

2009  First place award in the 2009 DENTSPLY/ADHA Graduate Student Clinicians Program at the ADHA meeting in Washington, DC. Authored by J Cotter, A McCann (mentor), J Dewald, P Campbell and E Schneiderman. Factors Affecting the Performance of Oral Cancer Screenings by Texas Dental Hygienists.

HONORS

2001 Selected to participate as a fellow in the American Dental Education Association’s Leadership Institute.


1995 Faculty mentor for Using Xylitol Gum and It’s Role in Caries Prevention by Caroline Graffitiori and Jacqueline Conlon. Placed second in the Baylor Student competition and also at the Texas Dental Association competition.

1993 Dental Hygiene Teacher of the Year Award Baylor College of Dentistry

1993 Faculty mentor for The Prevalence and Prevention of Nursing Caries by Christi Childress and Allison Owen presented at the Baylor Student competition. Won the Sigma Phi Alpha Dental Hygiene Research Award.

1989 Sigma Phi Alpha, transferred to Baylor College of Dentistry chapter.

1988 First place award in the Chesebrough - Pond's Educational Research Competition of the American Association of Dental Schools. Effectiveness of a National Board Review Course for Dental Students.

1984 Sigma Phi Alpha, University of Detroit chapter, faculty appointment.


PROFESSIONAL DEVELOPMENT & SERVICE

Invited Talks & Lectures

2012 Faculty Development workshop at Baylor College of Dentistry. 
Assessing Critical Thinking. May 9.


Texas A&M University Assessment Conference, College Station. 
Assessing and Improving the Evidence-based Practice Skills of Health Profession Students. February 20.

2010 Annual Meeting of the American Association of Dental Schools, Washington, DC. Presidential Symposium entitled Changing Institutional Culture through Planning & Assessment (February 28) and a Lunch and Learn presentation entitled Creating the Future for Your Dental School through Strategic Planning and Assessment. March 1 and 2.


Texas A&M University Assessment Conference, College Station. 
Implementing and Sustaining a Centralized Assessment System. February 19.


2003 Assessment Institute at Indiana University at Purdue University in Indianapolis. Levels and Loops of Learning at a Dental School. November 4.


PROFESSIONAL DEVELOPMENT & SERVICE

**Invited Talks & Lectures**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Location</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Minnesota Dental Hygiene Educators. Minneapolis, Minnesota.</td>
<td>Competency-Based Dental Hygiene Education.</td>
<td>August 17-18</td>
</tr>
<tr>
<td></td>
<td>Cerritos College. Los Angeles, California.</td>
<td>Creating &amp; Managing a Competency-Based Curriculum in Dental Hygiene.</td>
<td>May 5</td>
</tr>
<tr>
<td></td>
<td>Annual Meeting of the American Association of Dental Schools, Section Program for Dental Hygiene. Washington DC.</td>
<td>Excelling through an Effective Curriculum Management Plan.</td>
<td>March 6</td>
</tr>
<tr>
<td>2000</td>
<td>Annual Meeting of the American Association of Dental Schools Washington, DC. Faculty Development Workshop- Lessons Learned from Competency-Based Curricula</td>
<td></td>
<td>April 5</td>
</tr>
<tr>
<td></td>
<td>Annual Meeting of the American Association of Dental Schools, Washington DC. PEDNET Program- Assessing Dental Ethics Competencies Across the Curriculum</td>
<td></td>
<td>April 2</td>
</tr>
<tr>
<td></td>
<td>Annual Meeting of the American Association of Colleges of Pharmacy, Boston, Massachusetts.</td>
<td>Moving Towards an Ability-Based Curriculum &amp; A Culture of Assessment in Pharmacy.</td>
<td>July 3</td>
</tr>
<tr>
<td></td>
<td>Ohio Dental Hygiene Educators Meeting, Cleveland, Ohio.</td>
<td>Moving Towards a Competency-Based Curriculum</td>
<td>April 9</td>
</tr>
</tbody>
</table>
PROFESSIONAL DEVELOPMENT & SERVICE

Invited Talks & Lectures

1999
Northern Arizona University, Flagstaff, Arizona. 
*Competency-Based Education for Dental Hygiene & Program Assessment* 
March 23-24

*Moving Towards a Competency-Based Curriculum* 
March 20

Clinical Laboratory Educators National Conference, San Juan Puerto Rico. 
*Program and Student Assessment* (2 sessions) 
February 28

Georgia Perimeter College, Atlanta, Georgia. 
*Competency-Based Education for Dental Hygiene & Program Assessment* 
February 24-25

1998
University of Nebraska Dental School Retreat, Lincoln, Nebraska. 
*Competency-Based Education in Dentistry* 
December 7-8

Tarrant County Junior College, Hurst, Texas. 
Lecture to dental hygiene students - *How to Critique a Research Report* 
November 12

Trends in Occupational Studies Conference, Traverse City, Michigan. 
Two workshops for nursing & allied health faculty - *Assessment for the Health Professions I & II* 
October 29

Wayne County Community College, Detroit, Michigan. 
Workshop for nursing & allied health faculty - *Moving Towards a Competency-Based Curriculum* 
October 9

20th Annual Interdisciplinary Health Care Team Conference, Williamsburg, Virginia. Poster for health profession educators - *Assessment Center for Health Professions Education* 
September 18
PROFESSIONAL DEVELOPMENT & SERVICE

Invited Talks & Lectures

1998

University of Minnesota, Minneapolis, Minnesota. Workshop for dental hygiene faculty - *Competency-Based Dental Hygiene Education*

September 9-10

Fourteenth International Dental Hygiene Symposium, Florence, Italy. Poster - A Dental Hygiene Program’s Outcomes of Student-Alumni Involvement in Community Activities (Presented by co-author JP DeWald)

July 3 & 4

Health & Human Services, Bureau of Health Professions, Las Vegas, Nevada. Poster presentation to principle investigators - *The Assessment Center for Health Professions Education*

June 9

Faculty Retreat at Baylor College of Dentistry

*Assessment Report for the Strategic Focus Initiative*

April 22

American Association of Dental Schools Annual Session, Minneapolis, Minnesota. Two presentations to consultants for the Commission on Dental Accreditation - *Institutional Effectiveness.*

March 3

American Association of Dental Schools Annual Session, Minneapolis, Minnesota. Faculty Development Workshop - *The Competency-Based Curriculum.*

February 28

Faculty Meeting at Baylor College of Dentistry

*Course & Clinic Evaluation System*

February 9

Georgia Dental Hygiene Educators, Macon, Georgia. Workshop - *Competency-Based Evaluation.*

February 6

1997

Marquette University Dental School, Milwaukee, Wisconsin. Workshop for faculty - *Working Toward a Competency-Based Curriculum*

December 16-17

University of Arkansas Dental Hygiene Faculty, Little Rock. Workshop - *Assessment & Competency-Based Education.*

June 24
PROFESSIONAL DEVELOPMENT & SERVICE

Invited Talks & Lectures

1997

American Dental Hygienists’ Association, Atlanta, Georgia.
Workshop for educators - Competency-Based Evaluation.
June 19

Texas Tri-Dental School Advance, College Station, Texas.
Assessing Competence.
June 16

Northwest Dental Hygiene Educators, Portland, Oregon.
Two day workshop - Competency-Based Evaluation.
April 18-19

Section Meeting of Educational Research, Development &
Curriculum. Facilitator & Speaker of Workshop - Certifying the
Competence of Dental Students.
March 18

Combined Meeting of Periodontics & Pedodontics Sections.
Competency-Based Clinic Evaluation.
March 16

American Association of Dental Schools Annual Session, Orlando,
Florida. Signature Series Regional Workshop - Implementing a
Competency-Based Education Program. March 14-15.

1996

Faculty Advance at Baylor College of Dentistry
Assessment for Accreditation
November 20

Indiana University School of Dentistry
Question and answer session for the faculty - Assessment &
Curriculum Reform.
November 7

Trends in Occupational Studies Conference in Grand Rapids,
Michigan. Two workshops - An Overview of Assessment Models for
Health Professions Education and Assessment Measures for Health
Professions Education.
October 12

Canadian Dental Hygienists’ Association’s 7th Annual Professional
Conference, Calgary, Alberta.
Poster - Dental and Dental Hygienists’ Attitudes in a Joint Local
Anesthesia Course (Presented by co-author ML Gutmann).
June 8
PROFESSIONAL DEVELOPMENT & SERVICE

Invited Talks & Lectures

1996  
American Association of Dental Schools Annual Session, San Francisco, California. Faculty Development Workshop - Committing to a Competency-Based Education. 
March 17

Dental Hygiene Section of the American Association of Dental Schools, Annual Session, San Francisco, California. Workshop facilitator - Developing Competency Statements for Dental Hygiene. 
March 16

Sigma Phi Alpha (national dental hygiene honorary sorority), American Association of Dental Schools Annual Session, San Francisco, California. Competency-Based Education for Dental Hygiene. 
March 16

Basic Sciences Section, American Association of Dental Schools Annual Session, San Francisco, California. Workshop facilitator - Foundation Knowledge for Competencies: The Merging of Clinical and Basic Sciences. 
March 16

March 11

1995  
Assessment Conference in Indianapolis, Indiana. Competency-Based Assessment for a Health Professional Program (presented twice). 
November 6

National Dental Hygiene Directors’ Conference in Monterey, California. Educational Assessment for the 90’s and Beyond 
June 17

Allied Health Grant Workshop, Baltimore, Maryland. The Impact of the Center for Dental Hygiene Outcomes Assessment 
April 10-11

Triton College in Chicago, Illinois. Workshop for faculty - Improving Clinical Instruction 
March 31
PROFESSIONAL DEVELOPMENT & SERVICE

Invited Talks & Lectures

1995
American Association of Dental Schools Annual Session, San Antonio, Texas. Faculty Development Workshop - *Defining Competencies for the New Dentist*
March 10

1994
Assessment Conference at Indianapolis Indiana. *Pathway to Professionalism: An Assessment Center for Dental Hygiene.*
November

National Dental Hygiene Directors’ Conference in Cancun, Mexico. Poster - *Instrument Development at the Center for Dental Hygiene Outcomes Assessment*
June 14

May 10

Dallas Section of the American Association of Dental Research at Baylor College of Dentistry. *Outcomes Assessment for Improvement of the Profession*
May 10

Texas Dental Association Annual Meeting, San Antonio, Texas. Poster - *The Texas Dental Oncology Education Program.* (Presented by co-author K. Rankin)
May 5-6

March 14

Salivary Study Group at Baylor College of Dentistry - *How Do We Gather Evidence of Educational Effectiveness?*
February

Dallas County Dental Society Mid-Winter Dental Clinics, Dallas, Texas. Poster - *The Texas Dental Oncology Education Program.* (Presented by co-author K. Rankin)
January 21
PROFESSIONAL DEVELOPMENT & SERVICE

Continuing Education Presented - Baylor College of Dentistry


1998 Performance Assessment for Competency-Based Education
Attended by 20 health profession faculty on October 23–24 at Baylor College of Dentistry.
Course Director

1998 Competency-Based Health Professions Education
Attended by 20 health profession faculty on March 14-15 at Baylor College of Dentistry.
Teaching Participant

1996 Teaching and Evaluation in Clinical Settings
Attended by 25 health profession faculty on February 23-25 at Baylor College of Dentistry.
Teaching Participant

1995 Teaching to Competency: Skills for Health Professions Educators
Attended by 25 health profession faculty on August 4-8 in Steamboat, Colorado.
Teaching Participant

1995 Teaching and Evaluation in Clinical Settings
Attended by 25 health profession faculty on February 24-26 at Baylor College of Dentistry.
Teaching Participant

1994 Oral Cancer: What’s New and What's Known (But Usually Forgotten)
Attended by 35 dentists, dental hygienists and nurses on February 18 at Baylor College of Dentistry.
Teaching Participant

1990 Update in Clinical Dental Hygiene Practice: Oral Lesion Description
Attended by 40 dental hygiene alumnae on October 28 at Baylor College of Dentistry.
Teaching Participant
PROFESSIONAL DEVELOPMENT & SERVICE

Continuing Education Presented - University of Detroit Mercy

1988  
Update on Clinical Instrumentation  
Attended by dental hygienists  
Course Director

1983-1988  
The Role of the Dental Hygienist in Periodontal Therapy  
Attended by dental hygienists  
Course Director

1982  
Update on Basic Instrumentation  
Attended by dental hygienists  
Course Director

1981, 1980  
The Periodontal Patient and the Dental Hygienist  
Attended by dental hygienists  
Course Director

1980  
Cardiopulmonary Resuscitation  
Attended by dentists and dental hygienists  
Teaching Participant

1979-1982  
Root Planing and Ultrasonic Scaling  
Attended by dental hygienists  
Course Director

1977, 1982  
Hypertension  
Attended by dental hygienists  
Teaching Participant

1976-1979  
Virginia Wash Oral Cancer Seminar  
The Michigan Cancer Foundation, Detroit, Michigan  
Attended by dental hygienists  
Teaching Participant

Programs Organized

1999  

Annual Advisory Meetings of the Assessment Center for Health Professions Education in Dallas, Texas. Second weekend in August. Attended by 20 Assessment Center personnel, advisors and dental hygiene faculty trainees. Primary organizer.
PROFESSIONAL DEVELOPMENT & SERVICE

Programs Organized

1997  *Certifying the Competence of Dental Students* in Orlando, Florida at the Annual Meeting of the American Association of Dental Schools on March 18. Attended by 75 dental and dental educators. Primary organizer.

1993, 1994, 1995  *Annual Advisory Meeting of the Assessment Center for Health Professions Education* in Dallas, Texas. First weekend in August. Attended by 10 Assessment Center personnel and advisors. Primary organizer.

1994  *Outcomes Assessment: Where We Are Today* in Seattle, Washington at the Annual Meeting of the American Association of Dental Schools on March 14. Attended by 75 dental and dental hygiene educators. Coordinated this symposium and was also a presenter.

Journal Editorial Boards

2012-2013  Reviewer for MedEdportal

2010-2013  Editorial Review Board for *Journal of Dental Education*

2003-2008  Editorial Review Board for *Journal of Contemporary Dentistry*

1989-2012  Editorial Review Board for *Journal of Dental Hygiene*

1991-1997  Editorial Advisory Board for *Dental Hygienists’ News*

Advisory Board

2005-2008  Dental ResourceNet Advisory Board for Proctor & Gamble

Consulting

2010  Southern Association of Colleges and Schools Off-Site Review Committee that reviewed three health science centers

2009  Southern Association of Colleges and Schools Accreditation site visitor at a medical school

2007-2010  Commission on Dental Accreditation Peer Review Committee for Predoctoral Dentistry
PROFESSIONAL DEVELOPMENT & SERVICE

Consulting

2007
Nova Southeastern College of Dentistry, Davie, Florida. Reviewed Standard 1- Institutional Effectiveness for their follow up report to the Commission on Dental Accreditation and helped them revise their assessment plan. June 13-14

1994-2008
Commission on Dental Accreditation
Dental hygiene consultant for two to three site visits per year.

2002
Department of Dental Hygiene, University of Pacific, Murphys, California. Reviewed their accreditation self-study document for the Commission on Dental Accreditation. September

Department of Dental Hygiene, University of New Mexico. Reviewed their accreditation self-study document for the Commission on Dental Accreditation and conducted a mock site visit. June 25-26

2001
Waukesha County Technical College, Pewaukee, Wisconsin
Reviewed their assessment plan for dental hygiene.

2000
School of Dental Medicine, University of Pittsburgh
Reviewed their competency document and conducted a one day workshop on competency-based education at their faculty retreat. August 25

School of Dentistry, University of California at Los Angeles
Reviewed their competency document and conducted a two day workshop on competency-based education at their faculty retreat. September 21-22


Northern Arizona University, Flagstaff
Reviewed the dental hygiene self-study document for accreditation and conducted a two day workshop for faculty. March 23-24

Georgia Perimeter College, Atlanta
Reviewed the dental hygiene self-study document for accreditation and conducted a two day workshop for faculty. February 24-25
PROFESSIONAL DEVELOPMENT & SERVICE

Consulting

2000  Northwest Missouri State University, Marysville
Met with faculty and provided advice on assessment techniques for Sloan Foundation grant project led by the President, Dr. Dean Hubbard. 
January 21

1999  School of Dentistry, University of Detroit Mercy, Michigan
Reviewed the dental hygiene self-study document and conducted a mock accreditation site visit.
June 16

1998  San Joaquin Valley College, Visalia, California
Reviewed their application for Full Accreditation status
May-June

1996  San Joaquin Valley College, Visalia, California
Reviewed the application for Accreditation Eligible Status
September-November

1994  West Los Angeles College, Culver City, California.
Reviewed the Outcomes Assessment document of the Dental Hygiene Program.

Professional Organizations - Positions & Activities

2010-2012  American Dental Educators Association
Board member of the Leadership Institute Alumni Association

2010 & 2011  American Dental Hygienists’ Association
Member of the Research Grant Review Committee of the Institute for Oral Health to review grant applications

2008-2010  Commission on Dental Accreditation
Served on Predoctoral Accreditation Standards Task Force for revising the standards

Member of National Advisory Panel for the National Center for Dental Hygiene Research. Funded by HRSA.

1998 & 1999  American Association of Dental Schools
Reviewed abstracts for Annual Meeting posters.
PROFESSIONAL DEVELOPMENT & SERVICE

Professional Organizations - Positions & Activities

1998  American Association of Dental Schools
      Appointed to the Task Force for developing the Dental Hygiene Competency Document. Served as the facilitator during the retreat.

1996-1999  American Association of Dental Schools
          Appointed to the Steering Committee for the AADS Competency Initiative.

1996-1997  American Dental Association, Commission on Dental Accreditation
           Appointed to Dental Hygiene Standards Revision Committee.

1996-1997  American Dental Hygienists’ Association
           Appointed to Parameters of Practice Committee.

1996  American Dental Association, Commission on Dental Accreditation
      Ad Hoc Member to Dental Standards Revision Committee

      American Association of Dental Schools
      Advanced to position of Chair of the Educational Research/Development and Curriculum Section

1995  American Association of Dental Schools
      Group facilitator at the workshop Developing Competencies Statements for Predoctoral Dental Education in Chandler, Arizona.

1995  American Association of Dental Schools
      Reviewed symposium abstracts for the Annual Session.

      Advanced to position of Chair Elect of the Educational Research/Development and Curriculum Section.

1994  American Association of Dental Schools
      Advanced to position of Secretary of the Educational Research/Development and Curriculum Section.

      Coordinated and presented a symposium- Outcomes Assessment: Where We Are Today.

      Served as a member of the Councilor Nomination Committee for the Dental Hygiene Section.
PROFESSIONAL DEVELOPMENT & SERVICE

Institutional Committees - Health Science Center

2011-2012  HSC Quality Enhancement Plan (QEP) Steering Committee
2011-2012  HSC Academic Assessment Committee
2010 & 2012 Search Committees for Director of Assessment at the College of Pharmacy
2007-2012  HSC Institutional Effectiveness Council

Institutional Committees - Baylor College of Dentistry

2012  Leader for the development of the 2013-2018 Strategic Plan
2011-2012  Leader of the BCD QEP Committee.
2009-2011  Steering Committee for 2011 CODA accreditation site visit
Chair of Standard 1 Institutional Effectiveness
1994-2012  Planning & Assessment Committee (Chair)
Replaced Strategic Planning Committee and Assessment Team. Responsible for the development and oversight of the college Strategic Plan, writing the Annual Report, course evaluations, various surveys and focus groups.
1992-2012  Dental Undergraduate Curriculum Committee
Dental Hygiene Subcommittee (1993-1999)
2003-2004  Steering Committee for CODA accreditation site visit
Served on the committee as a representative for institutional effectiveness (Standard I)
1997-1999  Strategic Planning Committee
Responsible for continuous oversight of the 1996-2000 Strategic Plan
1997-1998  Strategic Focus Committee (oversight committee for curriculum reform)
Vision & Goals Task Force (chair)
Competency Evaluation Task Force (co-chair)
1996-1997  Task Forces for CODA Self-Study:
Biomedical Sciences, Institutional Effectiveness, Dental Hygiene, Ethics and Professionalism, Curriculum Management, Patient Care Services
PROFESSIONAL DEVELOPMENT & SERVICE

Graduate Thesis Committees - Baylor College of Dentistry

1996-2000  Strategic Planning Team

2012-2013  Chair of Thesis Committee for Mary Vu, Master’s Degree Candidate in Dental Hygiene. *The Cultural Climate of Southwest Dental Colleges.*

2009-2011  Chair of Thesis Committee for Dr. Sylvester Awagu, Master’s Degree Candidate in Health Professions Education. *Use of the Internet to Access Oral Health Information by Parents of Pediatric Dental Patients.*

2008-2010  Chair of Thesis Committee for Stacy Pettit, Master’s Degree Candidate in Dental Hygiene. *Attitudes, Knowledge and Practices of Nurses about Oral Care*

2008-2009  Thesis Committee for Amanda McNiel, Master’s Degree Candidate in Dental Hygiene. *Use of Stimulants among Texas Dental and Dental Hygiene Students.*

2008-2009  Chair of Thesis Committee for Jane Cotter, Master’s Degree Candidate in Dental Hygiene. *Factors Affecting Texas Dental Hygienists’ Performance of Oral Cancer Screenings.*

2007-2008  Chair of Thesis Committee for Dr. Amber Callis, Master’s Degree Candidate in Health Professions Education. *Comparison of Basic Science Learning between PBL and Traditional Training.*


1999-2004  Chair of Thesis Committee for Dr. Brent Hutson, Master’s Degree Candidate in Health Professions Education. *National Practices for the Promotion and Tenure of Clinical Faculty: A Survey of Dental Schools in the United States.*

2001-2003  Chair of Thesis Committee for Tamara Gravely, Master’s Degree Candidate in Endodontics and Health Professions Education. *Enrichment and Recruitment Programs at Dental Schools: Impact on Enrollment of Underrepresented Minority Students.*
PROFESSIONAL DEVELOPMENT & SERVICE

Graduate Thesis Committees- Baylor College of Dentistry

1999-2002  Thesis Committee for Tracy King, Master’s Degree Candidate in Dental Hygiene Education. *Infection Control Practices*

1999-2000  Thesis Committee for Kelly Murphee, Master’s Degree Candidate in Dental Hygiene. *A Survey of Texas Dental Hygienists Regarding Education, Recognition and Reporting of Elder Abuse*

1998-1999  Thesis Committee for Rubin Figueroa, Master’s Degree Candidate in Health Professions Education. *A New Course to Incorporate the Use of Information Technology Resources into the Dental Curriculum*

1997-1999  Thesis Committee for Glenna Johns, Master’s Degree Candidate in Dental Hygiene. *Career Retention in the Dental Hygiene Workforce in Texas*

Mentoring, Advising & Other Educational Activities - Baylor College of Dentistry

1997-2012  Table Clinic Judge for dental hygiene at Baylor’s Student Professional Day

1997  Faculty mentor for graduate student project *Assessing Dental Student Satisfaction with the Extended/Enhanced Programs* by Rosemarie Zartman and Ruben Figueroa. Presented this poster at the 1998 Annual Session of the American Association of Dental Schools.

1995  Faculty mentor for dental hygiene project *Using Xylitol Gum and Its Role in Caries Prevention* by Caroline Graffiori and Jacqueline Conlon. Placed second in the Baylor competition and also at the Texas Dental Association competition.

1994  Faculty mentor for dental hygiene project *Intra-Oral Cameras: A Picture is Worth a 1,000 Words* by Courtney Bawcom and Samantha Armstrong.

Continuing Education Taken

2012  *Evaluating Evidence: Transitioning from Classroom to Clinic*  
Baylor College of Dentistry, June 26

2012  *Sleep Disorders in Dentistry*  
Baylor College of Dentistry, September 12
PROFESSIONAL DEVELOPMENT & SERVICE

Continuing Education Taken

2012  Cervical Lesions: When to Graft, When to Restore
      Baylor College of Dentistry, February 1

2010  Stem Cells: Applications for Craniofacial Tissue Regeneration
      Baylor College of Dentistry, May 10

      Salivary Diagnostics: 5 steps to Clinical Utilities or Utility?
      Baylor College of Dentistry, May 6

      New Honor Codes for a Generation
      Baylor College of Dentistry, March 24

      Leading and Assessing New Models of Dental Education
      Using Faculty Assessment to foster the Scholarship of Teaching & Learning
      Leading Change from Within
      Annual Meeting of the American Dental Education Association
      Washington DC, February 27-March 3

2009  Elevating Teaching to Recognized Scholarship
      Bridging the Generation Gap
      Annual Meeting of the American Dental Education Association
      Phoenix, Arizona, March 15 to March 18

2008  The Community Dental Health Coordinator to Improve Access to Dental Care
      Baylor College of Dentistry, September 16

      Rethinking the Admission Interview
      Four Scholarship of Teaching & Learning sessions
      Macy Foundation Study Panel Report
      Annual Meeting of the American Dental Education Association
      Dallas, Texas, March 29 to April 2

      Linking Basic Science and Clinical Decision-Making
      Baylor College of Dentistry, January 3

2007  Evidence-Based Periodontics
      Baylor College of Dentistry, September 28

2006  Strategies for Teaching the New Generation of Dental Hygiene Students & the Millenia Go to Dental School: Implications for Admissions through Residency
      Annual Meeting of the American Dental Education Association
      Orlando, Florida, March 8 to 10
PROFESSIONAL DEVELOPMENT & SERVICE

Continuing Education Taken

2005  Opportunities for Clinical Research Using National Health Nutrition Examination Data
      Baylor College of Dentistry, January 20

2004  Enhancement of Clinical Research Skills
      Baylor College of Dentistry, June 15

Student Research Day
      Baylor College of Dentistry, April 7

The Medical Model of Caries Management
      Baylor College of Dentistry, February 10

2003  Current Issues in Bioethics: Cloning for Biomedical Research?
      Baylor College of Dentistry, March 27

2002  Oral Health in the Post Genomic Era
      Baylor College of Dentistry, November 7

Treatment of the Medically Compromised Patient in the Dental Office:
      Practical Guidelines for Oral Health Providers
      Baylor College of Dentistry, November 1

Student Research Day
      Baylor College of Dentistry, April 10

Presentations at the Annual Meeting of the American Dental Education Association
      San Diego, California, March 2 to 6

2001  New Developments in the Diagnosis and Treatment of Periodontal Disease
      Baylor College of Dentistry, September 28

Creating a Culture of Evidence: Taking Assessment Seriously
      Texas A&M University, March 27-28

2000  Women and Medications: Health Issues and Related Pharmacotherapies

Osteoporosis: Assessment, Prevention, and Pharmacotherapy
      Baylor College of Dentistry, October 27

Presenting Data and Information
      Graphics Press (Dr. Edward Tufte), November 6
PROFESSIONAL DEVELOPMENT & SERVICE

Continuing Education Taken

1998

- *The Ultimate Workshop in Competency Assessment in Healthcare*
  Professional Education Systems, September 29

- *Turning Results into Improvement Strategies*
  National Center on Postsecondary Teaching, Learning & Assessment, February 12-14

- *Design Expert Training Class* (creating survey forms)
  National Computer Systems, April 2-3

- *Design Expert Training Class*
  National Computer Systems, January 12-13

1997

- *Institutional Effectiveness*
  Alliance for Higher Education & SACS, September 26

- *NCS Survey Training Class*
  National Computer Systems, June 5

- *Scantools for Windows Training Class* (operating a scanner for data entry);
  National Computer Systems, June 3-4

- *Statistical Analysis with SPSS; SPSS, July 6-9*

1996

- *Beginning & Intermediate SPSS; SPSS, December 2-6*

- *Survey Research with SPSS; SPSS, September 23-25*

PUBLICATIONS

Refereed Articles

McCann AM, Lacy ES, Miller BH. A study of underrepresented minority student experiences at a diverse dental school. Accepted 6-26-13 for publication in JDE.


PUBLICATIONS

**Refereed Articles**


PUBLICATIONS

**Refereed Articles**


PUBLICATIONS

Book


Chapters


Non-Refereed Articles

McCann AL. E-teaching: the good, the bad and ways to pave a smoother road forward. *CCI Newsletter* Summer 2010 at [http://www.adea.org/adeacci/Campus-Liaisons/Liaison-Ledger/Pages/default.aspx](http://www.adea.org/adeacci/Campus-Liaisons/Liaison-Ledger/Pages/default.aspx).


Abstracts (Presentations-Posters)

Higginbotham MG, McCann AM, Schneiderman ES, Hinton RJ, Spears RD. *Improving the EBD skills of dental students through curricular innovation.* Abstract #156901 for the AADR Annual Meeting in Tampa, March 2012.

PUBLICATIONS

Abstracts (Presentations-Posters)


**PUBLICATIONS**

*Abstracts (Presentations-Posters)*


PUBLICATIONS

Abstracts (Presentations-Posters)


PUBLICATIONS

Book Reviews


Other Scholarly Materials

1999 Closing the Loop
BCD assessment newsletter developed to disseminate assessment results and information about program improvements.

1997-2000 Assessment Center Web Page
An on-line national resource for assessment materials. There are also links to resources at other sites, including ERIC and the assessment pages of several colleges. This site was accessed 3399 times. Supported by HRSA grant # AH00529.

1996-1999 Assessment Center Newsletter
Published annually and sent to 400 dental schools, dental hygiene programs, other health profession programs and national organizations. Supported by HRSA grants # AH00529 and # AH00356.

1995, 2000 Dental Hygiene Senior Exit Examination
This comprehensive examination was developed with funding from HRSA grant # AH00356. A videotape was developed about this exam in 1995 which has been distributed nationally. The examination was also featured in the following text: Palomba CA, Banta TW. Assessment Essentials. San Francisco: Jossey-Bass, 2000, p. 122.

1993 Assessment Center Electronic Bulletin Board
Created for on-line communication about assessment issues across the country. Supported by HRSA grant # AH00356.

1992-2001 Assessment Center for Health Professions Education
Created as a depository of assessment materials for health profession educators. Supported by HRSA grants #AH00356 and AH00529.
PUBLICATIONS

Other Scholarly Materials

1992-2012  Oral Lesion Description Method
Developed a method for describing oral lesions that was published in 1986, 1987 and 1992. The 1992 version was developed for chair side use. This method has been incorporated into the following textbooks:
TEACHING ACTIVITY

Baylor College of Dentistry

Graduate Course Director

2000-2012 5200 Educational Research (online in Blackboard)
1997-2011 5343 Educational Assessment (online in Blackboard)

Graduate Course Lecturer

2011-2012 5301 Didactic Teaching Strategies
Distance Education

2011-2012 5222 Applied Biostatistics
Qualitative Research

2010-2011 5201 Teaching Strategies: Dental Hygiene Education I
Testing

2001-2012 5221 Research Design and Methodology
Survey Research (3 lectures)

1995-2012 5225 Teaching Skills for Health Profession Educators
Instructional Planning & Assessment
Competency-Based Education (1999-2002)

1996 - 1998 5200 Educational Research
Assessment Research

1996 - 1998 5206 Learning in Small Groups
Assessing Small Group Learning

Dental Course Director

1993 – 1999 6890 Learning Strategies for Health Professions Students

Dental Course Lecturer

1995, 1996 6160 Learning Strategies Seminar
Cooperative Learning
TEACHING ACTIVITY

Baylor College of Dentistry

Special Programs Lecturer

1998  High School Minority Program  
      Tips for Academic Success

1997, 1998  Health Careers Opportunity Program (HCOP, pre-dental minority college students)  
            Collaborative Learning, Time Management, Learning Styles

1993  High School Minority Program  
      Reading and Note Taking

Dental Hygiene Course Director

1994  451 Dental Hygiene Education

1992-1995  391 Learning Strategies for Health Professions Students

1989-1993  344 Health Promotion/Disease Prevention

1989-1995  332 Health Education and Behavioral Science

Dental Hygiene Course Lecturer

2001-2012  3310 Health Education and Behavioral Science  
            Learning Styles

1998  433 Perspectives of Dental Hygiene  
      Career Opportunities in Dental Hygiene

1995-1996  332 Health Education and Behavioral Science  
            Communication

1994-2006  472 Research Methods  
            Evaluating Research Reports  
            Scientific Writing (until 2001)

1990-2011  3160 Preclinical Dental Hygiene  
            Recording the Extra/Intraoral Examination

            Oral Hygiene for Disabled Patients
TEACHING ACTIVITY

Baylor College of Dentistry

Dental Hygiene Course Lecturer

1990-1995    301 Fundamentals of Dental Hygiene
             Oral Health Research

1989-1993    318 Preclinical Dental Hygiene
             Recording Plaque Deposits

1989-1990    303 Theory of Dental Hygiene Practice I
             Sensory Impaired Patients

1989    451 Dental Hygiene Education
             Teaching in Dental Hygiene

Dental Clinical Instructor

1988-1993    Preclinical Periodontics

Dental Hygiene Clinical Instructor

1988-1992    Preclinic, First and Second Year Clinics

University of Detroit Mercy

Dental Hygiene Course Director (1974 - 1988)

Advanced Patient Care - Periodontal instrumentation, oral examination and lesion
description, occlusal dysfunction examination, physical assessment and medical
emergencies

Basic Patient Care - Preclinical skills

Clinical Dental Hygiene - First and second year clinics

Dental Anatomy

Directed Studies - Individual courses for Degree-Completion students

Legal, Ethical and Professional Issues

Research, Statistics and Writing

Special Patient Care - Disabled and geriatric
TEACHING ACTIVITY

University of Detroit Mercy

Dental & Dental Hygiene Lecturer (1974 - 1988)

Child Abuse - Dental

Dental Hygiene Profession - Dental

Periodontal Instrumentation – Dental

Nutritional Assessment and Dietary Counseling - Dental Hygiene

Dental Clinical Instructor (1973 - 1988)

Preclinical Periodontics

Dental Hygiene Clinical Instructor (1973 - 1988)

Preclinic, First and Second Year Clinics
CURRICULUM VITAE

Gabriele Mues

PERSONAL INFORMATION:

Present position: Assistant Professor
Department of Biomedical Sciences
TAMU Health Science Center Baylor College of Dentistry
Dallas, TX

Office address: Department of Biomedical Sciences
Texas A&M Health Science Center Baylor College of Dentistry
3302 Gaston Avenue
Dallas, TX  75246

Office contact: Phone: 214-828-8291
Fax: 214-874-4538
E-mail: gmues@bcd.tamhsc.edu

EDUCATION:

2003 M.D. (USA) USMLE 3
1997 M.D. (USA) USMLE 1 and 2
1978 Dipl. Psych., University of Bochum, Germany
1975 Dr. med., University of Essen, Germany
1973 M.D. (Germany), University of Essen, Germany
1970 Cand. Med., University of Marburg, Germany

PROFESSIONAL POSITIONS AND EMPLOYMENT

2008 - present Assistant Professor, Department of Biomedical Sciences, TAMHSC Baylor College of Dentistry, Dallas, TX
2006 - 2008 Research Associate I, Department of Biomedical Sciences, TAMHSC Baylor College of Dentistry, Dallas TX
2001 - 2002 Research Fellow, Department of Pathology, University of Texas Southwestern Medical Center, Dallas, TX
2001 - 2003  Fellow, Molecular Diagnostics, University of Texas Southwestern Medical Center, Dallas, TX

1999 - 2000  Research Fellow, Department of Human Genetics, University of Texas Southwestern Medical Center, Dallas, TX

1998 - 2003  House Staff, Parkland Memorial Hospital, Dallas TX

1998 - 2001  Resident, Clinical Pathology, University of Texas Southwestern Medical Center, Dallas, TX

1995 - 1997  Graduate Faculty, Baylor University, Waco, TX

1996 - 1997  Adjunct Associate Professor, Baylor College of Dentistry, Dallas, TX

1994 - 1997  Director, M. Crowley Research Laboratory, Baylor University Medical Center, Dallas, TX

1992 - 1995  Associate Graduate Faculty, Baylor University, Waco, TX

1992 - 1993  Associate Director, M. Crowley Research Laboratory, Baylor University Medical Center, Dallas

1988 - 1991  Assistant Instructor, Departments of Microbiology and Biochemistry, University of Texas Southwestern Medical Center, Dallas, TX

1982 - 1987  Research Associate, Department of Psychiatry, University of Texas Southwestern Medical Center, Dallas, TX

1981 - 1982  Research Fellow, School of Public Health, University of California, Berkeley

1978 - 1980  Research Fellow, Department of Psychology, University of Bochum, Germany

1974 - 1975  Intern, Internal Medicine, Elisabeth Krankenhaus, Bochum, Germany

1974  Intern, Surgery, Staedtische Krankenanstalten Karlsruhe, Germany

LICENSURE, BOARD CERTIFICATION
Licensure
2004 - 2006 Texas; Medical license # 8850 (not renewed due to a lack of Molecular Genetic Pathology positions
1975 - present Germany; Medical license

Board certification
2004 Clinical Pathology

HONORS AND AWARDS
1974 Medical licensing examination, Germany: Summa cum laude
1975 Award for outstanding thesis in Medicine, Germany
1981-1983 Research fellowship from “Deutsche Forschungsgemeinschaft”

RESEARCH EXPERIENCE

Development/establishment of clinical molecular tests
FV Leiden and Prothrombin mutations by TaqMan assay 2002-2003
Immunoglobulin/ T-cell receptor clonality assessment by fluorescent capillary electrophoresis 2002-2003
Tumor LOH assessment by fluorescent capillary electrophoresis 2002-2003
Bone marrow engraftment by STR analysis 2002-2003

Research for assessment of clinical significance
SNP analysis in the tissue factor pathway inhibitor gene 2001-2002
SNP analysis in lipid metabolism genes: Verification of mutations in Affymetrix variant detector arrays 1999-2000

Basic research
Testing small molecule genetic pathway activators/inhibitors for efficacy in treatment of tooth agenesis 2012-present
Detection of tooth agenesis genes in humans 2006-present
Exploring signaling pathways in early tooth development 2006-present
Detection of radiation induced gene products by the Differential Display method 1993-1996
Assessment of the heat shock response to x-irradiation 1991-1992
Construction of enzyme-labeled hybridization probes, M13-based universal hybridization probes 1988-1989
Isolation and characterization of a human hsc70 gene family 1982-1987
Development of bioassays for neuropeptides 1981-1982
Behavioral effects of experimental amygdale lesions (Master's thesis in Psychology) 1977-1979
Urinary enzyme excretion in hypertension and renal disease (Doctoral thesis in Medicine) 1972-1974

TEACHING

Techniques in cellular and molecular Biology (Graduate) 2010-2013
Immunology (Graduate) 2009-2013
Dental Pharmacology (Undergraduate) 2010-2012
Pharmacology review (Graduate) 2010-2012
Applied Pharmacology (Graduate) 2012
Craniofacial growth / Development (Graduate) 2010-2013

All Pharmacology, immunology and craniofacial lectures given were newly developed to serve as self-explanatory learning tools.

2009 taught 1 hour CE course: What do we know about the etiology of hypodontia at MUSC Charleston, SC

Supervision of all postgraduate and graduate laboratory personnel
Mentoring DDS, PhD and Master’s degree students
Supervision of dental students in the summer research program

Graduate Faculty Membership
1992 - 1995 Associate Graduate Faculty, Baylor University, Waco, TX
1995 – 1997 Graduate Faculty, Baylor University, Waco, TX
Teaching molecular biology and molecular genetics and mentoring undergraduate and graduate students in the laboratory

FUNDED RESEARCH GRANTS

A EDA pathway mutations in non-syndromic tooth agenesis; NIH/NIDCR R03 DE0196554-01A2; $100,000/ $146,500; 2010-2012; PI
B Signaling mechanisms in early tooth development; NIH/NIDCR R01 DE019471-02; $708,000/ $1034,000; 2008-2012; Co-PI
C American Recovery and Reinvestment Act administrative supplement; NIH/NIDCR R01 DE019471-01S3 3) $247,000/ $362,000; 2009-2011; Co-PI
This supplement supports a collaborative effort with Dr. Alex Vieira, Pittsburgh, to find additional gene mutations responsible for congenital tooth agenesis in humans.

PUBLICATIONS
John Bonds, Sarah Pollan-White, Lilin Xiang, **Gabriele Mues**, Rena D’Souza. The relationship between ovarian cancer and tooth agenesis. Submitted EJMG


Hui Kong, Ying Wang, Manshi Patel, **Gabriele Mues** and Rena N. D’Souza. Regulation of Bmp4 expression in odontogenic mesenchyme: From simple to complex. Cells Tissues Organs. 2011;194(2-4):156-60. PMID:21546760


Selected Abstracts

**G. Mues.** Candidate Genes for Tooth Agenesis Therapeutics. IADR 2013

**G. Mues.** J. Bonds, A.R., Vieira, L. Xiang, O. Klein, and R. D'souza
Wnt10A Mutations Play a Major Role in Non-Syndromic Tooth Agenesis. IADR 2013


**G. Mues.** A. Bonds, and R.N. D'Souza. A Novel Msx2 Mutation is Associated with Tooth Agenesis. IADR 2012

**G. Mues.** L. Xiang, A. Bonds, C. Fairley, O. Klein, A. Vieira, And R. D'Souza
EDAR Mutations in Non-Syndromic Tooth Agenesis IADR 2012

**H. Kong, H. Glessa, G. Mues. and R. D'Souza.** Differentially Expressed Genes in Msx1/- Versus Msx1+/+ Tooth Buds. IADR 2012

**S.A. Williams, S.L. Williams, Y. Lu, S. Wang, G. Mues, and R. D'Souza.** Spatiotemporal Expression of the Tcfap2b gene in Mouse Tooth Morphogenesis IADR 2012


Hui Kong, Ying Wang, Gabriele Mues and Rena D’Souza. Pax9 is bound to the Bmp4 promoter during tooth development in vivo IADR 2011

Wang, Y, Mues, G, D’Souza, RN. Functional evaluation of Msx1 missense mutations. AADR 2010

Patel M, Wang Y, Mues G, D’Souza R. Regulation of the Human Bmp4 Promoter by Pax9, Msx1 and Msx2. AADR 2010

Wang, Y, Mues, G, D’Souza. Interaction of Pax9 with homeodomain proteins during odontogenesis AADR 2010

Kong H, Wang Y, Mues G, D’Souza R. Activation of Bmp4 expression in tooth bud mesenchyme, AADR 2010

Bonds J, Wang Y, Mues G, D’Souza R. Pax9 is bound to the Bmp4 promoter during tooth development AADR 2010


**INSTITUTIONAL COMMITTEE WORK**

2010-2013    Member BCD Research Committee
2012-present Member BCD Planning Committee
1995-1997    Member, Internal Review Board, Baylor University Medical Center
1993-1997    Member, Animal Use and Care Committee, Baylor University Medical Center
CURRICULUM VITAE

Lynne A. Opperman, Ph.D.

PLACE OF BIRTH: Johannesburg, South Africa

DATE OF BIRTH: August 1, 1956

CITIZENSHIP: USA Citizen

MARITAL STATUS: Married to Brian D. Cunningham, 1999.

EDUCATION:
- B.Sc. Zoology 1979 Witwatersrand University, Johannesburg, South Africa.
- Ph.D. Developmental Biology 1985 Witwatersrand University, Johannesburg, South Africa.

EMPLOYMENT, APPOINTMENTS AND POSTDOCTORAL TRAINING:

2012-present **Interim Director**, Center for Craniofacial Research and Diagnosis, Texas A&M University Baylor College of Dentistry, Dallas, TX.

2010-2011 **Interim Assistant Dean for Research and Graduate Studies**, Texas A&M University Baylor College of Dentistry, Dallas, TX.

2010 **Acting Associate Dean for Research and Graduate Studies**, Texas A&M University Baylor College of Dentistry, Dallas, TX.

2007-present **Professor**, Department of Biomedical Sciences, Texas A&M University Baylor College of Dentistry, Dallas, TX.

2006-present **Director**, Technology Development, Texas A&M University Baylor College of Dentistry, Dallas, TX.

2004-present **Owner/Manager**, Craniotech ACR Devices, LLC

2004-2007 **Associate Professor**, Department of Biomedical Sciences, Baylor College of Dentistry, Texas A&M Health Science Center Dallas, TX.

2000-present **Graduate Faculty**, School of Graduate Studies, Texas A&M Health Science Center, College Station, TX

1997-2004 **Assistant Professor**, Department of Biomedical Sciences, Baylor College of Dentistry, Texas A&M Health Science Center, Dallas, TX.

1995-1996 **Assistant Professor (Research)**, Department of Plastic Surgery, University of Virginia, Charlottesville, VA.

1994-1995 **Research Associate**, Departments of Plastic and Neurological Surgery, University of Virginia, Charlottesville, VA.

1991-1994 **Research Associate**, Department of Plastic Surgery, University of Virginia Medical School, Charlottesville, VA.

1989-1990 **Postdoctoral Fellow**, Department of Pathology, University of Virginia Medical School, Charlottesville, VA.

1985-1988 **Research Officer**, MRC Research Unit for Pediatric Mineral Metabolism, Baragwanath Hospital, Soweto, South Africa.

1984 **Assistant Lecturer**, Comparative Embryology and Human Physiology, University of the Witwatersrand, Johannesburg, South Africa.

1983-1984 **Senior Teaching Assistant**, Medicine I; Zoology I; Embryology II, University of the Witwatersrand, Johannesburg, South Africa.
MEMBERSHIP ON FEDERAL GOVERNMENT REVIEW AND ADVISORY COMMITTEES

1997  NSF Developmental Mechanisms Grant Review
1999  NIH/NIDCR Special Emphasis Panel
1999  NIH/NIDCR Study Section, Ad Hoc, OBM-2.
2002-2003 NIH/SBIR Study Section
2003  NIH/NCI Special Emphasis Panel
2004  NIH/NIDCR P50 Program Grant Review
2004  NIH/NIDCR Special Grants Review Committee
2005; 2006; 2009 NIH/NIDCR Special Emphasis Panel
2007  NIH/NIDCR SPDD study section, ad hoc member
2007  NIH NIAMS Bioengineering Special Emphasis Panel, Ad Hoc reviewer
2009  NIH Challenge Grant First Round Review
2009  NIH GO Grant Study Section
2010  NIH/NIDCR Special Emphasis Panel (PO1 Review)

OTHER EXPERIENCE, TASK FORCES, AND ADVISORY COMMITTEES

2000  British Medical Research Council Ad-Hoc Grant Review
2002-2003 Research Grants Council of Hong Kong, Grant Review
2002-2005 Regular Member, Board of Directors, American Association of Anatomists
2002-2005 Member, Advisory Committee for Young Anatomists, American Association of Anatomists
2002-2005 Member, Board of Directors, Craniofacial Biology Group, International Association of Dental Research
2003  Member, Technology Commercialization Task Force, TAMHSC
2003-2004 President, Dallas Chapter, American Association for Dental Research
2004-2007 Councilor, Dallas Chapter, American Association for Dental Research
2003-2006 Chairman, Archives Task Force, American Association of Anatomists
2004  March of Dimes, Ad Hoc Grant Review
2004  Wellcome Trust Ad Hoc Grant Review
2004-present Co-Chairman, Technology Commercialization Advisory Committee, TAMHSC
2004-present Director, First Year Dentistry General Histology Course
2004-2005 Chairman, Nominations Committee, American Association of Anatomists
2004  Focus Group Member: Vision 2015, TAMHSC
2004  Focus Group Member: Strengths and Weaknesses of the Research Foundation, Baylor College of Dentistry
2004  Member, Task Force on Interdisciplinary Graduate Education, TAMHSC
2004-present Member of the Scientific Advisory Board, Journal of Endodontics
2004-present Member of the Editorial Board, Developmental Dynamics.
2005-2008 Vice-President, President-Elect, President, Immediate Past President, Craniofacial Biology Group, International Association of Dental Research
2005  Committee Member: Vision 2015, TAMHSC
2005-2007 Committee Member, Research Meetings Outreach Grant Committee, American Association of Anatomists
2005  Chairman, Communication Self Study Group, TAMHSC
2005 Chairman, Anatomical Record Publication Task Force, American Association of Anatomists
2005-2008 Member, Committee on Committees, TAMHSC-BCD
2006-2009 Member of the Editorial Board, Experimental Biology and Medicine
2006-2011 Co-Chair, Program Committee and Member of the Executive Board, American Association of Anatomists
2007-2011 Member, Legislative Affairs Committee, Technology Business Council, Dallas Greater Chamber of Commerce
2007-2009 Member, Capital Connections Committee, Technology Business Council, Dallas Greater Chamber of Commerce
2007-2008 Member of the Scientific Advisory Board, COAST 2008
2006-2011 Co-Chair, Program Committee and Member of the Executive Board, American Association of Anatomists
2007-2011 Member, Legislative Affairs Committee, Technology Business Council, Dallas Greater Chamber of Commerce
2007-2013 Chair, American Association of Anatomists 125th Anniversary Task Force to plan the meeting and events for 2013.
2010-present Member, Review Editorial Board, Frontiers in Craniofacial Biology
2008 Venture Assessment Advisor, North Texas Enterprise Center for Medical Technology (NTEC)
2007 Scientific Advisory Board, Global Licensing, Inc.
2012-2015 Member-at-large, Steering Committee of Section R (Dentistry and Oral Health Sciences) of the American Association for the Advancement of Science (AAAS)

1982 Van der Horst Embryology Prize. Witwatersrand University, Johannesburg, South Africa.
1991 Young Investigators Travel Award, 8th Workshop on Vitamin D, Paris, France.
2004 Service Excellence Award, Texas A&M HSC, Baylor College of Dentistry.
2005 Basic Science Faculty Research Award, Texas A&M HSC, Baylor College of Dentistry.
2006 Nominated and included on slate of candidates for President-elect, AADR
2006 Mentor, Hatton Award 2nd Place Winner, AADR meeting, 8-11 March, 2006, Orlando, FL
2006 Mentor, Caulk-Dentsply 2nd Place Winner, AADR meeting, 2-5 April, 2008, Dallas, TX
2008 Member, Management Development Program Class of 2008, June 14-26, 2008, Harvard Graduate School of Education, Cambridge, MA
2010 Fellow, American Association of Anatomists
2005 Basic Science Faculty Research Award, Texas A&M HSC, Baylor College of Dentistry.
2006 Nominated and included on slate of candidates for President-elect, AADR
2006 Mentor, Hatton Award 2nd Place Winner, AADR meeting, 8-11 March, 2006, Orlando, FL
2008 Mentor, Caulk-Dentsply 2nd Place Winner, AADR meeting, 2-5 April, 2008, Dallas, TX
2008 Member, Management Development Program Class of 2008, June 14-26, 2008, Harvard Graduate School of Education, Cambridge, MA
2010 Fellow, American Association of Anatomists
2011-2017 President-elect, President and Past-President, American Association of Anatomists
2012-2015 Member-at-large, Steering Committee of Section R (Dentistry and Oral Health Sciences) of the American Association for the Advancement of Science (AAAS)
OTHER RECOGNITION

2004  Member, Search Committee, Vice President for Academic Affairs, Texas A&M HSC.
2004  Member, Search Committee, Chairman of Department of Biomedical Sciences, Baylor College of Dentistry, Texas A&M HSC.
2004  Member, Search Committee, Faculty member, Department of Endodontology, Baylor College of Dentistry, Texas A&M HSC.
2005  Abstract Review for the Annual Meeting of the American Association for Dental Research March 9-12, Baltimore, MD
2005  Member, Search Committee, Faculty member, Department of Biomedical Sciences, Baylor College of Dentistry, Texas A&M HSC.
2006  Abstract review and program preparation for the Annual Meeting of the International Association for Dental Research March 22-24, New Orleans, LA
2006-2011 Abstract review and program preparation for the Annual Meeting of the American Association of Anatomists, Experimental Biology Meeting
2009-present Member, Selection Committee, Specialty residents, Department of Endodontics, Texas A&M University Baylor College of Dentistry, Dallas, TX.
2013  Member, Search Committee, Faculty member, Department of Endodontics, Texas A&M University Baylor College of Dentistry, Dallas, TX.

LECTURESHIPS

2001  Invited Speaker: Departmental Seminar Series, Department of Orthodontics, Houston School of Dentistry, February 28, Houston, TX.
2001  Invited Panelist: Suture Biology Session, American Association of Dental Research, March 7-10, 2001, Chicago, IL.
Opperman LA, Curriculum Vitae  
September 2013

2001  Invited lecture: Craniofacial syndromes – from bedside to genes, July 27, Driscoll Children's Hospital, Children's Medical Center of South Texas, Corpus Christi, TX.
2002  Invited lecture: Molecular pathways regulating cranial suture morphogenesis and bone growth, January 31, Institute for Molecular Medicine and Genetics, Medical College of Georgia, Augusta, GA.
2002  Invited Speaker: Third Symposium of the Nordic Countries on Craniofacial Growth: From Genes to Clinics, August 22-25, Turku, Finland.
2003  Invited lecture: Regulation of Craniofacial Skeletal Morphogenesis and Growth, April 3, 2003, Department of Biological and Earth Sciences, Texas A&M University – Commerce, Commerce, TX.
2003  Invited lecture: Factors regulating craniofacial skeletal development. Dallas Section of the North American Division, International Association for Dental Research seminar series, Baylor College of Dentistry, May 1 2003, Dallas TX.
2005  Invited Speaker: The ECM Environment in Suture Morphogenesis and Growth. AADR/IADR Symposium “ECM in the Craniofacial Complex, March 10, 2005, Baltimore, MD
2008  Invited speaker: Symposium on Bone augmentation methods in the craniofacial skeleton, 37th annual meeting of the American Association for Dental Research, Dallas, TX, April 3rd, 2008.
2008  Keynote Speaker: Technology Transfer and the Student Inventor, 26th Annual Dental Science Symposium, University of San Antonio Health Science Center, April 16, 2008.
2013  Invited Speaker: Center for Craniofacial Research and Diagnosis. Dallas Chapter of the American Association for Dental Research, March 28, 2013.
2014  Keynote Speaker: 18th Congress of the International Federation of Associations of Anatomists (IFAA), August 8-10, 2014, Beijing, China.
CONFERENCE CHAIRMANSHIPS, SYMPOSIA, SEMINARS ORGANIZED

1997  Co-chair: “Genes” session, Texas Mineralized Tissue Society Meeting, August 1-3, 1997, Corpus Christi, TX.

1997-2003 Chairman, Committee for Biomedical Sciences Annual Seminar Series (BCD).


2000 Chairman, Organizing Committee, 12th Annual Conference of the Texas Mineralized Tissue Society, Dallas, TX, 21-23 July 2000.


2002 Chairman of Symposium, The annual meeting of the International Association of Dental Research, San Diego, CA, 6-9 March, 2002.

2002 Chairman of Symposium, Experimental Biology 2002 meeting, April 21-24, San Antonio, CA.


2003 Chairman: Platform session at the Experimental Biology 2003 meeting, April 11-15, San Diego, CA.

2003-2004 Dallas Section of AADR/IADR, Lunch and Learn Series (BCD).

2004 Chairman of Symposium, Experimental Biology 2004 meeting, April 17 – April 21, Washington, DC.

2004 Organizer, Dallas Chapter of the American Association for Dental Research sponsored Technology Day, July 13, Baylor College of Dentistry, Dallas, TX

2005 Chairman: Developmental Biology Platform Session, American Association of Dental Research meeting, March 9-12, Baltimore, MD

2005 Chairman of Symposium, Experimental Biology meeting, April 1-6, San Diego, CA. (Organizer).

2005 Invited to present a Meet-the-Professor session entitled “Craniosynostosis and Suture Biology” at the Annual Meeting of the American Bone and Mineral Society to be held from September 23-27, 2005, Nashville, TN

2007 Chairman of platform session, American Association of Anatomists at the annual Experimental Biology meeting, April 29-May 2, 2007, Washington DC

2007 Chairman, oral session at 85th annual meeting of the International Association of Dental Research, March 23-28, 2007, New Orleans, LA

2008 Chairman, oral session, 37th Annual meeting of the American Association for Dental Research, April 2-5, 2008, Dallas, TX

2008 Chairman, platform session, American Association of Anatomists at the annual Experimental Biology meeting, April 5-9, 2008, San Diego, CA


2009 Chairman of platform session, American Association of Anatomists at the annual Experimental Biology meeting, April 23-29, 2009, New Orleans, LA

2010 Chairman of Symposium, Experimental Biology meeting, April 1-6, Anaheim, CA. (Organizer).

2011 Chairman of Symposium, Experimental Biology meeting, April 9-13, Washington, DC. (Organizer).
2012  Bioengineering Interest Group (BIG-DFW) meeting, January 27, 2012, Dallas, TX (Organizer, 30 attendees).
2013  Bioengineering Interest Group (BIG-DFW) meeting, January 18, 2013, Dallas, TX (Co-Organizer, 54 attendees).
2014  Chairman of Symposium, International Federation of Anatomical Associations, August 18-24, 2014, Beijing, China (Organizer).

OTHER CONFERENCE ACTIVITIES

1998  Judge, Young Investigator Awards, 10th Annual Texas Mineralized Tissue Society Meeting, 14-16 August, 1998, Austin, TX.
1999  Judge, Sarnat Awards, Craniofacial Biology Group, American Association for Dental Research Meeting, March 10-13, Vancouver, BC.
2002  Judge, Sarnat Awards, Craniofacial Biology Group, International Association for Dental Research Meeting, March 7-9, 2002, San Diego, CA.
2003  Judge, Langman Award, Committee of Young Anatomists, American Association of Anatomists at the Experimental Biology 2003 meeting, April 11-15, San Diego, CA.
2003  Judge, Postdoctoral Poster Awards, Committee of Young Anatomists, American Association of Anatomists at the Experimental Biology 2003 meeting, April 11-15, San Diego, CA.
2004  Judge, Sarnat Awards, Craniofacial Biology Group, International Association for Dental Research Meeting, March 10-13, Honolulu, Hawaii.
2004  Judge, Langman Award, Experimental Biology 2004 meeting, April 17 – April 21, Washington, DC.
2004  Judge, Graduate poster award, Experimental Biology 2004 meeting, April 17 – April 21, Washington, DC.
2006  Judge, Sarnat Awards, Craniofacial Biology Group, International Association for Dental Research Meeting, June 28-July 2, 2006, Brisbane, Australia
2009  Presented a Lunch and Learn session “Technology transfer and student and faculty inventors” at the 87th General Session of the joint IADR/AADR, April 1-4, 2009, Miami, FL

PROFESSIONAL MEMBERSHIP

1. American Society for Bone and Mineral Research, 1986-present
3. American Cleft Palate-Craniofacial Association, 1992-present
4. American Association for the Advancement of Science, 1992-present
6. American Dental Association, 1997-present
7. Sigma Xi, 1997-present
8. American Association of Anatomists, 1998-present
9. Friends of the National Institute of Dental and Craniofacial Research, 1998-present
10. Society of Craniofacial Genetics, 2003-2011
MANUSCRIPT REVIEW

1. American Journal of Physiology
2. Calcified Tissue International
4. Plastic and Reconstructive Surgery
5. In Vitro Cellular and Developmental Biology – Animal
6. Microscopy Research and Techniques
7. Journal of Dental Research
8. Cleft Palate-Craniofacial Journal
9. Development
10. The Anatomical Record
11. Archives of Oral Biology
12. Biochimica et Biophysica Acta
13. Cells, Tissues and Organs
14. Orthodontics and Craniofacial Research
15. Cell Transplantation
16. Developmental Dynamics
17. Journal of Pediatric Research
18. Journal of Endodontics
19. Developmental Biology
20. International Journal of Maxillofacial Implants
21. Journal of Anatomy
22. Bone
23. Biomaterials
24. Experimental Biology and Medicine
25. Acta Odontologica Scandinavia
26. Expert Review of Medical Devices
27. Australian Orthodontic Journal
28. Texas Dental Journal
29. European Journal of Orthodontics
30. Clinical Oral Investigations

GRANTS RECEIVED

Principal Investigator

1993-1995 Individual National Research Service Award F32 DEO5622 (NIH/NIDCR) $101,400.00
1996-2003 First Award R29 DE11978 (NIH/NIDCR) $350,000
1998-1999 Supplement to R29 DE11978 (NIH/NIDCR) $2,000
2000-2001 Supplement to R29 DE11978 (NIH/NIDCR) $4,676
2001-2002 Tobacco Initiative (TAMUS-HSC) $75,000
2003-2004 Small Business STTR R41 DE15437 (NIH/NIDCR) $206,522
2003-2005 AADR Student Research Fellowship, Dentsply International (JT Rawlins) $3,000.00
2003-2008 Individual Predoctoral Dental Scientist Fellowship F30 DE014657 (JT Rawlins) $30,000.00
2004-2005: Baylor College of Dentistry, Intramural Grant for visiting fellowship to NIDCR $4,311
2004-2005 RDEAP Grant, Texas A&M University System Health Science Center $15,000
2005-2006 Subcontract, Small Business SBIR R43 DE15893-01 (NIH/NIDCR) $49,220
2005-2007 Small Business STTR R41 DE15437-02 (NIH/NIDCR) $998,601
2007-2008 Grant for periodontology student research proposal (Straumann) $14,511
2007-2009 Subcontract, Small Business SBIR R43 DE17259-01 (NIH/NIDCR) $98,918
2007-2008 Grant for testing dental materials (Dentsply) $71,597
2007-2010 Subcontract, Small Business SBIR Grant R44 DE15437 (NIH/NIDCR) Osseoinductive surface treatment for dental implants $352,716
2011-2012 Use of Natural Dental Implants as a Minimally Invasive Approach to Replacing Teeth (Natural Dental Implants, Inc.) $76,931
2012-2013 Use of Natural Dental Implants as a Minimally Invasive Approach to Replacing Teeth Phase II: (Natural Dental Implants, Inc.) $95,830
2012-2014 NIH/NIDCR R44 DE020204-01 (Primus PI; Opperman PI subcontract) Quick-Set Endodontic Material $368,023

Co-Investigator/ Mentor
1991-1992 Maxillofacial Surgeons Foundation Award (PI JA Persing). $12,000.00
1992-1993 Maxillofacial Surgeons Foundation Award (PI JA Persing). $8,000.00
1994-1995 Maxillofacial Surgeons Foundation Award (PI KY Lin). $10,000.00
1997-1998 Foundation for Orthodontic Research (PI JB Cope). $3,000.00
1998-1999 Baylor Oral Health Foundation (PI RP Harper). $32,000.00
1998-2000 Baylor Oral Health Foundation (PI CD Bishop). $68,000
2003-2006 R01 DE15401 NIDCR (PI R Hinton) $1,161,725
2005-2012 K12 HD052225-01 NIDCR (PI M Packer) $9,500,000
2010-2012 R03 DE020119-01 NIDCR (PI MD Benson) Role of Ephrins in Osteoblast Differentiation $150,000
2012-2013 Delta Dental Oral Health Status of Independent Elders Residents in Assisted Living Facilities in Dallas, Texas - Pilot Study (PI H Tapias) $47,057

Consultant
1999-2004 Comprehensive Oral Health Research Center of Discovery, Johns Hopkins University NIDCR P60 DE13078 Cytokine therapy in craniosynostotic rabbits $451,885
2010-2011 SBIR R43 DE020204-01 NIDCR (Primus PI) Quick-Set Endodontic Material $99,984
2010-2012 SBIR R44 DE017829-02 NIDCR (Harrel PI) Instrument System and Technique for Minimally Invasive Periodontal Surgery (MIS) $678,957

Pending

STANDING COMMITTEE REPRESENTATION AND TASK FORCES
1997-2001 Graduate Committee (BCD)
1997- Biomedical Sciences Resources Committee (BCD)
1998-2003 Biomedical Sciences Chairman's Advisory Committee (BCD)
1998-2001 Research Committee (BCD)
1999-2003 Faculty Development Committee (BCD)
1999-2001 Research Executive Committee Tobacco Initiative (TAMHSC)
2000-2001 Associate Dean for Research Advisory Council (BCD)
2000-2001 Faculty Senate representative for the Graduate School of Biomedical Sciences; Speaker 2001 (TAMHSC)
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2003-2006  Faculty Senate representative for the Graduate School of Biomedical Sciences; Deputy Speaker 2005, Speaker 2006 (TAMHSC)

2003-    Task Force to create a Cell Biology Course in the D1 curriculum (BCD)

2004-    Co Chair, Technology Commercialization Advisory Committee (TAMHSC)
2005-2013 Member, Committee on Committees, Chair 2009-201 (BCD)
2006    Chair, Emerging Technology Advisory Committee (BCD)
2007    Member, Intellectual Property Working Group (TAMUS)
2007-2009 Member, Appointment, Promotions and Tenure Committee (BCD)
2008-2011 Member, Council of Principal Investigators (TAMUS)
2008-present Member, Development Committee, (BCD)
2009-2011 Faculty Senate representative for the College of Dentistry (TAMHSC); Deputy Speaker 2009; Speaker 2010
2009-2013 Member, Intellectual Property Constituent’s Committee (TAMUS)
2013-present Member, TAMU-TAMHSC Faculty Senate Realignment Committee

COURSES TAUGHT

1995-1996 General Histology for M1 students, University of Virginia Medical School
1997-present 6600 General Histology, Graduate and D1 levels (revamped curriculum for electronic labs, and Course Director since 2005)
2000-present 5190 Current Topics in Biomedical Sciences Colloquium, Graduate level (Created curriculum and Course Director since 2000)
2001-present 5V42 Cell and Molecular Biology Track: Histology of Craniofacial Tissues, Graduate level (On curriculum development team, and Course Director since 2001)
2002-2011 5V40 Advanced Human Craniofacial Development, Graduate level (On curriculum development team; lecturing team)
2002-present 5V73 Craniofacial Growth Track: Craniofacial Anomalies, Graduate level (On curriculum development team, and Course Director from 2002-2009)
2003-2007 6680 Cell and Molecular Biology, D1 level (combined into Biochemistry 2008)
2008-present 6510 Biochemistry, D1; member of lecturing team

STUDENT MENTORSHIP

Visiting Professors/Scholars/Clinicians
2006-2009 Dong Mei He (Clinician/China)
2008-2009 Hansen Xu (Clinician/China)

Postdoctoral Fellows and Research Associates
1997-2000 Charles D. Bishop
1997-2000 Peter T. Gakunga
2002-2004 Reiko Shibazaki
2004-2007 Mohammed Elsalanty
2006-2007 Ibrahim Zakhary

Ph.D. Students

External Examiner
1999 David Rice [Helsinki, Finland]
2008 Lindsay Jean McCutcheon [Johannesburg, South Africa]
Primary and Co-Primary Mentor
1997-2004  Katayoun Adab
2006-2010  Elias Kontogiorgos
2007-2009  Uriel Zapata

Committee Member or Prelim. Examiner
1997-1999  Jason Cope
1997-2000  Nikitas Sykaras
1997-2000  Maria Fuentes
1997-2000  Matt Quintero
1999-2002  Pei Kang
1999-2002  Robert Spears
2001-2004  Yiyu Fang
2002-2004  Mohammed Elsalanty
2002-2004  Dong Chung
2001-2004  Patricia Garcia-Morales
2004-      Roberto Carillo
2005-2007  Samer Alaqeel
2006-2007  Julia Chang
2006-2008  Sean Liu
2006-2010  Shankar Venugopalan
2008-2012  Monica Prasad
2011-2012  Afsaneh Rangiani
2011-      Anika Voisey-Rogers
2011-      Leslie Smith
2012-      Maria Serrano
2013       Shuxian Lin

M.S. Students
Primary Mentor
2000-2001  Rita Ne (Endodontics)
2000-2002  Candace Trasatti (Endodontics)
2000-2002  Mohammed Mohammed (Endodontics)
2000-2003  Ana Perez (Endodontics)
2000-2003  Nathan Hodges (Periodontics)
2000-2003  Saud Al-awadhi (Endodontics)
2001-2003  Dan Loftus (Periodontics)
2003-2004  Cathy Pham (Prosthodontics)
2003-2006  Jason (Tony) Dacy (Periodontics)
2004-2005  Shannon Owen (Orthodontics)
2004-2006  Wayne Woods (Orthodontics)
2004-2006  Annette Bitouni (Biomedical Sciences)
2005-2008  Christine Foley (Periodontics)
2007-2010  Michelle Newby (Prosthodontics)
2007-2008  Juan Ramirez (Prosthodontics)
2008-2010  Jelani Washington (Endodontics)
2008-2011  Stephen Walker (Periodontics)
2009-2011  Veera Malavia (Biomedical Sciences)
2010-2012  Richard Derksen (Prosthodontics)
2011-2013  Carlos Sevilla (Prosthodontics)
Opperman LA, Curriculum Vitae

Committee Member

1998-1999  Julio Gaitan (Endodontics)
1998-2000  Karla Ham (Endodontics)
2000-2003  Immanuel Sigalas (Endodontics)
2000-2001  Mercedes Dominguez (Endodontics)
2003-2005  Monica Chamorro (Endodontics)
2003-2006  John Roberts (DDS/MS)
2004-2006  Aparna Naidu (Oral pathology)
2004-2006  Ann Nguyen (Orthodontics)
2007-2012  Lucy Nagashima (Prosthodontics)
2008-2012  Christopher Massey (Orthodontics)
2008-2012  Matt McBride (Biomedical Sciences)
2010-2012  Stephen Ruso (Orthodontics)
2011-2012  Wendy Vu (Biomedical Sciences)
2011-2013  Poorva Gharpure (Biomedical Sciences)
2011-2013  Stacy Beltran (Periodontics)
2012-2013  Stephanie Spann (Health Education)
2012-2013  Ross Pulver (Orthodontics)
2013-2013  Brittany Wright (Orthodontics)

Undergraduate Students, Dental Students and Resident Certificate Trainees

1998-1999  Jay Crossland (BCD 1st year)
1999-2000  Victor Galanis (UTD 2nd year)
2000-2001  Shawn Seifikar (UTD 2nd year)
2001-2001  Nikeya Carter (MSU 2nd year)
2001-2001  Kenya Washington (MSU 2nd year)
2002-2002  Charles Allen (BCD 2nd year)
2002-2002  Ngoc-Tuyen Dinh Ong (BCD 2nd year)
2002-2003  Waheed Mohamed (BCD 1st and 2nd year)
2003-2003  David Farnsworth (BCD 1st year)
2004-2005  Jonathon Kimes (BCD 1st year)
2005-2006  Saosat Olatunbosun (BCD 2nd year)
2005-2007  Molina Cosby (BCD 1st year)
2006-2007  Laura Ryan (BCD 1st year)
2006-2007  Paul Shahwan (BCD 1st year)
2007-2008  Niyati Mehta (BCD 1st year)
2007-2008  Joseph Kayne (BCD 1st year)
2007-2008  Allen Mortimer (BCD Pre-1st year)
2008-2009  Benjamin Cozad (BCD 1st year)
2008-2009  Jeremy Fike (BCD 1st year)
2009-2010  Kenner Misner (BCD 1st year)
2009-2010  Caytlyn Foy (BCD 1st year)
2009-2010  Patrick Whittington (BCD 1st year)
2009-2011  David Bird (Endodontics Certificate)
2009-2011  Bob Gatti (Endodontics Certificate)
2009-2011  Rob Hale (Endodontics Certificate)
2010-2011  Corbin Gatlin (BCD 1st year)
2010-2011  Bradley Crossfield (BCD 1st year)
2012-2013  Christopher Gonzales (BCD 1st year)
2013-2013  Eberechukwu Iheanacho (BCD 1st year)
High School Students
1998-2000 Avery Williams
1999-2000 Danny Munoz

FACULTY MENTORSHIP COMMITTEES
2008-2010 Dr. Khaldoun Ajlouni (Dept. Restorative Sciences)
2009-present Dr. M. Douglas Benson (Dept. Biomedical Sciences)
2010-present Dr. Elias Kontogiorgos (Dept. Restorative Sciences)
2011-present Dr. Venu Varanasi (Dept. Biomedical Sciences)

SCIENTIFIC PUBLICATIONS

PATENTS – Assigned to CRANIOTECH ACR DEVICES, LLC


FULL LENGTH ARTICLES


Opperman LA, Curriculum Vitae

September 2013


100. McBride MD, Campbell PM, Opperman LA, Dechow PC, Buschang PH, How does the amount of surgical insult affect bone around moving teeth? AJODO (In Press).


BOOK CHAPTERS


BRIEF COMMUNICATIONS


PUBLISHED ABSTRACTS


46. Ong N-T, Rawlins JT, Opperman LA. Tgf-β2 Regulates Fgfr1 But Not Fgfr2 mRNA Expression in Fetal Rat Coronal Sutures. JDR (Spec Iss A), 0408, 2003.
47. Rawlins JT, Opperman LA Tgf-β2 Down Regulates Twist and Up Regulates Msx2 expression in Fetal Rat Coronal Sutures. JDR (Spec Iss A), 1518, 2003.


64. Opperman LA, Fernandez CF 2005 Erk1/2 signaling is required for Smad2 and Tgf-β2 induced Erk1/2 expression in cranial bones but not in cranial sutures. FASEB J (In Press).


69. Wang Q, Dechow PC, Strait DS, Carlson DS, Opperman LA Heredity of sutural patterns at the pterion in rhesus monkeys. FASEB J. 2006 20:A870


73. Liu S, Brugler B, Ceen RF, Buschang PH, Opperman, LA Bone stimulation using continuous or intermittent forces to expand sutures. J Dent Res 86(Spec Iss A0768, 2007 (www.dentalresearch.org)


96. San Miguel SM, Opperman LA, Svoboda KK Antioxidants Increased In Vitro Wound Healing of Nicotine-Treated Oral Fibroblasts FASEB J 2010 24:181.2
Opperman LA, Curriculum Vitae

September 2013


UNPUBLISHED ABSTRACTS AND CONFERENCES


35. Opperman LA. Cellular and molecular regulation of suture development and growth. 79th General Session of the International Association of Dental Research, Chiba, Japan, June 27-30,


in craniosynostotic rabbits. 59th Annual Meeting of the American Cleft Palate-Craniofacial Association, Seattle, WA, April, 2002.


Annual Meeting of the American Cleft Palate-Craniofacial Association, April 4-9, The Kingston Plantation, Myrtle Beach, SC. (2005).


65. Elsalanty ME, Zakhary I, Por Y-C, Barcelo CR, Genecov DG, Salyer KE, Opperman LA Dept. Biomedical Sciences, Texas A&M Health Science Center, Baylor College of Dentistry, Dallas, TX Developing Devices and Procedures for Healing Extra-Large Bone Defects in the Craniofacial Region. 9th International Conference on the Chemistry and Biology of Mineralized Tissues, November 4-8, The Lakeway Inn, Austin, TX, 2007.


CURRICULUM VITAE
Chunlin Qin D.D.S., M.S., Ph.D.
Date of Preparation: March, 2013

I. GENERAL INFORMATION

A. PERSONAL INFORMATION

Place of Birth: Heilongjiang Province, People’s Republic of China
Citizenship: U.S.A
Permanent Residency: U.S.A.
Home Address: 7121 Occidental Rd
Plano, TX 75025
Home Telephone: 972-517-1769
Home Email: chunlin.qin@gmail.com
University Address: Department of Biomedical Sciences
Baylor College of Dentistry
Texas A &M University System Health Science Center
3302 Gaston Ave, Dallas, TX 75246
Texas, USA
University Telephone: 214-828-8292
University FAX: 214-874-4538
University Email: cqin@bcd.tamhsc.edu

B. EDUCATION

1994-1998 Ph.D. in Dentistry (Histopathology/Biochemistry)
Department of Oral Pathology
Okayama University Graduate School of Dentistry, Okayama, JAPAN
(Ph.D. obtained in March, 1998)

1986-1989 Master Degree of Dentistry (Histopathology/oral Surgery)
Department of Oral and Maxillofacial Surgery
Harbin Medical University School of Dentistry, Harbin, CHINA.
(Master Degree obtained in June, 1989)

1978-1983  D.D.S. Harbin Medical University School of Dentistry, Harbin, CHINA
            (D.D.S. obtained in June, 1983)

C. POSTGRADUATE TRAINING

1998-2002  Postdoctoral Fellow – Department of Basic Sciences
            The University of Texas Health Science Center at
            Houston Dental Branch, Houston, Texas, USA

1993-1994  Visiting Scientist – Department of Oral Pathology
            Okayama University School of Dentistry, Okayama, JAPAN

            Asahi University School of Dentistry, Gifu, JAPAN

D. ACADEMIC APPOINTMENTS

2009 - Present  Associate Professor (with tenure)
            Department of Biomedical Sciences
            Texas A&M Health Science Center Baylor College of Dentistry,
            Dallas, Texas, USA

2006-2009  Assistant Professor (Tenure-track)
            Department of Biomedical Sciences
            Baylor College of Dentistry
            Texas A &M University Health Science Center
            Dallas, Texas, USA

2005-2006  Assistant Professor (Tenure-track)
            Department of Endodontics
            The University of Texas Health Science Center at
            Houston Dental Branch, Houston, Texas, USA

2003-2005  Assistant Professor (Research)
            Department of Endodontics & Periodontics
            The University of Texas Health Science Center at
            Houston Dental Branch, Houston, Texas, USA

1998-1999  Associate Professor
            Department of Oral and Maxillofacial Surgery
            Harbin Medical University School of Dentistry, Harbin, CHINA
1989-1992 Senior Assistant Professor (Lecturer)
Department of Oral and Maxillofacial Surgery
Harbin Medical University School of Dentistry, Harbin, CHINA

1983-1986 Assistant Professor
Department of Endodontics & Periodontics
Harbin Medical University School of Dentistry, Harbin, CHINA

E. HOSPITAL APPOINTMENTS

1989-1992 Lecturer/Senior Resident, Department of Oral and Maxillofacial Surgery
Harbin Medical University School of Dentistry, Harbin, CHINA

1983-1986 Assistant Professor/Resident, Department of Endodontics and Periodontics
Harbin Medical University School of Dentistry, Harbin, CHINA

F. HONORS, AWARDS, FELLOWSHIPS

2009-2012: Secretary and Treasurer, International Association for Dental Research (IADR)/American Association for Dental Research (AADR) Mineralized Tissue Group

January, 2010 Recipient of “Basic Science Faculty Research Award”, Texas A & M University Health Science Center Baylor College of Dentistry, Dallas, TX, USA

November, 2007 Recipient of “Best Poster Award”, 9th International Conference on Chemistry and Biology of Mineralized Tissues (ICCBMT), Austin, TX, November 4-8, 2007. USA

November, 2001 Recipient of “New Investigator Award”
The Seventh International Conference on Chemistry and Biology of Mineralized Tissues, Jacksonville, FL, USA

1996 Recipient of “Hard Tissue Biology Award”
Japanese Society of Hard Tissue Biology, Tokyo, Japan

1990 Rotary Club International-Yoneyama Memorial Fellowship
Okayama University Graduate School of Dentistry, Okayama, JAPAN

1992-1993 Sagawa Memorial Health Foundation Visiting Scientist Fellowship
G. OTHER APPOINTMENTS

2003-present  Honorary/Visiting Professor
Harbin Medical University School of Dentistry Research
Harbin, CHINA

II. RESEARCH

A. BIBLIOGRAPHY

1. BOOKS AND/OR BOOK CHAPTERS:


2. REFEREED ARTICLES IN JOURNALS (Published/Accepted, Since 1990)


3. PROCEEDINGS


4. MANUSCRIPTS SUBMITTED

5. ABSTRACTS (Published/Accepted):


on the Chemistry and Biology of Mineralized Tissues (10th ICCBMT), Carefree, Arizona, USA, P55, November 7-12, 2010


20. Wang X, Xie Y, Sun Y, Feng J, Qin C: The expression of FAM20C (DMP4) during odontogenesis and osteogenesis. J Dent Res; 89 (Spec Iss A); Abstract #905, 2010

21. Sun Y, Prasad M, Wang X, Zhu Q, Feng J, Qin C: Cleavage-site residue substitution blocks processing of DMP1 in vivo. J Dent Res; 89 (Spec Iss A); Abstract #96 2010


31. Maciejewksa I, Qin D, Huang B, Bonewald LF, Butler WT, Qin C: The NH$_2$-terminal and COOH-terminal Fragments of Dentin Matrix Protein 1 (DMP1) Are Localized Differently in Bone or Dentin. the 9th International Conference on Chemistry and Biology of Mineralized Tissues (ICCBMT), Austin, TX, November 4-8, 2007, Program: p 21 (Oral Presentation).

32. Huang B, Peng T, Butler WT Qin C: Identification and Characterization of the Proteoglycan Form of Rat Dentin Sialoprotein. The 9$^{th}$ ICCBMT meeting, Austin TX, Nov. 4-9, 2007, Program: p70.

33. Qin D, Maciejewksa I, Huang B, Butler WT, Wygant JN, McIntyre BW, Qin C: Expression of SIBLING proteins in the developing and mature molar dentin of rats at different ages. The 9$^{th}$ ICCBMT meeting, Austin TX, Nov. 4-9, 2007 Program: p 53.

34. Huang B, Qin D, Maciejewksa I, Sun Y, Peng T, Butler WT Qin C: Distribution of SIBLING Proteins in the Organic and Inorganic Phases of Rat Dentin and Bone. The 9$^{th}$ ICCBMT meeting, Austin TX, Nov. 4-9, 2007 Program: p 70

35. Lu Y, Xie S, Yu S, Qin C, Bonewald L, Feng JQ: The DMP1 C-terminal fragment recapitulates all functions of full length DMP1 in odontogenesis and osteogenesis in vivo. The 9$^{th}$ ICCBMT meeting, Austin TX, Nov. 4-9, 2007 Program: p 20


40. Moses K, Qin C, Butler WT: SIBLING proteins in molar reactionary dentin of different age rats. Abstract accepted for oral presentation at the American Association of Endodontics (AAE), Dallas, Texas, USA, April 6-9, 2005.


accepted for oral presentation at the 8th International Conference on the Chemistry & Biology of Mineralized Tissues, Banff, Alberta, Canada, October 17-22, 2004.


Abstracts Submitted:

6. INVITED ORAL PRESENTATION:

November 7, 2012: DMP 1 and FAM20C (DMP4) in biomineralization and phosphate homeostasis. Invited Seminar Speech at University of Rochester Medical Center School of Medicine and Dentistry Rochester NY


June 25, 2012: Dentin matrix proteins in the formation of tooth and bone. Invited Seminar Speech at Beijing University-Shenzhen Hospital, Shenzhen, China.


November 3, 2011: Dentin matrix proteins in biomineralization and phosphate homeostasis. Seminar lecture at Texas A&M Health Science Center Institute of Biosciences and Technology, Houston TX, USA

June 28, 2011: Dentin matrix proteins in biomineralization and phosphate homeostasis. Seminar lecture at Harbin Medical University School of Dentistry, Harbin, China

April 11, 2011: Regulation of Biomineralization by Dentin Matrix Protein 1 (DMP1). Symposium lecture on Molecular Mechanisms in Bone, Tooth & Cartilage Development, Maturation and Regeneration at the 2011 American Association of Anatomists (AAA) Annual Meeting/Experimental Biology (EB)

July 28, 2010: Proteolytic processing of dentin matrix protein 1 is essential to the formation of bone and tooth. Invited seminar lecture at Hospital For Special Surgery, New York, USA

June 21, 2010: The post-translational modifications of proteins in the matrices of bone and dentin. Invited seminar speech at Peking University School of Stomatology Beijing, China

June 17, 2010: Osteogenesis and odontogenesis. Invited speech at Harbin Medical University 1st Clinical College, Harbin, China

June 14, 2010: Protein post-translational modifications and mineralized tissue formation. Invited seminar speech at Jilin University School of Dentistry, Changchun, China

June 13, 2010: Dentin sialophosphoprotein (DSPP) and dentin matrix protein 1 (DMP1) in dentinogenesis. Invited seminar speech at the Fourth Military University School of Stomatology, Xi’an, China

November 19, 2009: Post-translational modifications of dentin and bone matrix proteins. Invited seminar speech at University of Illinois at Chicago College of Dentistry

November 19, 2009: Dentin matrix proteins – Invited special seminar lecture at University of Illinois at Chicago College of Dentistry, Chicago, Illinois, USA
October 10, 2009: Graduate programs in USA dental schools – Invited speech at Harbin Medical University School of Dentistry, Harbin, China

September 23, 2009: Posttranslational modifications of dentin matrix proteins – Invited symposium speech at the 2nd Meeting of IADR Pan Asian Pacific Federation (PAPF) and IADR Asia/Pacific Region (APR), Wuhan, China.

July 24, 2008: Studies of dentinogenesis using modern molecular approaches – transgenic and knockout methodology. Invited seminar speech at Wuhan University School of Dentistry, Wuhan, China

July 15, 2008: Non-collagenous proteins in dentinogenesis and osteogenesis – Invited seminar speech at Jilin University School of Dentistry, Changchun, China

September 17, 2007: Posttranslational modifications of non-collagenous proteins in the formation of bone and dentin. Seminar Speech at Harbin Institute of Technology Department of Life Science and Engineering Bio-X Center, Harbin, China

September 12, 2007: Posttranslational modifications of DMP1 and DSPP. Kenote Speaker at the 8th Annual Meeting of IADR Chinese Division, Xi’an, China

August 24, 2007: DMP1 and DSPP in Dentinogenesis and Osteogenesis. Invited Seminar Lecture for Residents and Postgraduates in the Department of Endodontics at Baylor College of Dentistry, Texas A & M University System Health Science Center, Dallas, TX, USA

November 16, 2006: Strategy and Plan in Biomedical Research. Invited speech at The Second Clinical College of Harbin Medical University, Harbin China

March 10, 2006: Dentin Matrix Protein 1 Is a Proteoglycan. Invited speaker at the 35th Annual Meeting of the American Association for Dental Research (AADR) - Late Breaking News Session. Orlando, FL, USA.

February 23, 2006: Dentin matrix protein 1 & dentin sialophosphoprotein: Posttranslational modifications and tissue localizations. Invited Seminar Lecture at Baylor College of Dentistry, Texas A & M University System Health Science Center

September 14, 2005: PTMs of DMP1 and DSPP. Invited speaker at the 2005 Gordon Research Conference on Small Integrin-Binding Proteins, At Big Sky Resort, Big Sky, MT, USA

January 12, 2005: Dentin matrix protein 1 and dentin sialophosphoprotein - Posttranslational modifications and their roles in biomineralization. Invited Seminar Lecture at University of Alabama at Birmingham School of Dentistry

December 16, 2004: Dentin matrix protein 1 and dentin sialophosphoprotein. Invited Seminar Lecture at University of Pennsylvania School of Dental Medicine
November 19, 2004:  The Proteolytic processing of dentin matrix protein 1 and dentin sialophosphoprotein. Selected Faculty Platform Presentation at the University of Texas-Houston Health Science Center’s 10th Research Day

November 3, 2004:  Dentin matrix protein 1 and dentin sialophosphoprotein. Invited Seminar Lecture at University of Missouri at Kansas City School of Dentistry.

October 21, 2004:  Unique Similarities between Dentin Sialophosphoprotein and Dentin Matrix Protein 1. The 8th International Conference on the Chemistry and Biology of Mineralized Tissues. Banff Center, Alberta, Canada.

September 29, 2004:  Dentin matrix protein 1 and dentin sialophosphoprotein - proteolytic processing, tissue localization and isoforms. Invited Seminar Lecture at University of Texas-Health Science Center at San Antonio Dental School

August 2, 2004:  Dentin matrix proteins in dentinogenesis. Invited Seminar Lecture at Harbin Medical University School of Dentistry, Harbin, CHINA

March 13, 2003:  Bone DMP1 is proteolytically processed. The 32nd Annual Meeting of American Association for Dental Research, San Antonio, TX USA.

May 10, 2002:  Identification of dentin sialophosphoprotein in dentin ECM. The 3rd International Conference on Osteopontin and Related Proteins. San Antonio, TX, USA.

March 6, 2002:  Dentin sialophosphoprotein (DSPP) in dentin extracellular matrix (ECM). The 80th General Session of International Association for Dental Research, San Diego, CA USA

November 7, 2001  The expression of dentin sialophosphoprotein in osteoblasts. The 7th International Conference on the Chemistry and Biology of Mineralized Tissues. Ponte Vedra Beach, Florida, USA

April 6, 2000  Sialoproteins from rat bone. The 78th General Session of International Association for Dental Research, Washington DC, USA

July 22, 2000  Sialoproteins from rat bone. The 12th Annual Conference of Texas Mineralized Tissue Society, Dallas, Texas, USA

July 5, 1996  The BMP-induced ectopic bone formation in young and adult rats: a comparative study. The 2nd International Meeting on Apatite/Implant, Tokyo, Japan

March 15, 1995  The effects of aging on the ectopic bone formation induced by bone morphogenetic proteins. The 3rd Annual meeting of Japanese Society of Hard Tissue Biology, Kokura, Japan

7. POSTER PRESENTATION:

November 11-12, 2010:  Proteolytic Processing Is Essential to the Formation of Bone and Dentin. “Texas A&M HSC Research Symposium 2010”, College Station, TX, USA
B. AREAS OF RESEARCH INTEREST

1. 1998 – present (Current)

The main research interest of Dr. Qin’s group is to investigate the roles of the extracellular matrix (ECM) proteins in the formation and mineralization of bone, dentin and cementum. One of Dr. Qin’s current research focuses on one category of ECM proteins known as the SIBLING (Small Integrin-Binding Llgand, N-linked Glycoprotein) family, which includes dentin matrix protein 1 (DMP1), dentin sialophosphoprotein (DSPP), bone sialoprotein (BSP), osteopontin (OPN) and matrix extracellular phosphoglycoprotein (MEPE). These SIBLING proteins are believed to play key biological roles in the process of biomineralization. However, details about their precise involvement in controlling mechanisms of mineralization are unknown. Dr. Qin’s laboratory is seeking to understand the overall processes of osteogenesis, dentinogenesis and cementogenesis by focusing upon the nature, metabolism, tissue/cell localization and functions of DMP1, DSPP, BSP and OPN. Dr. Qin believes that the posttranslational modifications of these proteins play crucial roles in the mechanisms and timing of reactions that participate in the formation and mineralization of bone, dentin and cementum. Dr. Qin has been performing studies to test this overall hypothesis, using multidisciplinary approaches, which include protein chemistry, histomorphometry, in vivo (transgenic/knockout) gene targeting and in vitro gene targeting methods. In particular, Dr. Qin’s laboratory has recently generated several types of mutant mouse models to study the roles of DMP1 and DSPP in osteogenesis, dentinogenesis and cementogenesis. Another focus of Dr. Qin’s current research work is to study the structure, tissue/cell localization and biological roles of FAM20C (Family with sequence similarity 20, member C, also known as “dentin matrix protein 4”); a new molecule which is highly expressed in the mineralized tissues and about which very little is known. Recently, Dr. Qin’s group generated Fam20C-conditional knockout mice; the dentin, cementum, enamel and bone in the Fam20C-deficient mice show remarkable defects when compared with the normal mice.

2. 1992 – 1998 (Past)

(1). 1993-1998 – BMP-induced Ectopic Bone Formation

While studying and working at Department of Oral Pathology of Okayama University School of Dentistry (Japan), my research work involved the isolation and characterization of bone morphogenetic proteins (BMP) and the ectopic bone formation induced by these proteins. In particular, my research interests were focused on the effects of aging on bone formation induced by BMP. The aims of these studies were to
elucidate the age-related changes in bone formation and to develop new methods and factors that will improve osteogenesis in the aged people. It should be noted here that many patients who need bone augmentation (e.g., alveolar bone atrophy) are aged people. During this four and half year period, I also involved in other research projects that included the ossification mode of different BMP-carrier systems and gene expression of bone matrix proteins and amelogenin in odontogenic tumors.

While working at Asahi University School of Dentistry (Japan), my research interests were focused on the elucidation of histogenesis and cytogenesis of salivary gland lesions and tumors. In particular, I focused on the immunolocalization of a variety of macromolecules in lymphoepithelial lesions, pleomorphic adenomas, Warthin’s tumors, myoepitheliomas, clear cell carcinomas, adenoid cystic carcinomas, mucoepidermoid carcinomas and malignant pleomorphic adenomas.

C. MAJOR, CURRENT RESEARCH PROJECTS:

1. Proteins Involved in Osteogenesis and Dentinogenesis:
This project is based on the overall hypothesis that non-collagenous extracellular matrix (ECM) proteins play vital roles in the formation of dentin by odontoblasts and in the homeostatic mechanisms of formation and breakdown of bone by osteoblasts, osteocytes and osteoclasts. Specifically, the project is focusing upon the biosynthetic pathways and biological functions of dentin matrix protein 1 (DMP1) and dentin sialophosphoprotein (DSPP). DSPP is proteolytically processed into dentin sialoprotein (DSP) and dentin phosphoprotein DPP, and that DPM1 is processed into 37 kDa and 57 kDa fragments. Our detailed sequence analyses show that four cleavage sites in DMP1 and two in DSPP are X-Asp bonds, strongly suggesting that these two proteins are processed by the same unidentified proteinase. We believe that these processing events play significant, crucial roles in the mechanisms and timing of reactions that participate in conversion of osteoid to bone and predentin to dentin and that failure to process these two proteins will give rise to abnormal phenotypes similar to those when Dmp1 or Dspp genes are mutated or knocked out. This current project is aimed to determine which enzyme(s) is responsible for catalyzing the proteolytic processing of DMP1 and DSPP, to study the effects of the processed fragments of DMP1 and DSPP on mineralization and to elucidate the biosynthetic pathways of the cleaved products of DMP1 and DSPP. We anticipate that the results of these studies will unfold greater understanding of the processes of osteogenesis and dentinogenesis.

2. Proteoglycan Forms of DMP1 and DSPP:
Dr. Qin’s group discovered that the NH2-terminal fragment of DMP1 occurs as a proteoglycan in the extracellular matrix of bone and dentin. Dr. Qin designated the proteoglycan form of DMP1-NH2-terminal fragment as “DMP1-PG”. Dr. Qin’s group has characterized DMP1-PG and identified the linking site between the glycosaminoglycan (GAG) and the core protein. Amino acid sequence alignment analysis showed that the glycosaminoglycan attachment domain regions are highly conserved among a wide range of species from caiman to the Homo sapiens, indicating that the GAG may be critical for the basic biological functions of DMP1. Dr. Qin and others discovered that the NH2-terminal fragment of DSPP (i.e., DSP) in the extracellular matrix of dentin also occurs as a proteoglycan (referred to as “DSP-PG”). Dr. Qin’s group is performing a series of experiments to investigate the biological functions of DMP1-PG and DSP-PG.

3. The Structure and Function of FAM20C (DMP4):
Dr. Qin’s group has recently begun to study the structure, tissue/cell localization and biological roles of FAM20C (Family with sequence similarity 20, member C, also known as "dentin matrix protein 4") FAM20C is a new molecule that is highly expressed in the mineralized tissues. Information regarding FAM20C is very
much limited. Dr. Qin’s group generated Fam20C-conditional knockout mice; the dentin, cementum, enamel and bone in the Fam20C-deficient mice show remarkable defects when compared with the normal mice. Additionally, Dr. Qin’s laboratory has generated different forms of recombinant FAM20C protein and the antibodies against FAM20C.

D. RESEARCH SUPPORTS (GRANTS/CONTRACTS):

1. NATIONAL:
   (1) Awarded:

   a): 
   Source: NIH/National Institute of Dental and Craniofacial Research
   Title: Studies of the Roles of DMP1 and DSPP in Osteogenesis and Dentinogenesis
   Time Period: July 1, 2009 – June 30, 2013 (2R01DE005092 32-35; Priority Score = 110, Percentile = 0.2)
   Direct Costs: $873,000
   Indirect Costs: $405,944
   Total costs: $1,278,944
   Role: Principal Investigator

   b): 
   Source: NIH/National Institute of Dental and Craniofacial Research
   Title: DMP1 Mutations: Defects in Odontogenesis
   Time Period: September 1, 2008 – June 30, 2013 (R01 DE015209:1-5)
   Direct Costs: $1,162,500
   Indirect Costs: $558,000
   Total costs: $1,720,500
   Role: Co-Principal Investigator (PI, Feng)

   c): 
   Source: NIH/National Institute of Dental and Craniofacial Research
   Title: Studies of the Roles of DMP1 and DSPP in Osteogenesis and Dentinogenesis
   Time Period: September 23, 2009 – August 31, 2011
   (3R01DE005092-32A1S1 - American Recovery and Reinvestment Act of 2009 Competitive Revision Grant Award; Priority Score = 12, Percentile = N/A)
   Direct Costs: $242,500
   Indirect Costs: $112,762
   Total Costs: $355,262
   Role: Principal Investigator

   d): 
   Source: NIH/National Institute of Dental and Craniofacial Research
   Title: Studies of the Roles of DMP1 and DSPP in Osteogenesis and Dentinogenesis
   Time Period: April 23, 2010 – August 31, 2011
(3R01DE005092-32A1S2: American Recovery and Reinvestment Act of 2009 Administrative Supplement - Equipment Grant Award; Priority Score = N/A, **Percentile** = N/A)

Total Costs: $72,303
Role: Principal Investigator

e): Source: NIH/National Institute of Dental and Craniofacial Research
Title: Studies of Proteins Involved in Dentinogenesis
Time Period: July 1, 2004 – June 30, 2009 (5R01DE005092:27-31; Priority Score = 183, **Percentile** = 6.5)
Direct Costs: $981,170
Indirect Costs: $461,432
Total Costs: $1,442,602
Role: Principal Investigator

f): Source: NIH/National Institute of Dental and Craniofacial Research
Title: Studies of Proteins Involved in Dentinogenesis
Time Period: June 1, 2009 – May 31 2010
(5R01DE005092-31S1 - American Recovery and Reinvestment Act of 2009 Grant Award for Summer Research Students; Priority Score = N/A, **Percentile** = N/A)
Direct Costs: $10,000
Indirect Costs: $4,650
Total Costs: $14,650
Role: Principal Investigator

(2) Pending:
Source: NIH/National Institute of Dental and Craniofacial Research
Title: The Roles of FAM20C (DMP4) in Odontogenesis and Osteogenesis
Time Period: December 1, 2012 – November 30, 2017 (1R01DE022549-01A1; Priority Score = 20, **Percentile** = 5)
Direct Costs: $1,250,000 (Requested Direct Costs)
Indirect Costs: $575,000 (Requested Indirect Costs)
Total Costs: $1,825,000 (Requested Total Costs)
Role: Principal Investigator

2. STATE:
None

3. UNIVERSITY:
None

E. PROFESSIONAL AND SCIENTIFIC ORGANIZATIONS
1. The International Association for Dental Research (IADR) and American Association for Dental Research (AADR)
2. American Society of Anatomists (AAA)

F. JOURNAL REFEREE:

1. Journal of Dental Research: (2009-2012: regular reviewer; other time period: ad hoc)
2. Journal of Biological Chemistry: ad hoc
3. Calcified Tissue International: ad hoc
4. Archives of Oral Biology: ad hoc
5. European Journal of Oral Science: ad hoc
6. Oral Oncology (European Cancer Society): ad hoc
7. Cell Tissue Research: ad hoc
8. Journal of Endodontology (2010-2012: regular reviewer; other time period: ad hoc)
9. Journal of Cellular Physiology: ad hoc
10. Pathology & Oncology Research: ad hoc
11. Acta histochemica: ad hoc
12. Cells Tissues Organs: ad hoc
15. Matrix Biology: ad hoc
16. Journal of Rheumatology: ad hoc

G. OTHER PROFESSIONAL ACTIVITIES:

National/International Consultantships:

March 29-April 1, 2012: Reviewer, NIH Craniofacial Development and Musculoskeletal Tissue Engineering Review Panel (ZRG1 MOSS-A 02) - Reviewer of NIH R01 and R21 Applications

March 29-30, 2012: Reviewer, NIH/NIDCR Special Emphasis Panel - Review of Extramural Loan Repayment Applications (ZDE1 MK)

February 2-3, 2012: Reviewer, NIH/NIDCR Skeletal Biology Development and Disease (SBDD) Study Section - Review of NIH R01 and R21 Applications

March 30, 2011: Reviewer, NIH/NIDCR Extramural Loan Repayment Applications Reviewer (ZDE1 MK)

February 14, 2011: Reviewer, NIH/NIDCR Special Emphasis Panel (MOSS-B) - Review of NIH R01 Applications

May 4, 2010: Reviewer, NIH/NIDCR Extramural Loan Repayment Applications Reviewer (ZDE1 MK)

March 24, 2010: Reviewer, NIH/NIDCR Special Emphasis Panel (MOSS-B 02 S) - Review of NIH R01 Applications
June 2009: Reviewer, NIDCR Special Grant Review Committee: Review of F, K, and R03 Applications (2009/10 Council DSR1)

April 2009: Reviewer, NIH/NIDCR Extramural Loan Repayment Applications (2009/08 Council ZDE1 MK 23)

October 2008: Reviewer of the NIH/NIDCR Dental and Enamel Special Emphasis Panel for R01 grant applications (ZRG1 MOSS-K 09)

April 2008: Reviewer of the NIH/NIDCR Special Emphasis Panel for Loan Repayment Applications (ZDE1-SK 29)

July 2004: Reviewer of the NIH/NIDCR Special Emphasis Review Panel for R01 grant applications (ZRG1 MOSS-B 02)

2005-2008: Member, Ethics Committee, American Association for Dental Research

2009-2012: Editorial Board Member, Journal of Dental Research

2010-2012: Editorial Board Member, Journal of Endodontics

III. TEACHING ACTIVITIES

A. BASIC SCIENCES IN DENTISTRY

2008-Present: Lectures on “Macromolecules, amino acids, proteins” and “Intracellular compartments and molecule transport” (Course: “Cell and Molecular Biology Part I”) for postgraduates and residents at Baylor College of Dentistry, Texas A &M University System Health Science Center, Dallas, TX, USA – Dr. Qin is the Director for this course. Total Clock **hours: 4/Year**

2007-Present: Lectures on “Dentin-pulp Complex and Dentin Matrix Proteins & Disorders” (Course: “Cell and Molecular Biology Part II”) for postgraduates and residents at Baylor College of Dentistry, Texas A &M University System Health Science Center, Dallas, TX, USA Total Clock **hours: 2/Year**

2007-Present: Lectures on “Periodontium and Oral Mucosa” (Course: “Oral Histology”) for dental hygiene course at Baylor College of Dentistry, Texas A &M University System Health Science Center, Dallas, TX, USA Total Clock **hours: 2/Year**
2007-
Lectures on “Periodontium” (Course: “Oral Histology”) for dental students (undergraduates) at Baylor College of Dentistry, Texas A &M University System Health Science Center, Dallas, TX, USA
Total Clock hours: 2/Year; Lab practice hours: 8/Year

2006-
Lectures on “Amino Acids, Proteins, Enzymes, Vitamins, Intracellular compartments and transport” (Course: “Biochemistry Molecular and Cell Biology”) for dental students (undergraduates) at Baylor College of Dentistry, Texas A &M University System Health Science Center, Dallas, TX, USA – Dr. Qin was the Co-director for this course from 2007 to 2011.
Total Clock hours: 10/Year

2005 - 2006
Lectures on Odontogenic Cysts and Neoplasms (Course: “General Oral Pathology”) for dental hygiene students at the University of Texas-Houston Health Science Center Dental Branch, Houston, TX, USA
Total Clock hours: 3

2005 - 2006
Lectures on Dentin Pulp Complex and Dentin Matrix Proteins & Disorders (Course: “Development, Structure and Function of Oral Tissues”) for Postgraduates at the University of Texas-Houston Health Science Center Dental Branch, Houston, TX, USA
Total Clock hours: 2

B. CLINICAL TEACHING

1995-1998
As a PhD student, I gave lectures (in English) for the Oral Pathology course on “Salivary Gland Tumors”, “Odontogenic Cysts and Tumors”, “Oral Mucosa Diseases and Precancer Lesions”, and supervised Oral Pathology laboratory practice for dental students (D3) at Okayama University School of Dentistry, Okayama, JAPAN.
Total clock hours: ~18

1989-1991
Lecture on “Management of Tumors in the Head and Neck Region”, and “Trauma in the Oral and Maxillofacial Region” (in Chinese) for Year 4 (D4) dental students at Harbin Medical University School of Dentistry, Harbin, CHINA
Total clock hours: 5

1985-1986
Lecture on “Periodontal Diseases” and “Diseases of the Oral Mucosa” (in Chinese) for Year 4 (D4) dental students at Harbin Medical University School of Dentistry, Harbin, CHINA
Total clock hours: 4
C. TEACHING AS A CLINICAL INSTRUCTOR

1989-1991 As a Senior Assistant Professor (Lecturer), I supervised Year 5 (D5) dental students for their clinical training in the Department of Oral and Maxillofacial Surgery, Harbin Medical University School of Dentistry, Harbin, CHINA

1985-1986 As an Assistant Professor, I supervised Year 5 (D5) dental students for their clinical training in the Department of Endodontics & Periodontics, Harbin Medical University School of Dentistry, Harbin, CHINA

D. SERVICES IN SUPERVISING COMMITTEES FOR MASTERS’/Ph.D. DIRECTED DISSERTATIONS AND DENTAL STUDENTS SUPERVISED

Ph.D. Dissertations Directed:

2012- Priyam Jani, DDS
MS Degree Student
Supervising Committee Chair: Chunlin Qin,
Department of Biomedical Sciences,
Baylor College of Dentistry,
Texas A &M University Health Science Center

2009- Albert K, Yamoah, MS
DDS/PhD Degree Student
Supervising Committee Chair: Chunlin Qin,
Department of Biomedical Sciences,
Baylor College of Dentistry,
Texas A &M University Health Science Center
Supervising Committee Members: Chunlin Qin, Jian Feng, Rena D’Souza, Kathy Svoboda, Jay Groppe, Paul Dechow

2008- Monica Prasad, DDS
Ph.D. Degree Student
Supervising Committee Chair: Chunlin Qin
Department of Biomedical Sciences
Baylor College of Dentistry
Texas A &M University Health Science Center
Supervising Committee Members: Chunlin Qin, Paul Dechow, Jian Feng, Robert Hinton, Jay Groppe, Fen Wang

2008-2011 Yao Sun, DDS, MS,
Ph.D. Degree Student
Supervising Committee Chair: Chunlin Qin,
Department of Biomedical Sciences,
Baylor College of Dentistry,
Texas A &M University Health Science Center
Supervising Committee Members: Chunlin Qin, Jian Feng, Paul Paul Dechow, Jay Groppe, Fen Wang

2009-
Julia Yu Fong Chang, DDS, MS
PhD Degree Student
Supervising Committee Chair: Fen Wang
Department of Biomedical Sciences,
Baylor College of Dentistry,
Texas A &M University Health Science Center
Supervising Committee Members: Fen Wang, Chunlin Qin

2010-
Afsaneh Rangiani, DDS
PhD Degree Student
Supervising Committee Chair: Jerry Feng
Department of Biomedical Sciences,
Baylor College of Dentistry,
Texas A &M University Health Science Center
Supervising Committee Members: Jerry Feng, Chunlin Qin, Brad Amendt, Makoto Kuro-o, Paul Dechow

2010-2-11
Katherine Regan, BS, MS
PhD Degree Student
Supervising Committee Chair: Rena D’Souza
Department of Biomedical Sciences,
Baylor College of Dentistry,
Texas A &M University Health Science Center
Supervising Committee Members: Rena D’Souza, Chunlin Qin, Xiaohua Liu, Paul Dechow, Kathy Svoboda

Masters’ Dissertations Directed:

2007-
Pavithra Pugalagiri, DDS, MS Candidate
Supervising Committee Chair: Yi-Shing Cheng
Department of Biomedical Sciences,
Baylor College of Dentistry,
Texas A &M University Health Science Center
Supervising Committee Members: Yi-Shing Cheng, Chunlin Qin, Harvey Kessler, Jerry Feng

2003- 2005
Kyle Moses, DDS, MS Candidate
Supervising Committee Chair: Chunlin Qin
Endodontics Certification Program
Department of Endodontics & Periodontics
The University of Texas Health Science Center at Houston
Dental Branch, Houston,
Supervising Committee Members: Chunlin Qin, William T Butler, John R Ludington, Timothy A Svec, John A Suchina,

**Research Training of Dental Students:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Student Name</th>
<th>Institution and Year</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-2013</td>
<td>Jiyoung Jung</td>
<td>Baylor College of Dentistry (1&lt;sup&gt;st&lt;/sup&gt; year dental student in 2012)</td>
<td>Texas A &amp;M University Health Science Center</td>
</tr>
<tr>
<td>2010-2011</td>
<td>Richland Mosley</td>
<td>Baylor College of Dentistry (1&lt;sup&gt;st&lt;/sup&gt; year dental student in 2010)</td>
<td>Texas A &amp;M University Health Science Center</td>
</tr>
<tr>
<td>2009-2010</td>
<td>Brianda Hernandez</td>
<td>Baylor College of Dentistry (1&lt;sup&gt;st&lt;/sup&gt; year dental student in 2009)</td>
<td>Texas A &amp;M University Health Science Center</td>
</tr>
<tr>
<td>2009-2010</td>
<td>Richland Mosley</td>
<td>Baylor College of Dentistry (1&lt;sup&gt;st&lt;/sup&gt; year dental student in 2009)</td>
<td>Texas A &amp;M University Health Science Center</td>
</tr>
<tr>
<td>2008-2009</td>
<td>Stephen Pope</td>
<td>Baylor College of Dentistry (1&lt;sup&gt;st&lt;/sup&gt; year dental student)</td>
<td>Texas A &amp;M University Health Science Center</td>
</tr>
<tr>
<td>2007-2008</td>
<td>Vikram Gandhi</td>
<td>Baylor College of Dentistry (1&lt;sup&gt;st&lt;/sup&gt; year dental student)</td>
<td>Texas A &amp;M University Health Science Center</td>
</tr>
<tr>
<td>2003-2004</td>
<td>Ryan M Leonhart</td>
<td>The University of Texas Health Science Center at Houston Dental Branch</td>
<td>(1&lt;sup&gt;st&lt;/sup&gt; year dental student), Houston, Texas</td>
</tr>
<tr>
<td>2001-2003</td>
<td>Jarrod Jones</td>
<td>The University of Texas Health Science Center at Houston Dental Branch</td>
<td>(1&lt;sup&gt;st&lt;/sup&gt; year and 2&lt;sup&gt;nd&lt;/sup&gt; year dental student), Houston, Texas</td>
</tr>
</tbody>
</table>

**E. POSTDOCTORAL FELLOWS, VISITING RESEARCH SCIENTISTS & RESEARCH ASSOCIATES SUPERVISED**

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>Qilin Liu, DDS, MS</td>
<td>Visiting Research Scientist</td>
</tr>
</tbody>
</table>
2011-2011  Changcheng Li, DDS, MS
Postdoctoral Research Fellow
Department of Biomedical Sciences
Baylor College of Dentistry
Texas A &M University Health Science Center

2009-2009  Su Ma, DDS, MS
Visiting Research Scientist
Department of Biomedical Sciences
Baylor College of Dentistry
Texas A &M University Health Science Center

2008-  Xiaofang Wang, DDS, MS, PHD
Postdoctoral Research Fellow
Department of Biomedical Sciences
Baylor College of Dentistry
Texas A &M University Health Science Center

2008-2010  Qinglin Zhu, DDS, MS, PHD
Postdoctoral Research Fellow
Department of Biomedical Sciences
Baylor College of Dentistry
Texas A &M University Health Science Center

2007-2008  Yao Sun, DDS, MS
Visiting Research Scientist/Postdoctoral Research Fellow
Department of Biomedical Sciences
Baylor College of Dentistry
Texas A &M University Health Science Center

2007-2008  Izabela Maciejewska, DDS, PhD
Postdoctoral Research Fellow
Department of Biomedical Sciences
Baylor College of Dentistry
Texas A &M University Health Science Center

2006-2007  Disheng Qin, DDS
Visiting Research Scientist/Postdoctoral Research Fellow
Department of Biomedical Sciences
Baylor College of Dentistry
Texas A &M University Health Science Center

2005-2007  Bingzhen Huang, MD, PhD
Postdoctoral Research Fellow
Department of Biomedical Sciences  
Baylor College of Dentistry  
Texas A &M University Health Science Center

2005-2007  
Tao Peng, MD  
Postdoctoral Research Fellow  
Department of Biomedical Sciences  
Baylor College of Dentistry  
Texas A &M University Health Science Center

2004-2005  
Jan Brunn, MS  
Senior Research Associate  
at University of Texas-Houston Dental Branch  
Currently, Retired

2002-2004  
Otto Baba, DDS, PhD  
Visiting Professor at Univ. of Texas-Houston Dental Branch  
From Tokyo Medical and Dental University of Japan  
Currently, Assistant Professor at Tokyo Medical and Dental University of Japan

IV. SERVICE ACTIVITIES IN UNIVERSITY COMMITTEES

2008-2014  
Member, Awards Committee, Baylor College of Dentistry, Texas A &M University System Health Science Center, USA

2011-2012:  
Member, Faculty Conduct Review Committee, Baylor College of Dentistry, Texas A &M University System Health Science Center, USA

2010-2013  
Member, Research Committee, Baylor College of Dentistry, Texas A &M University System Health Science Center, USA

2008-2011  
Member, Faculty Development Committee, Baylor College of Dentistry, Texas A &M University System Health Science Center, USA

2007-2009  
Faculty Senate, Texas A &M University System Health Science Center, USA

2006- 2007  
Member, Resources Committee, Department of Biomedical Sciences, Baylor College of Dentistry, Texas A &M University System Health Science Center, USA

2005-2006  
Member, Committee of Research Interests and Conflicts, the University of Texas Health Science Center at Houston, USA
2004-2006 Member, Research Committee, the University of Texas Health Science Center at Houston Dental Branch, USA
Darren M. Roesch, Ph.D.

Personal Information

work address: 3302 Gaston Avenue
Room 456
Dallas, TX 75246
voice: 214-828-8324
fax: 214-874-4538
email: roesch@bcd.tamhsc.edu

personal address: 2752 Gaston Avenue
Apartment 1221
Dallas, TX 75226
voice: 202-412-2058

internet portfolio: http://www.darrenroesch.com

Current Position

Assistant Professor
Department of Biomedical Sciences
Texas A&M University Baylor College of Dentistry
Dallas, TX
2011-Present

I teach pharmacology, physiology, and neuroscience at a stand-alone College of Dentistry. I conduct scholarly analyses of methods of the teaching and learning of the biomedical sciences, and I coordinate basic biomedical research on endocrine mechanisms of Central Sensitization in patients with chronic pain associated with temporomandibular jaw and muscle disorders (TMJMD).

Current Teaching Activities

DDDS 7290 Dental Pharmacology (coordinator)
DDDS 8380 Medical Pharmacology (coordinator)
DDDS 9110 Applied Pharmacology (coordinator)
BMS 5212 Clinical Pharmacology (coordinator)
DDDS 6870 Physiology
DDDS 6770 Neuroscience
DDDS 7410 Integrative Sciences
BMS 3340 Biomedical Sciences
Education

M.S. in Education for Healthcare Professions
Texas A&M Health Science Center
Degree Expected: May 2015

Ph.D. in Pharmaceutical Sciences--Pharmacodynamics
College of Pharmacy, University of Florida
Degree Awarded: May 1998

B.S. in Molecular Biology and Cell Science
University of Florida
Degree Awarded: May 1993

Professional Experience

Assistant Professor
Department of Pharmaceutical Sciences
Texas A&M Health Science Center Rangel College of Pharmacy
Kingsville, TX
2009-2011

I taught pharmacology in an integrated pharmacy curriculum at this newly founded college of pharmacy. As part of my work, I participated in curricular design and helped with the initial accreditation process for this new school. My scholarly emphasis was on team-based methods for teaching in an integrated curriculum. I developed novel courses on Licit and Illicit Drug Use and International Issues in Pharmaceutical Sciences.

Research Assistant Professor
Division of Endocrinology and Metabolism
Georgetown University Medical Center
Washington, DC
2002-2009

I was one of the founding members of the Center for the Study of Sex Differences at Georgetown University. I conducted biomedical research on mechanisms of sex differences in neuroendocrine control of the adrenal glands and the role of the adrenal glands in cardio-renal function. As part of the educational outreach program of the Center for the Study of Sex Differences, I developed two novel courses related to sex differences in physiology and pathophysiology and the endocrine system. During this time, I was also a member of the Washington Obstetric-Fetal Pharmacology Research Unit. My work was funded by the National Institutes of Health, the Korea Research Institute of Chemical Technology, and the DC Chapter of the National Kidney Foundation.
I was a recipient of the Poste Vert award from the Institut National de la Santé et de la Recherche Médicale (INSERM), and I conducted research at prestigious Collège de France in the Latin Quarter. I worked in a large team of researchers who were focused on the role of the then newly discovered peptide, apelin, in neuroendocrine control of vasopressin release, cardiovascular function, and appetite.

I was a recipient of the Ruth L. Kirschstein National Research Service Award. My research focused on estrogen regulation of adrenal and pituitary angiotensin receptors and the role of these estrogen-induced changes in responsiveness to angiotensin and overall electrolyte homeostasis.

As a Graduate Assistant at the University of Florida, I took classes in physiology, pharmacology, neuroscience, and endocrinology. I helped in the conduct of physiology and pharmacology courses for undergraduate pharmacy students, and I conducted research on the effects of estrogen and progesterone on neuroendocrine control of the hypothalamic-pituitary-adrenal axis and the role of these effects in cardiovascular adaptation to pregnancy. During this time, I received several awards for presenting my research findings.
Peer Reviewed Publications


**Book Chapters**


**Pending Projects**

Principal Investigator: Darren M. Roesch, Ph.D.
*C-peptide and Central Sensitization in TMJMD*
NIH/R21/NIDCR
Award Amount: $275,000
2014-1016

**Funded Projects and Awards**

Principal Investigator: Darren M. Roesch, Ph.D.
*Effect of Estradiol on Aldosterone Responses and Action*
Ruth L. Kirschstein National Research Service Award
NIH/HL010419
Award Amount: NIH Postdoctoral Pay Scale
2000-2003

*Poste vert*
Institut National de la Santé et de la Recherche Médicale (INSERM), France

Principal Investigator: Darren M. Roesch, Ph.D.
*Ovarian Steroid Modulation of Aldosterone Secretion*
Joseph M. Krainin, M.D. Memorial Young Investigator Award
National Kidney Foundation of the National Capital Area, Inc.
Award Amount: $30,000
2003-2004

Principal Investigator: Darren M. Roesch, Ph.D.
Development of Selective Estrogen Receptor Modulators for the Prevention of Postmenopausal Obesity and Cardiovascular Disease
Novel Drug Target Discovery Award
Korea Research Institute of Chemical Technology
Award Amount: $50,000

Principal Investigator: Darren M. Roesch, Ph.D.
Estrogen, Estrogen Receptors, and Body Weight Homeostasis
Georgetown Intramural Research Grant
Georgetown University Medical Center
Award Amount: $20,000
2004-2005

Principal Investigator: Darren M. Roesch, Ph.D.
Ovarian Senescence and Adrenal Hormone Responses
NIH/NIA/R03/AG022624
Award Amount: $155,200
2004-2006

Professional Service

Texas A&M University Baylor College of Dentistry
Research Committee, 2011-Present

Texas A&M Health Science Center Rangel College of Pharmacy
Chair, Physiology Search Committee, Dr. Bret Bessac hired.
Coordinator, Department of Pharmaceutical Sciences Seminar Program, 2009-2011
Member, Curricular Affairs Committee, 2009-2010
Member, Outcome Assessment Committee, 2009-2010
Member, Instructional Venues Committee, 2009-2011
Member, TAMHSC Faculty Senate Seminar Series Committee, 2010-2011
Member, Library Resources Committee, 2010-2011
Member, Faculty Retreat Planning Committee, 2010

Georgetown University
Computer Services Advisory Committee, 2005-2009
Medical Center Committee on the Library, 2004-2009
Learned Societies

American Dental Education Association
American Educational Research Association
American Physiological Society

National Leadership

Secretary
Physiology, Pharmacology and Therapeutics Section
American Dental Education Association

References

Maureen Keller-Wood, Ph.D.
Professor and Chair
Department of Pharmacodynamics
University of Florida College of Pharmacy
Email: kellerwd@cop.ufl.edu

Joseph G. Verbalis, M.D.
Professor and Chair
Division of Endocrinology and Metabolism, Department of Medicine
Georgetown University Medical Center
Email: verbalis@georgetown.edu

Anna Ratka, Ph.D. Pharm.D.
Professor and Chair
Department of Pharmaceutical Sciences
Chicago State University College of Pharmacy
Email: aratka@csu.edu

Rena D'Souza, D.D.S., M.S, Ph.D.
Dean
School of Dentistry
University of Utah
Email: RD'Souza@bcd.tamhsc.edu
Name: L. Bruno Ruest  Date: February 18, 2013

HSC Component: Baylor College of Dentistry
Component Department/Unit: Biomedical Sciences

Present Rank (Check one of the following):

- [X] Assistant Professor
- [ ] Clinical Assistant Professor
- [ ] Adjunct Assistant Professor
- [ ] Associate Professor
- [ ] Clinical Associate Professor
- [ ] Adjunct Associate Professor

I am applying for promotion to: (Check one of the following):

- [ ] Associate Professor
- [ ] Clinical Associate Professor
- [ ] Adjunct Associate Professor
- [ ] Professor
- [ ] Clinical Professor
- [ ] Adjunct Professor

Present Tenure Status:  

- [X] Tenure Track  
- [ ] Tenure in Title Only
- [ ] Tenured
- [ ] Tenured In Title Only

*Non-Tenure Track:  

- [ ] Educator*
- [ ] Research*
- [ ] Service*

Applying for tenure?  

- [ ] Yes  
- [X] No

Applying for tenure in title only?  

- [ ] Yes  
- [ ] No

1 Tenure in Title Only is only available in the College of Medicine.

Primary Academic Area (if Tenured or Tenure Track):  

- [ ] Education  
- [X] Research  
- [ ] Professional Service

Secondary Academic Area (if Tenured or Tenure Track):  

- [X] Education  
- [ ] Research  
- [ ] Professional Service

I have read The Texas A&M University System Health Science Center Internal Policies concerning Faculty Appointment, Promotion and Tenure located under Section 12 Faculty, 12.01.99.Z1.01 of the HSC Institutional Rules and Policies, URL http://www.tamhsc.edu/facultystaff/rules/  

- [ ] Yes  
- [X] No

I understand that the deliberations of the Component and the Health Science Center Appointment, Promotion and Tenure Review Committees are confidential. I understand that I should not solicit any information about those deliberations from any member of those committees or anyone involved in the deliberations. I also understand that the results of the Component committee deliberations serve as recommendations to the Component Dean/Director and the results of the Health Science Center Appointment, Promotion and Tenure Review Committee deliberations serve as recommendation to the Health Science Center Vice President for Academic Affairs, with the final decision on promotion made by the Health Science Center President. I understand that the granting of tenure is made by The Texas A&M University System Board of Regents.

- [X] Yes  
- [ ] No
General Information

A. Education

List all earned and honorary college degrees that you have received (B.S., M.S., M.D., Ph.D., etc.) and the dates. Give the name of degree, date of degree, field of degree, and institution and location degree awarded for each.

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Degree Awarded</th>
<th>Institution and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-1996</td>
<td>Bachelor of Sciences (B.Sc) with Major in Biology/Microbiology.</td>
<td>University of Sherbrooke, Sherbrooke, Canada</td>
</tr>
<tr>
<td>1996-2002</td>
<td>Doctor of Philosophy (Ph.D.), Division of Experimental Medicine, Faculty of Medicine, McGill University, Lady Davis Institute for Medical Research, Montréal, Canada. (Advisor: Dr. Eugenia Wang)</td>
<td>Thesis title: Peptide elongation factors and caspase-3 in myocytes: a way to control apoptosis (August 2001, Granted in 2002). (Specialization: cell and molecular biology, muscle ageing and physiology, cellular differentiation)</td>
</tr>
</tbody>
</table>

B. Postdoctoral Education (Including Residencies and Fellowships)

List the postdoctoral education that you have completed. Give the title of your position (e.g., Postdoctoral Fellow), the beginning and ending dates, the source of funding (e.g. American Heart Association, Texas Affiliate), field, name of mentor, and name of institution and location for each. Underline those positions for which the applications were peer reviewed.

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Position Description</th>
<th>Institution and Location</th>
<th>Funding Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-2006</td>
<td>Postdoctoral Research Associate, Birth Defects Center and Dept. of Molecular, Cellular and Craniofacial Biology, University of Louisville School of Dentistry, Louisville, KY. (Advisors: Dr. David E. Clouthier, and after December 2005: Thomas B. Knudsen and David Clouthier)</td>
<td>Research Focus: The main focus of my research was to study the function of the endothelin-A receptor signaling in neural crest cells during craniofacial and cardiovascular development (Specialization: genetics, embryology, cell biology). I also investigated the role of mitochondrial p53 and the toxicology of alcohol during pregnancy (Specialization: toxicology, teratology, genetics, bioinformatics). Funding: NIH, American heart Association and a fellowship from the Heart and Stroke Foundation of Canada.</td>
<td></td>
</tr>
</tbody>
</table>

C. Positions Held

List each position (teaching, administrative, and other) you have held subsequent to completion of your postdoctoral education. Give beginning and ending dates and the institution and location for each position. If you were a member of the graduate faculty at another institution, give the dates of appointment and the name of the institution and location. If you held an academic appointment, give the appropriate dates and the name and location of the institution. Underline your academic appointments at Texas A&M Health Science Center.

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Position Description</th>
<th>Institution and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-Present</td>
<td>Assistant Professor (tenure track)</td>
<td>Department of Biomedical Sciences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Baylor College of Dentistry (BCD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Texas A&amp;M University Health Science Center (TAMHSC)</td>
</tr>
<tr>
<td>2007-Present</td>
<td>Associate Member of the Graduate Faculty, BCD</td>
<td></td>
</tr>
</tbody>
</table>
List dates in chronological order, beginning with the first and ending with the most recent.

<table>
<thead>
<tr>
<th>Year</th>
<th>Position</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-Present</td>
<td>Member of the Graduate Faculty</td>
<td>Health Science Center School of Graduate Studies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Formerly Graduate School of Biomedical Sciences)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TAMHSC</td>
</tr>
<tr>
<td>2006-2009</td>
<td>Assistant Professor (non-tenure track)</td>
<td>Department of Biomedical Sciences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Baylor College of Dentistry (BCD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Texas A&amp;M University Health Science Center (TAMHSC)</td>
</tr>
</tbody>
</table>

### D. Honors

List the honors you have received and the dates (for example, Phi Beta Kappa, 1985; American Heart Association Established Investigator, 2001).

<table>
<thead>
<tr>
<th>Year</th>
<th>Honor</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>Student Scholarship, Foundation Desjardins (Canada)</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>Summer Student Scholarship, Fond de Recherche en Santé du Québec (FRSQ)</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>American Society for Cell Biology, Glenn Award for the best scientific presentation in the Biology of Aging (for work)</td>
<td></td>
</tr>
<tr>
<td>1998-2001</td>
<td>Doctoral Research Award. Medical Research Council of Canada (now Canadian Institutes of Health Research)</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>Finalist, Scientific Poster Presentation Research! Louisville</td>
<td></td>
</tr>
<tr>
<td>2004-2006</td>
<td>Junior Personnel Award, Research Fellowship, Heart and Stroke Foundation of Canada</td>
<td></td>
</tr>
<tr>
<td>2007, 2008</td>
<td>Nominated, Mossman Award in Developmental Biology for Junior Scientist, American Association of Anatomists (AAA)</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>Matt Brown (student) Won the ADA/ Dentsply National Student Clinician Research Award (2009, 50th Anniversary) (ADA Caulk/Dentsply) and was invited to present his work at the American Dental Association 150th anniversary and Annual Meeting in Honolulu, Hawaii. Honorable Mention Student Poster Presentation, 36th Annual Research Day TAMHSC Baylor College of Dentistry</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>Laura Mayer (student) Best Student Poster Presentation, 36th Annual Research Day TAMHSC Baylor College of Dentistry. Representative (award), Hinman National Student Research Meeting (2009)</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>The abstract authored by Yanping Zhang (postdoc) was peer-reviewed and selected for the Hatton competition at the March 2012 American Association for Dental Research 41st Annual Meeting.</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>Evan Blackwell received an honorable mention for his poster at the 39th Annual Baylor College of Dentistry Research Day.</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>The paper “Differential programming of p53-deficient embryonic cells during rotenone block” published in 2011 (Green et al., Toxicology 290:31-41) was selected for the next edition of the Global Medical Discovery Series. Global Medical Discovery highlights highly significant pharmacological papers</td>
<td></td>
</tr>
</tbody>
</table>
List dates in chronological order, beginning with the first and ending with the most recent.

### E. Specialty and Sub-Specialty Board Certifications

List the name of each board or other professional organization by which you have been certified/recertified. Also, give the original date of certification for each and expiration date(s) for each (e.g. American Board of Ophthalmology, 1990, exp. 2010; American Board of Microbiology, 1992, exp. 2010).

<table>
<thead>
<tr>
<th>Name of Board/Professional Organization</th>
<th>Original Date of Certification</th>
<th>Expiration Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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### F. Society Memberships

1. **College or academic fellowships or memberships and effective dates (American and/or foreign)**

   (e.g., American College of Physicians, 1995; American Academy of Microbiology, 1996)

<table>
<thead>
<tr>
<th>Society</th>
<th>Effective Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Association of Anatomists (AAA)</td>
<td>2007-present</td>
</tr>
<tr>
<td>American Association of Anatomists (AAA) Advisory Committee for Young Anatomists (ACYA)</td>
<td>2011-present</td>
</tr>
<tr>
<td>American Society for Microbiology (ASM)</td>
<td>2012</td>
</tr>
</tbody>
</table>

2. **Elective societies and effective dates**

   (e.g., American Physiological Society, 1985; Health Science Communication Association, 1988)

<table>
<thead>
<tr>
<th>Society</th>
<th>Effective Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Society for Developmental Biology (SDB)</td>
<td>2003-present</td>
</tr>
<tr>
<td>Federation of American Society of Experimental Biology (FASEB)</td>
<td>2003-present</td>
</tr>
<tr>
<td>American Association for the Advancement of Science (AAAS)</td>
<td>2003-2011</td>
</tr>
<tr>
<td>American Association for Dental Research- Dallas section</td>
<td>2007-present</td>
</tr>
<tr>
<td>American Association for Dental Research (AADR)/ International Association for Dental Research (IADR)</td>
<td>2008-present</td>
</tr>
<tr>
<td>American Cleft Palate-Craniofacial Association</td>
<td>2009-2011</td>
</tr>
<tr>
<td>Member of the Cardiovascular Research Institute (Texas A&amp;M)</td>
<td>2012-present</td>
</tr>
<tr>
<td>American Heart Association (AHA)</td>
<td>2013-present</td>
</tr>
</tbody>
</table>

---
## Teaching

### A. Local Teaching Activities

1. **Lectures, small group conferences, laboratories and seminars for professional students, graduate students, residents and fellows**

<table>
<thead>
<tr>
<th>Course title and number</th>
<th>Year (*<em>director or <em>co-director</em></em>)</th>
<th>Number of students</th>
<th>Hours or lectures (contacts, including proctoring, journal club, etc)</th>
<th>Teaching evaluation</th>
<th>Comparison mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>6870 Physiology (5.5 credit hours)</td>
<td>2007</td>
<td>~95</td>
<td>1 (13.5)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>100</td>
<td>15 (29.5)</td>
<td>2.94</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>2009*</td>
<td>100</td>
<td>15 (33)</td>
<td>4.3</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>2010*</td>
<td>103</td>
<td>15 (44)</td>
<td>4.2</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>105</td>
<td>15 (37)</td>
<td>3.7</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>105</td>
<td>15 (37)</td>
<td>4.0</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>2013*</td>
<td>102</td>
<td>19 (1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Material prepared: PowerPoint presentations, handouts, quizzes, exams and props.

<table>
<thead>
<tr>
<th>Course title and number</th>
<th>Year (*<em>director or <em>co-director</em></em>)</th>
<th>Number of students</th>
<th>Hours or lectures (contacts, including proctoring, journal club, etc)</th>
<th>Teaching evaluation</th>
<th>Comparison mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 5V69 Growth &amp; Development Mechanisms (1 and 2 credit hours depending of program and activity)</td>
<td>2007</td>
<td>19</td>
<td>4 (9)</td>
<td>3.45</td>
<td>4.46</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>19</td>
<td>6 (12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2009*</td>
<td>24</td>
<td>8 (14)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2010*</td>
<td>24</td>
<td>9 (16)</td>
<td>4.3</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>2011**</td>
<td>23</td>
<td>9 (17)</td>
<td>4.4</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>2012**</td>
<td>21</td>
<td>9 (17)</td>
<td>4.3</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Material prepared: PowerPoint presentations, handouts (including from other lecturers) and exams. This course includes a mandatory journal club for MS and PhD students (2 credit hours). In addition of identifying papers to discuss, this journal club requires the preparation of teaching materials to enhance the education of the students, including the preparation of PowerPoint presentations, handouts, exams and documents for miniproposal submission and evaluation.

<table>
<thead>
<tr>
<th>Course title and number</th>
<th>Year (*<em>director or <em>co-director</em></em>)</th>
<th>Number of students</th>
<th>Hours or lectures (contacts, including proctoring, journal club, etc)</th>
<th>Teaching evaluation</th>
<th>Comparison mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 5V73 Advanced Human Craniofacial Development and Craniofacial Anomalies (1 and 2 credit hours depending of program and activity)</td>
<td>2007</td>
<td>23</td>
<td>1 (12)</td>
<td>3.23</td>
<td>4.46</td>
</tr>
<tr>
<td></td>
<td>2008</td>
<td>22</td>
<td>1 (12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2009*</td>
<td>28</td>
<td>1 (16)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2010*</td>
<td>28</td>
<td>2 (17)</td>
<td>4.1</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>2011**</td>
<td>28</td>
<td>2 (17)</td>
<td>4.4</td>
<td>4.3</td>
</tr>
</tbody>
</table>
List dates in chronological order, beginning with the first and ending with the most recent.

| Material prepared: PowerPoint presentations, handouts (including from other lecturers) and exams. This course includes a mandatory student oral presentation which requires the preparation of an annually changing list of birth defects or conditions involving the craniofacial aspect, an investigation on these defects and conditions (for judging the quality and accuracy of the presentation and coverage of the subject). This course includes a mandatory journal club for MS and PhD students (2 credit hours). In addition of identifying papers to discuss, this journal club requires the preparation of teaching materials to enhance the education of the students, including the preparation of PowerPoint presentations, handouts, exams and documents for miniproposal submission and evaluation. |
|---|---|---|---|---|
| 2012** | 24 | 2 (17) | 4.3 | 4.3 |

| BMS 5V93 Cleft Palate Directed Reading |
|---|---|---|---|
| 2007 | 10 | 6 | NA |
| 2008 | 4 | 8 | NA |
| 2009 | 9 | 8 | NA |
| 2010** | 6 | 6 | NA |
| 2011** | 6 | 8 | NA |
| 2012** | 3 | 8 | NA |

Material prepared: Papers to discuss, PowerPoint presentations, handouts and questions for oral quizzes.

| BMS 5V95 Developmental Biology Directed Reading (1 credit hour) |
|---|---|---|---|---|
| 2007** | 1 | 8 | NA |
| 2010** | 1 | 10 | NA |
| 2011** | 1 | 8 | NA |
| 2012** | 1 | 8 | |

Material prepared: Papers to discuss, PowerPoint presentations, handouts and quizzes. The course may require the students to write an assay, requiring the preparation of guidelines on how the assay will be graded.

| BMS 5341 Techniques in Cell and Molecular Biology (1 credit hour) |
|---|---|---|---|---|
| 2010 | 8 | 3 | 4.6 | 4.2 |
| 2011 | 4 | 2 | 4.5 | 4.3 |
| 2012 | 2 | 2 | NA | |

Material prepared: PowerPoint presentations, handouts and quizzes. Students can come in my lab to have a hand-on experience with the discussed techniques.

| BMS 5V91 Special Topics in Biomedical Sciences (mineralized tissue course) (1 credit hour) |
|---|---|---|---|---|
| 2011 | 5 | 2 | 4.0 | 4.3 |
| 2012 | 5 | 2 | 4.0 | 4.3 |

Material prepared: PowerPoint presentations, handouts and protocols.

| BMS 5190 Current Issues in Sciences (Colloquium, 1 credit hour) |
|---|---|---|---|
| 2011 | 8 | 1 | NA |
| 2012 | 8 | 1 | NA |

Material prepared: PowerPoint presentations.

| Cognate exam (1 credit hour) |
|---|---|---|---|
| 2010* | 1 | 10 | NA |
| 2012** | 1 | 10 | NA |

Material prepared: Papers to discuss, question lists for discussion and back-and-forth discussions and analyses with the student to evaluate its selection of research articles and progress. This course requires the students to write an assay/review on a specific subject, requiring the preparation of guidelines on how
List dates in chronological order, beginning with the first and ending with the most recent.

<table>
<thead>
<tr>
<th>Date</th>
<th>Exam</th>
<th>Students</th>
<th>Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>7400</td>
<td>National Board Review</td>
<td>2007</td>
<td>55</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Material prepared: NA (cancelled after 2007)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. **Clinical teaching for professional students, residents and fellows**

List for each the topic of instruction/supervision; number of hours of direct instruction or supervision per year; approximate number of students, residents or fellows impacted; brief description of educational materials developed (slides, handouts, etc.). For Attachment A (1), attach teaching evaluations that are to be from the previous five years, not to exceed ten evaluations, which are felt to best exemplify your pedagogy. You may include peer teaching reviews as well as student evaluations.

NA

B. **Non-Credit Instruction**

1. **Continuing Medical Education**

List for each the topic of instruction; number of hours of direct instruction per year; approximate number of professionals impacted; brief description of educational materials developed (slides, handouts, etc.). For Attachment A (2), attach evaluations of CME activities presented by you that are to be from the previous five years, not to exceed ten evaluations, which are felt to best exemplify your pedagogy.

NA

2. **Educational activities for the lay public**

List for each the topic of instruction; number of hours of direct instruction per year; approximate number of individuals impacted; brief description of educational materials developed (slides, handouts, etc.).

2008 Claybon Elementary School, Forney ISD, TX (Developed a PowerPoint presentation introducing research to 23 students)

C. **Mentoring and Advising**

1. **Graduate students**

Are you a member of the graduate faculty?  
X Yes  No

If so, Date of Appointment:  
2007
List dates in chronological order, beginning with the first and ending with the most recent.

List the name of each graduate student for whom you served as a member of the thesis or dissertation committee. Underline the names of students for whom you served as Chairperson. Give the name of each student, the degree earned, the field of the student, the name of the department and institution where the degree was earned, and the date the degree was earned. Asterisk (*) those students who did not complete writing their dissertation under your supervision. Give each student's current title/position and location (if known).

<table>
<thead>
<tr>
<th>Name</th>
<th>Date (#thesis or * graduate committee)</th>
<th>Degree earned</th>
<th>Field</th>
<th>Department</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wenli Vu</td>
<td>2009 #</td>
<td>PhD</td>
<td>Biomedical Sciences</td>
<td>Biomedical Sciences</td>
<td>TAMU-BCD</td>
</tr>
<tr>
<td>Dr. Vu is a postdoctoral fellow at UCSF.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ashneet Sachar</td>
<td>2011 *</td>
<td>PhD</td>
<td>Biomedical Sciences</td>
<td>Biomedical Sciences</td>
<td>TAMU-BCD</td>
</tr>
<tr>
<td>Dr. Sachar returned to India and is practicing dentistry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jason Koesters</td>
<td>2011 #</td>
<td>MS</td>
<td>Oral Biology</td>
<td>Pediatric Dentistry</td>
<td></td>
</tr>
<tr>
<td>Dr. Koester is a pediatric dentist practicing in Texas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wendy Vu</td>
<td>2013 **</td>
<td>MS</td>
<td>Biomedical Sciences</td>
<td>Biomedical Sciences</td>
<td>TAMU-BCD</td>
</tr>
<tr>
<td>Ms. Vu will become a dental student in August 2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anika Voisey Rodgers DDS-PhD candidate</td>
<td>*</td>
<td>Biomedical Sciences</td>
<td>Biomedical Sciences</td>
<td>TAMU-BCD</td>
<td></td>
</tr>
<tr>
<td>Mrs. Rodgers is currently a dental student at TAMU-BCD, after 3 years as PhD candidate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Postdoctoral fellows, research associates, residents, fellows and visiting scientists

List the name and beginning and ending dates of each person for whom you served as a research advisor or faculty mentor. Give each person's current title/position and location (if known).

<table>
<thead>
<tr>
<th>Name</th>
<th>Dates</th>
<th>Current Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yanping Zhang, MD</td>
<td>2007-2012</td>
<td>Research Associated, Stanford University</td>
</tr>
<tr>
<td>Maria Serrano, DDS, MS</td>
<td>2010-2012</td>
<td>Dr. Serrano returned to school and she is actually a PhD candidate at TAMU-BCD</td>
</tr>
</tbody>
</table>

3. Professional students

List the name and beginning and ending dates of each student for whom you served as a research advisor or faculty mentor, and the name of the program (e.g., Medical Student Summer Research Program).

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jennifer R. Case</td>
<td>2006</td>
<td>Student Summer Research Program (U. of Louisville KY)</td>
</tr>
</tbody>
</table>
List dates in chronological order, beginning with the first and ending with the most recent.

<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashley DeMarco</td>
<td>2007</td>
<td>Dental Student Summer Research Program (BCD)</td>
</tr>
<tr>
<td>Laura D. Mayer</td>
<td>2008</td>
<td>Dental Student Summer Research Program (BCD)</td>
</tr>
<tr>
<td>Gregory R. Knutsen</td>
<td>2009 and 2010</td>
<td>Dental Student Summer Research Program (BCD)</td>
</tr>
<tr>
<td>Evan L Blackwell</td>
<td>2010 and 2011</td>
<td>Dental Student Summer Research Program (BCD)</td>
</tr>
<tr>
<td>Zachary D. Alleman</td>
<td>2011</td>
<td>Dental Student Summer Research Program (BCD)</td>
</tr>
<tr>
<td>Mitchell T. McKnight</td>
<td>2012</td>
<td>Dental Student Summer Research Program (BCD)</td>
</tr>
</tbody>
</table>

4. Undergraduate students, high school students and other individuals

List the name, beginning and ending dates, and approximate number of hours/week of each undergraduate student, high school student or other individual for whom you served as a research advisor, and the name of the program (e.g., Prairie View Undergraduate Medical Academy Student). Give the person's current title/position and location (if known).

Mitchell T. McKnight (2010 and 2011/ 20 hours week/ No specific program): Dental Student TAMU-BCD

D. Other Teaching Activities

List lectures or Grand Rounds you have given. Underline those you presented at other institutions or at national meetings or symposia; include the topics and dates.

In situ hybridization (2010, 2011, 2012) Biomineralized Tissue course (offered at BCD, opened nationally and internationally)

E. Enhancement of Teaching Skills

List teaching academy programs, continuing education programs and workshops you have attended and include the dates.

2007 Physiology (31 hours)
2011 Physiology (20 hours)
2012 Physiology (15 hours)

F. Education Administration

List courses, clerkships, graduate programs, residency programs and fellowship programs you have directed and include the dates.

Directorship
Cognate exam (2012)

Co-Directorship
List dates in chronological order, beginning with the first and ending with the most recent.

<table>
<thead>
<tr>
<th>Course/Program</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 5V73 Advanced Human Craniofacial Development and Craniofacial Anomalies</td>
<td>2009, 2010</td>
</tr>
<tr>
<td>Cognate exam</td>
<td>2010</td>
</tr>
<tr>
<td>Fellowship program mentoring</td>
<td></td>
</tr>
<tr>
<td>NIH F32 fellowship (Serrano, 2010-2012)</td>
<td></td>
</tr>
</tbody>
</table>

G. Education Committees

List state, regional and national education committees on which you have served (e.g., residency review committees, National Board of Medical Examiners), the dates of your membership, and any offices you have held (e.g., Secretary).

<table>
<thead>
<tr>
<th>Committee</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

H. Innovations in Education

List new courses, residency programs, fellowship programs, workshops, laboratory exercises and other educational components you have developed and the dates they were initiated.

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop new lectures for BMS 5341 Techniques in Cell and Molecular Biology course</td>
<td>2010</td>
</tr>
<tr>
<td>In situ Hybridization (5V91)</td>
<td>2010</td>
</tr>
</tbody>
</table>

I. Education Awards

List teaching awards you have received and the dates.

<table>
<thead>
<tr>
<th>Award</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>


Research and Scholarship

A. Summary of Research and Scholarly Activity

Most important discoveries: I identified a non-canonical function for the peptide elongation factor eEF1a2 and that the endothelin-A receptor is important for the mandibular patterning of neural crest cells during early embryonic development. These 2 papers were cited more than 50 times each.

Current scholarly activity: I investigate the genetic mechanisms leading to birth defects and abnormal pregnancy, focusing on the function of the endothelin-A receptor signaling. I investigate the function of neural crest cells during craniofacial and cardiovascular development and how they are patterned to form specific structures. I investigate the role of endothelin signaling in periodontal disease.

B. Publications

1. Published articles and case reports

Give the complete citation of each published article or case report for which you are an author or co-author (chronological order, ending with the most recent). Place an asterisk (*) before those that received peer review. Give all of the authors' names exactly as they appear in the article or case report, print your name in bold letters and underline the name of the corresponding author (the person who submitted the article). Include the beginning and ending page numbers. Please use the format of the following example:

Lukyanenko V, I Gyorke, TF Wiesner, and S Gyorke (2001). Potentiation of Ca\textsuperscript{2+} release by cADP-ribose in the heart is mediated by enhanced SR Ca\textsuperscript{2+} uptake into the sarcoplasmic reticulum. Circ. Res. 89, 614-622.

List dates in chronological order, beginning with the first and ending with the most recent.

| --- | --- |

2. Articles and case reports in press


3. Articles and case reports submitted


*Vu WT, **Ruest LB**. 2012. The role of TGF-B3 in the fate of medial epithelial cells during palate development. Frontiers Physiol. (special issue canceled, minireview no longer needed)

4. Books, chapters in books, and monographs

List dates in chronological order, beginning with the first and ending with the most recent.


5. Abstracts

Give the complete citation of each abstract for which you are an author or co-author (chronological order, ending with the most recent). Give the authors' names exactly as they appear in the literature, print your name in bold, and underline the presenter's name. Use the same format as that for published articles and case reports. **Place an asterisk (*) before those that received peer review.** Note if presentation given in conjunction with submission.


29. Blackwell EL, Zhang Y, Knutsen GR, **Ruest LB**. 2010. Twist1 function during mandibular development. 1st Texas A&M Health Science Center Research Symposium (November 2010, College Station TX)


List dates in chronological order, beginning with the first and ending with the most recent.


6. Exhibits and productions

Describe any exhibits and productions for which you have been responsible (chronological order, ending with the most recent). Indicate which of these have won awards (e.g., the AMA Billings Silver Medal). Place an asterisk (*) before those that received peer review.

NA

C. Presentations

1. Invited
List dates in chronological order, beginning with the first and ending with the most recent.

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Institution</th>
<th>Location</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Patterning of neural crest cells by endothelin.</td>
<td>Birth Defects Center, University of Louisville, Louisville KY.</td>
<td>Kentucky, USA</td>
<td>November 30, 2004</td>
</tr>
<tr>
<td>2.</td>
<td>Neural crest cell patterning by endothelin-A receptor signaling.</td>
<td>Department of Biological Sciences, Murray State University, Murray KY.</td>
<td>Kentucky, USA</td>
<td>January 20, 2006</td>
</tr>
<tr>
<td>3.</td>
<td>Neural crest cell patterning by endothelin signaling.</td>
<td>Department of Molecular, Cellular and Craniofacial Biology and the Birth Defects Center, University of Louisville, Louisville KY.</td>
<td>Kentucky, USA</td>
<td>January 23, 2006</td>
</tr>
<tr>
<td>4.</td>
<td>Neural crest cells patterning by endothelin-A receptor signaling.</td>
<td>Department of Anatomy and Cell Biology, Medical College of Georgia (Augusta, GA)</td>
<td>Georgia, USA</td>
<td>February 16, 2006</td>
</tr>
<tr>
<td>5.</td>
<td>Endothelin-A receptor function during development: when a blood pressure regulator determines neural crest cell patterning.</td>
<td>Department of Biology, University of Northern Colorado (Greeley, CO)</td>
<td>Colorado, USA</td>
<td>April 6, 2006</td>
</tr>
<tr>
<td>6.</td>
<td>Endothelin-A receptor and neural crest cell development: losing your jaw over a blood pressure regulator.</td>
<td>Department of Biomedical Sciences, Baylor College of Dentistry (Texas A&amp;M University System Health Science Center)</td>
<td>Texas, USA</td>
<td>April 10, 2006</td>
</tr>
<tr>
<td>7.</td>
<td>Endothelin-A receptor function during development: when a blood pressure regulator determines neural crest cell patterning.</td>
<td>Department of Biology, Dalhousie University (Halifax, NS)</td>
<td>Nova Scotia, Canada</td>
<td>April 17, 2006</td>
</tr>
<tr>
<td>8.</td>
<td>Endothelin-A receptor and neural crest cell development: losing your jaw over a blood pressure regulator.</td>
<td>Institute of Biosciences and Technology, Texas A&amp;M University System Health Science Center, (Houston, TX)</td>
<td>Texas, USA</td>
<td>June 12, 2006</td>
</tr>
<tr>
<td>9.</td>
<td>Recombineering. BYOL seminar series</td>
<td>Baylor College of Dentistry, Texas A&amp;M Health Science Center, (Dallas, TX)</td>
<td>Texas, USA</td>
<td>December 19, 2007</td>
</tr>
<tr>
<td>10.</td>
<td>Endothelin signaling in neural crest cells.</td>
<td>Molecular Biology Workshop, Institute of Biosciences and Technology, Texas A&amp;M University Health Science Center, (Houston, TX)</td>
<td>Texas, USA</td>
<td>April 7, 2009</td>
</tr>
<tr>
<td>11.</td>
<td>Endothelin signaling in neural crest cells.</td>
<td>Department of Systems Biology and Translational Medicine Seminar, College of Medicine, Texas A&amp;M University Health Science Center, (Temple, TX)</td>
<td>Texas, USA</td>
<td>April 22, 2009</td>
</tr>
<tr>
<td>12.</td>
<td>*Twist1 function during mandibular development.</td>
<td>1st Texas A&amp;M Health Science Center Research Symposium (College Station TX)</td>
<td>Texas, USA</td>
<td>November 11, 2010</td>
</tr>
<tr>
<td>13.</td>
<td>*TWISTing a Hand on the mandible.</td>
<td>2012 Experimental Biology Meeting (San Diego CA)</td>
<td>California, USA</td>
<td>April 24, 2012</td>
</tr>
</tbody>
</table>

*Place an asterisk (*) before those that received peer review.*
2. **Non-invited Without Published Abstract**

List the non-invited research presentations you have given at international or national meetings, symposia, workshops or conferences, and non-invited research lectures (chronological order, ending with the most recent). Underline those presented at other institutions. Give the title of your presentation, the name of the meeting, symposium, workshop, conference or institution, and the date.

NA

D. **Patents or Commercialization of Research**

List the titles, authors and dates of award and/or application of those patents to which you have contributed (e.g., invention disclosures, patent applications pending, licensing of technology or collaboration with other faculty leading to product development/licensing and commercialization).

NA

E. **Extramural Professional Service**

In chronological order under each of the following headings, give the beginning and ending dates for each appointment as a regular or ad hoc member.

1. **Manuscript reviewer for the following journals**

   Ad hoc reviewer:
   2008  Int J. Dev Biol
   2011  Anatomical Record
   2012  Cleft Palate Journal
   Frontiers (physiology)
   Journal of Gerontology
   2013  Journal of Gerontology

2. **Consultant to government agencies, private industry, or other organizations**

   NA

3. **Officer or committee member of scientific or professional organizations**

   American Association for Dental Research- Dallas section (elected)
   2009-2010  Ex-officio, consultant
   2008-2009  President
   2008  Vice-President

   American Association of Anatomists’ Advisory Committee for Young Anatomists (ACYA) (appointed)
   2011-present  Member
4. **Member of research grant study sections (e.g., NIH, AHA Western Review Consortium)**

   | NA |

5. **Member of editorial boards (e.g., Circulation Research)**

   | NA |

6. **Editor**

   | NA |

**F. Grants and Contracts to Support Scholarly Work**

Under the categories listed below, list each grant or contract on which you were a principal investigator or co-investigator (not consultant) obtained to support your current scholarly activities or interests including research, contributions to education, and/or patient care. Include the granting agency, grant number, beginning and ending dates, name of the principal investigator, title of the grant/contract, percent effort, and total direct costs for the duration of the grant. **Place an asterisk (*) before any grant or contract that was peer-reviewed.** Please use the format of the following example:

   NIH R01 HL 34567; 07/01/98 - 06/30/03; John Doe (PI); Bill Smith (CoI) Mechanisms of cardiac arrhythmias; 30% effort; $1,000,000.

1. **Intramural awards (e.g., seed grants)**

   | *Research Development Grant | Ruest (PI) | 03/01/2007-02/28/2008 |
   | Office of the VP for Research & Grad. Studies/ Texas A&M Health Science Center |
   | Identification of the elements regulating Ednra expression in neural crest cells |
   | Role: PI ($15,000) |

2. **Extramural awards**

   a. **Local but not from HSC**

   b. **State and/or regional**
List dates in chronological order, beginning with the first and ending with the most recent.

### c. National and/or international

<table>
<thead>
<tr>
<th>Grant Type</th>
<th>PI/Co-I</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Summer Student Scholarship</td>
<td>Ruest (PI)</td>
<td>05/01/1995-08/10/1995</td>
</tr>
<tr>
<td>Fond de Recherche en Santé du Québec (FRSQ) (Quebec Health Research Fund) Characterization of the bovine cardiac ATPDase</td>
<td>Role: PI ($3,000)</td>
<td></td>
</tr>
<tr>
<td>*Doctoral Research Award (1554-Ruest)</td>
<td>Ruest (PI)</td>
<td>04/01/1998-03/31/2001</td>
</tr>
<tr>
<td>Medical Research Council of Canada (now Canadian Institutes of Health Research) Paracrine induction of programmed cell death by apoptotic cultured myotubes</td>
<td>Role: PI ($57,000) (100% effort)</td>
<td></td>
</tr>
<tr>
<td>*Research Fellowship</td>
<td>Ruest (PI)</td>
<td>09/01/2004-08/31/2006</td>
</tr>
<tr>
<td>Heart and Stroke Foundation of Canada Endothelin-A receptor function during cardiovascular development</td>
<td>Role: PI ($76,000) (100% effort)</td>
<td></td>
</tr>
<tr>
<td>*Research Grant</td>
<td>Ruest (PI)</td>
<td>07/01/2007-06/30/2008</td>
</tr>
<tr>
<td>Cleft Palate Foundation Early Patterning Genes of Upper Jaw Development</td>
<td>Role: PI ($10,000) (10% effort)</td>
<td></td>
</tr>
<tr>
<td>*Equipment Grant</td>
<td>Svoboda (PI)</td>
<td>04/01/2010-03/31/2011</td>
</tr>
<tr>
<td>National Institutes of Health Leica SP5 Confocal Microscope</td>
<td>Role: Co-I (~$500,000) (NA)</td>
<td></td>
</tr>
<tr>
<td>*Research Grant (11BGIA5670010)</td>
<td>Ruest (PI)</td>
<td>01/01/2011-12/31/2012</td>
</tr>
<tr>
<td>American Heart Association South Central Affiliate Endothelin-A receptor function in cardiovascular development</td>
<td>Role: PI ($140,000) (30% effort)</td>
<td></td>
</tr>
</tbody>
</table>

### 3. Grants submitted and pending approval

<table>
<thead>
<tr>
<th>Grant Type</th>
<th>PI/Co-I</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Grant</td>
<td>Peng (PI)</td>
<td>06/01/2013-05/31/2016</td>
</tr>
<tr>
<td>March of Dimes Birth Defects Foundation Role and mechanisms of Cdc42 in DiGeorge syndrome</td>
<td>Role: Co-I ($363,000) (10% effort)</td>
<td></td>
</tr>
<tr>
<td>Research Grant</td>
<td>Ruest (PI)</td>
<td>07/01/2013-06/30/2015</td>
</tr>
<tr>
<td>American Heart Association</td>
<td>Endothelin-A receptor function cardiac neural crest cells</td>
<td>Role: PI ($140,000) (25% effort)</td>
</tr>
<tr>
<td>Research Grant</td>
<td>Ruest (PI)</td>
<td>06/01/2013-05/31/2016</td>
</tr>
<tr>
<td>March of Dimes Birth Defects Foundation Endothelin-A receptor in premature parturition</td>
<td>Role: PI ($450,000) (25% effort)</td>
<td></td>
</tr>
</tbody>
</table>
List dates in chronological order, beginning with the first and ending with the most recent.

### 4. Grants approved but not funded

Give the priority scores and percentile scores (if available).

<table>
<thead>
<tr>
<th>Grant Type</th>
<th>PI</th>
<th>Start Date - End Date</th>
<th>Funding Agency</th>
<th>Description</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Grant</td>
<td>Ruest (PI)</td>
<td>07/01/2009-06/30/2011</td>
<td>American Heart Association South Central Affiliate</td>
<td>Identification of Endothelin-A receptor-dependent genes in subpopulations of cardiac neural crest cells</td>
<td>PI</td>
</tr>
<tr>
<td>Research Grant</td>
<td>Ruest (PI)</td>
<td>07/01/2009-06/30/2012</td>
<td>March of Dimes Foundation</td>
<td>Identification of the mechanisms regulating the patterning gene Ednra in neural crest cells</td>
<td>PI</td>
</tr>
</tbody>
</table>

#### Grants submitted but not funded

<table>
<thead>
<tr>
<th>Grant Type</th>
<th>PI</th>
<th>Start Date - End Date</th>
<th>Funding Agency</th>
<th>Description</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Grant Award</td>
<td>Ruest (PI)</td>
<td>06/01/2008-05/31/2011</td>
<td>Basil O’Connor Starter Scholar Research Award (March of Dimes Foundation)</td>
<td>Regulation of Ednra expression during embryonic development and pregnancy</td>
<td>PI</td>
</tr>
<tr>
<td>Research Grant</td>
<td>Ruest (PI)</td>
<td>07/01/2008-06/30/2012</td>
<td>American Heart Association South Central Affiliate</td>
<td>Identification of Endothelin-A receptor-dependent genes in cardiac neural crest cells</td>
<td>PI</td>
</tr>
<tr>
<td>Research Grant</td>
<td>Ruest (PI)</td>
<td>07/01/2008-06/30/2010</td>
<td>American Heart Association South Central Affiliate</td>
<td>Identification of Endothelin-A receptor-dependent genes in subpopulations of cardiac neural crest cells</td>
<td>PI</td>
</tr>
<tr>
<td>Research Grant (R21)</td>
<td>Sharma AC (PI)</td>
<td>12/01/2008-11/30/2011</td>
<td>National Institutes of Health</td>
<td>Myocardial endothelin mechanisms in sepsis</td>
<td>Co-PI</td>
</tr>
<tr>
<td>Research Grant (R01)</td>
<td>Ruest (PI)</td>
<td>12/01/2008-11/30/2011</td>
<td>National Institutes of Health</td>
<td>Runx2 function in palate formation</td>
<td>PI</td>
</tr>
<tr>
<td>Research Grant</td>
<td>Svoboda (PI)</td>
<td>09/01/2009-08/31/2011</td>
<td>National Institutes of Health (NIDCR) - Challenge Grant (15-ES-101)</td>
<td>Genome impact on nicotine detoxification in mouse model</td>
<td>Co-I</td>
</tr>
<tr>
<td>Research Grant</td>
<td>Ruest and Spears (PI)</td>
<td>12/01/2009-11/30/2014</td>
<td>National Institutes of Health (NIDCR)</td>
<td>Runx2 function in palate formation</td>
<td>PI</td>
</tr>
<tr>
<td>Research Grant (R21)</td>
<td>Ruest (PI)</td>
<td>04/01/2010-03/31/2012</td>
<td>National Institutes of Health (NICHID)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
List dates in chronological order, beginning with the first and ending with the most recent.

Progesterone Regulation of the Endothelin-A receptor in eclamptic pregnancy  
Role: PI  
Research Grant  Ruest (PI)  03/01/2010-02/28/2013  
March of Dimes Foundation (Prematurity Research Initiative)  
Endothelin-A receptor and pregnancy hypertensive disorders  
Role: PI  
Research Grant (R01)  Svoboda (PI)  04/01/2010-03/31/2014  
National Institutes of Health (NIDCR)  
The role of Twist and Snail in palate development and fusion  
Role: Co-I  
Research Grant (R01)  Ruest (PI)  09/01/2010-08/31-2014  
National Institutes of Health (NIDCR)  
Runx2 function in palate development  
Role: PI  
Research Grant (R03)  Ruest (PI)  12/01/2010-11/30/2012  
National Institutes of Health (NIDCR)  
Regulatory mechanisms of early upper jaw development  
Role: PI  
Research Grant (R01)  Svoboda (PI)  12/01/2010-11/30/2015  
National Institutes of Health (NIDCR)  
The role of Twist and Snail in palate development and fusion  
Role: Co-I  
Research Grant (R01)  Ruest (PI)  04/01/2011-03/31/2016  
National Institutes of Health (NIDCR)  
Regulation of early neural crest cell development and patterning  
Role: PI  
Research Grant (R03)  Ruest (PI)  07/01/2011-06/30/2013  
National Institutes of Health (NIDCR)  
Signaling mechanisms in pregnancy-related periodontitis  
Role: PI  
Research Grant (R03)  Ruest (PI)  07/01/2012-06/30/2014  
National Institutes of Health (NIDCR)  
Signaling mechanisms in pregnancy-related periodontitis  
Role: PI  
Research Grant (1R15DE023447-01)  Ruest (PI)  12/01/2012-11/30/2015  
National Institutes of Health (NIDCR)  
Molecular mechanisms controlling mandibular neural crest cell development  
Role: Co-I  
RUEST
List dates in chronological order, beginning with the first and ending with the most recent.

G. Sponsored Clinical Trials and Drug Studies

Supply the same information and use the same format as above for research grants

NA
List dates in chronological order, beginning with the first and ending with the most recent.

# Administrative Service

## A. Elected, Appointed or Voluntary Positions

For each of the following categories, list the organizations, task forces, committees or programs on which you have served, the beginning and ending dates of your service, any offices you held, and whether you were elected, appointed or volunteered for that service (e.g. Admissions Committee, 1999-present, appointed).

### 1. Institutional (HSC or Texas A&M University System)

<table>
<thead>
<tr>
<th>Organization/Committee</th>
<th>Position</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas A&amp;M Health Science Center 1st Research Symposium (appointed)</td>
<td>Organizing member</td>
<td>November 2010</td>
</tr>
<tr>
<td>Member, Cardiovascular Research Institute (appointed)</td>
<td>2012</td>
<td>member</td>
</tr>
<tr>
<td></td>
<td>2012-2013</td>
<td>Planning committee, CVRI 4th Research Symposium (May 2013)</td>
</tr>
<tr>
<td></td>
<td>2012-2013</td>
<td>Session organizer, CVRI 4th Research Symposium</td>
</tr>
</tbody>
</table>

### 2. Component

Most appointments are from September 1st to August 31st unless indicated otherwise

<table>
<thead>
<tr>
<th>Committee/Committee</th>
<th>Position</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biosafety Committee (appointed)</td>
<td>Member</td>
<td>2007-present</td>
</tr>
<tr>
<td></td>
<td>Recombinant DNA Subcommittee</td>
<td>2007-present</td>
</tr>
<tr>
<td>Research Committee (appointed)</td>
<td>Member</td>
<td>2007-2011</td>
</tr>
<tr>
<td></td>
<td>Secretary</td>
<td>2007-present</td>
</tr>
<tr>
<td>Awards Committee (appointed)</td>
<td>Secretary</td>
<td>2007-present</td>
</tr>
<tr>
<td>Baylor College of Dentistry Annual Research Day (volunteered)</td>
<td>Judge, Student Oral Presentations</td>
<td>2007-present</td>
</tr>
<tr>
<td>Faculty Forum (elected)</td>
<td>Secretary</td>
<td>May 2008-2009</td>
</tr>
<tr>
<td></td>
<td>Vice-President</td>
<td>2009-December 2009</td>
</tr>
<tr>
<td></td>
<td>Interim President</td>
<td>January 2010-2010</td>
</tr>
<tr>
<td></td>
<td>President</td>
<td>2010-2011</td>
</tr>
<tr>
<td>TAMU-Baylor College of Dentistry Administrative Council</td>
<td>Faculty representative</td>
<td>November 2009-2011</td>
</tr>
<tr>
<td>Faculty Ad Hoc Committee for the Dean Search (mandated by Faculty Forum)</td>
<td>Chair</td>
<td>December 2010-May 2011</td>
</tr>
<tr>
<td>Dental Admission Committee (appointed)</td>
<td>Member</td>
<td>2010-present</td>
</tr>
</tbody>
</table>
3. Department/Unit

| Pathways to Excellence” seminar series (appointed) | 2007-2001 Organizing Member |
| Resource committee (appointed) | 2008-present Member |

4. Hospital/Clinic

NA

5. State and Regional

| American Association for Dental Research- Dallas section (elected) |
| 2009-2010 Ex-officio, consultant |
| 2008-2009 President |
| 2008 Vice-President |

6. National and International

| American Association of Anatomists’ Advisory Committee for Young Anatomists (ACYA) (appointed) |
| 2011-present Member |

B. Recognition

List service awards you have received and the dates.

NA

C. Innovation

List organizations, task forces, committees or programs you have initiated and the dates of establishment.

Faculty Ad Hoc Committee for the Dean Search.
In 2010, I was mandated by Faculty Forum to organize a faculty committee to interview the candidates for the open Dean position. I was appointed as Chair of the committee of 7 members. The committee established a list of questions that were asked to all the candidates during a time period that was specifically allocated for the faculty to visit with the candidates. In addition of asking the questions with the other members of the committee, I was hosting the forum opened to all the faculty of the College, I was in charge of welcoming the candidates and moderating the discussions during the open-question periods. At the end, the committee produced a summary of the meetings and the summary was given to the Dean Search committee.
List dates in chronological order, beginning with the first and ending with the most recent.

**Public Service**

**A. Elected, Appointed or Voluntary Positions**

For each of the following categories, list the organizations, task forces, committees or programs on which you have served, the beginning and ending dates of your service, any offices you held, and whether you were elected, appointed or volunteered for that position (e.g., Bryan/College Station Chapter, American Heart Association, 1995-present, voluntary).

| 1. Local | NA |
| 2. State and Regional | See above (AADR-Dallas chapter) |
| 3. National and International | See above (ACYA) |

**B. Recognition**

List public service awards you have received and the dates.

| NA |

**C. Innovation**

List public organizations, task forces, committees or programs you have initiated (e.g., Temple Task Force for a Smoke-Free Environment) and the dates of establishment.

| NA |
Other Information

Briefly provide any other information that is pertinent to your professional or public activities. This may include items such as your involvement in religious organizations, former or current military experience, and awards or other pertinent information not mentioned above.

Organized talks or symposia:

Pathways to Excellence” seminar series
   2007-2011       Organizing Member

Faculty Forum
   2008-2011       (Monthly)

Texas A&M Health Science Center Research Symposium, Session 1: Developmental Biology and Stem Cell Research. College Station November 11, 2010. Session organizer and chair


Cardiovascular Research Institute 4th Research Symposium, session organizer and chair (Session IV: Developmental Biology and Stem Cell Research) (Temple TX, May 2013)

Other services:

Research! Louisville
   2004 and 2005       Judge (poster presentation)

Bloomfield Center for Research in Aging Journal Club
   1998-1999       Organizer
Attachments

The Faculty Record plus the attachments below, in the order listed, are to be submitted as a single PDF file. Identify the attachments appropriately.

A. Teaching Activities

1. Teaching Evaluations

These are to be from the previous five years, not to exceed ten evaluations, which are felt to best exemplify the pedagogy of the candidate. You may include peer teaching reviews as well as student evaluations. Submit as a PDF attachment to faculty record.

2. Continuing Medical Education

These are to be from the previous five years, not to exceed ten evaluations of CME activities presented by the candidate, which are felt to best exemplify the pedagogy of the candidate. Submit as a PDF attachment to faculty record.

B. Representative Publications

These are to be from the previous five years, not to exceed ten publications, which are felt to best exemplify the scholarship of the candidate. Submit as a PDF attachment to faculty record.

C. Brief statement of Philosophy of Teaching, Research, and Service

This statement is to be concise in form, being no more than 3 pages, single spaced at a maximum. It should provide a statement on goals, philosophy, strategies, and emphases in carrying out your professional responsibilities and performance in the broad areas of teaching, research and service. The purpose is not for you to make an argument for promotion or tenure; it is to provide a context for review of the file at each level of review. Submit as a PDF attachment to faculty record.

D. External References List #1
(For Component/Unit in soliciting external letters; list will not be submitted to HSC.)

Submit a list of 4 external references agreed upon collectively by the candidate and component department/unit chair, including a short one paragraph biographical sketch of each, title including academic rank, physical mailing address, e-mail address, phone number and contact information for an administrative assistant. External references must be contacted by component department/unit chair prior to faculty record submission to ensure availability to provide an external review. Submit as a PDF attachment to faculty record.

E. External References List #2
(For Component/Unit in soliciting external letters; list will not be submitted to HSC.)

Submit a list of 4 external references provided by the component department/unit chair in consultation with their respective departmental/unit representative on the Component Faculty Appointment Promotion and Tenure Review Committee and/or other senior faculty. The external references in List #2 should not be close friends of, colleagues of, or collaborators with the candidate. The list should include for each external reference a short one paragraph biographical sketch, title including academic rank, physical mailing address, e-mail address, phone number and contact information for an administrative assistant. The Component Committee and HSC Appointment, Promotion and Tenure Review Committee consider input from these unbiased sources essential to the decision making process concerning promotion and/or tenure. External references must be contacted by component department/unit chair prior to faculty record submission to ensure availability to provide an external review. Submit as a PDF attachment to faculty record.
Certification

I certify that, to the best of my knowledge, the information contained herein is true and correct.

______________________________________________________ ___________________________
Signature of Applicant  Date

I certify that, to the best of my knowledge, the information contained herein is true and correct.

______________________________________________________ ___________________________
Signature of Component Department/Unit Chair/Academic Officer  Date
Use your computer to complete this form and utilize as much space as necessary, below each heading, to provide the requested information. If you have no information for a topic, write "None" or "NA" under the heading. Whenever dates are requested throughout the document, list them in chronological order, beginning with the first and ending with the most recent. Do not double list accomplishments, but rather place them in the category you deem most appropriate. The Faculty Record plus attachments are to be submitted as a single PDF file.

The electronic version of this form can be found on-line at: http://www.tamhsc.edu/facultystaff/rules/index.html, 12.01.99.Z1.01 Appendix B

Name: Emet D. Schneiderman

HSC Component: Texas A&M University Baylor College of Dentistry

Component Department/Unit: Biomedical Sciences

Present Rank (Check one of the following):

- Assistant Professor
- Clinical Assistant Professor
- Adjunct Assistant Professor
- Clinical Associate Professor
- Adjunct Associate Professor

I am applying for promotion to: (Check one of the following):

- Associate Professor
- Clinical Associate Professor
- Adjunct Associate Professor
- Professor
- Clinical Professor
- Adjunct Professor

Present Tenure Status:

- Tenure Track
- Only Track
- Tenured
- Tenured In Title Only

*Non-Tenure Track:

- Educator*
- Research*
- Professional
- Service*

Applying for tenure? Yes No

Applying for tenure in title only? Yes No

1 Tenure in Title Only is only available in the College of Medicine.

Primary Academic Area
(if Tenured or Tenure Track): Education Research Professional Service

Secondary Academic Area
(if Tenured or Tenure Track): Education Research Professional Service

I have read The Texas A&M University System Health Science Center Internal Policies concerning Faculty Appointment, Promotion and Tenure located under Section 12 Faculty, 12.01.99.Z1.01 of the HSC Institutional Rules and Policies, URL http://www.tamhsc.edu/facultystaff/rules/

Yes No

I understand that the deliberations of the Component and the Health Science Center Appointment, Promotion and Tenure Review Committees are confidential. I understand that I should not solicit any information about those deliberations from any member of those committees or anyone involved in the deliberations. I also understand that the results of the Component committee deliberations serve as recommendations to the Component Dean/Director and the results of the Health Science Center Appointment, Promotion and Tenure Review Committee deliberations serve as recommendation to the Health Science Center Vice President for Academic Affairs, with the final decision on promotion made by the Health Science Center President. I understand that the granting of tenure is made by The Texas A&M University System Board of Regents.

Yes No
List dates in chronological order, beginning with the first and ending with the most recent.

**General Information**

**A. Education**

List all earned and honorary college degrees that you have received (B.S., M.S., M.D., Ph.D., etc.) and the dates. Give the name of degree, date of degree, field of degree, and institution and location degree awarded for each.

<table>
<thead>
<tr>
<th>Year</th>
<th>Degree</th>
<th>Institution</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>BA, Anthropology</td>
<td>Northwestern University</td>
<td>Evanston, Illinois</td>
</tr>
<tr>
<td>1978</td>
<td>MA, Anthropology (Biological)</td>
<td>Northwestern University</td>
<td>Evanston, Illinois</td>
</tr>
<tr>
<td>1985</td>
<td>PhD, Anthropology (Biological)</td>
<td>The University of Michigan</td>
<td>Ann Arbor, Michigan</td>
</tr>
</tbody>
</table>

**B. Postdoctoral Education (Including Residencies and Fellowships)**

List the postdoctoral education that you have completed. Give the title of your position (e.g., Postdoctoral Fellow), the beginning and ending dates, the source of funding (e.g. American Heart Association, Texas Affiliate), field, name of mentor, and name of institution and location for each. Underline those positions for which the applications were peer reviewed.

**C. Positions Held**

List each position (teaching, administrative, and other) you have held subsequent to completion of your postdoctoral education. Give beginning and ending dates and the institution and location for each position. If you were a member of the graduate faculty at another institution, give the dates of appointment and the name of the institution and location. If you held an academic appointment, give the appropriate dates and the name and location of the institution. Underline your academic appointments at Texas A&M Health Science Center.

**Positions and Employment**

<table>
<thead>
<tr>
<th>Year</th>
<th>Position</th>
<th>Institution and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978-1985</td>
<td>Research Assistant, University of Michigan Center for Human Growth and</td>
<td>University of Michigan Center for Human Growth and Development, Ann Arbor, MI</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td></td>
</tr>
<tr>
<td>1984-1986</td>
<td>Lecturer, Department of Orthodontics</td>
<td>University of Michigan, Ann Arbor, MI</td>
</tr>
<tr>
<td>1985-1988</td>
<td>Assistant Professor, Department of Orthodontics</td>
<td>University of Detroit, Detroit MI</td>
</tr>
<tr>
<td>1988-1994</td>
<td>Assistant Professor and Director of Research</td>
<td>Department of Oral and Maxillofacial</td>
</tr>
<tr>
<td></td>
<td>Surgery and Pharmacology, Baylor College of Dentistry</td>
<td>Dallas, TX</td>
</tr>
<tr>
<td>1994-2006</td>
<td>Associate Professor with tenure, Department of Oral and Maxillofacial</td>
<td>Baylor College of Dentistry-Texas A&amp;M</td>
</tr>
<tr>
<td></td>
<td>Surgery and Pharmacology, Texas A&amp;M University System</td>
<td>University System, Dallas, TX</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(began component of Texas A&amp;M Health and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Science Center in 1999)</td>
</tr>
<tr>
<td>1996-2006</td>
<td>Executive Director of Information Resources/Information Technology Services</td>
<td>Baylor College of Dentistry-Texas A&amp;M University System Health Science Center</td>
</tr>
<tr>
<td>2006-</td>
<td>Associate Professor with tenure, Biomedical Sciences</td>
<td>Baylor College of Dentistry-Texas A&amp;M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Health Science Center</td>
</tr>
<tr>
<td>2009-</td>
<td>Faculty Member, School of Graduate Studies</td>
<td>Texas A&amp;M Health Science Center</td>
</tr>
</tbody>
</table>

**Experience**

<table>
<thead>
<tr>
<th>Year</th>
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<th>Institution and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987-1989</td>
<td>Member of the Cleft-Lip and Palate Team and Dental Staff</td>
<td>Children's Hospital of Michigan, Detroit</td>
</tr>
<tr>
<td>1998-2009</td>
<td>Member</td>
<td>Soredex Digital Advisory Group, Helsinki Finland</td>
</tr>
<tr>
<td>2005-</td>
<td>Member</td>
<td>Southern Association of Colleges and Schools (SACS), Evaluator/Site visitor for a Member Institutions</td>
</tr>
</tbody>
</table>
List dates in chronological order, beginning with the first and ending with the most recent.

<table>
<thead>
<tr>
<th>Year(s)</th>
<th>Position/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-11</td>
<td>North and Central Texas Clinical and Translational Science Initiative (NIH UL1 RR014982) pilot grant award reviewer</td>
</tr>
<tr>
<td>2010-</td>
<td>Chair, Institutional Review Board, Baylor College of Dentistry-Texas A&amp;M Health Science Center</td>
</tr>
</tbody>
</table>

D. Honors

List the honors you have received and the dates (for example, Phi Beta Kappa, 1985; American Heart Association Established Investigator, 2001).


Co-mentored Dr. Amber Callis, recipient of the Olav Alvares Award for Outstanding Articles Published in the Journal of Dental Education in 2010 for the article entitled “Application of Basic Science to Clinical Problems: Traditional vs. Hybrid Problem-Based Learning” (2010, 74: 1113-1124.)

Co-mentor of Jane Cotter, First Place Winner of Densply Award at American Association of Dental Hygienists Meeting, June 19, 2009 in Washington DC for poster “Factors Affecting the Performance of Oral Cancer Screening by Texas Dental Hygienists.”

Co-mentor of Dr. Tamara Gravely, winner of award from American Dental Education Association for the best manuscript in the “Milieu in Dental School and Practice” section, 2004.

Mentor of (Yunn-Sheng) Dr. Gloria Hu, place winner for her Graduate Student Research presented at the Annual Meeting of the American Academy of Pediatric Dentistry, May 1994, Orlando, Florida.

Mentor of Dr. Ronald J. Garza, recipient of second place award for research project presented at the Annual Meeting of the American Academy of Pediatric Dentistry, May 28 to June 1, 1993, St. Louis, Missouri.

First Place Prize in the Lever Brothers (Chesebrough-Ponds) Educational Research Paper Competition at the 1988 meeting of the American Association of Dental Schools.

Juan Comas Prize for Outstanding Student Paper for 1985 at the 54th Annual Meeting of the American Association of Physical Anthropologists.

E. Specialty and Sub-Specialty Board Certifications

List the name of each board or other professional organization by which you have been certified/recertified. Also, give the original date of certification for each and expiration date(s) for each (e.g. American Board of Ophthalmology, 1990, exp. 2010; American Board of Microbiology, 1992, exp. 2010).
List dates in chronological order, beginning with the first and ending with the most recent.

F. Society Memberships

1. College or academic fellowships or memberships and effective dates (American and/or foreign)
   
   (e.g., American College of Physicians, 1995; American Academy of Microbiology, 1996)

2. Elected societies and effective dates
   
   (e.g., American Physiological Society, 1985; Health Science Communication Association, 1988)

   Sigma Xi, Member, 1990-1995

3. Other memberships (not elected) and effective dates
   
   (e.g., American Medical Association, 1980; American Society for Microbiology, 1982)

   **Current**
   American Cleft Palate Association, Member, 1987-1996; 2007-
   American Association of Dental Schools, Member, 1988-
   American Association for Dental Research, Member, 1983-
   International Association for Dental Research, Member, 1983-
   Dallas Section, AADR/IADR, 1989-
       President, July 1992-1993
       Vice President, August 1991-1992
       Secretary-Treasurer, July 1990-August 1991
       Judge, Student Research Competition, 1990, 1992, 1994

   **Past**
   Texas Telemedicine and Education Consortium, 1996-2004
   National Center for Science Education 1991-2000
   Human Biology Council, Member, 1986-1995
   American Association of Physical Anthropologists, Member, 1980-1994
List dates in chronological order, beginning with the first and ending with the most recent.

Teaching

A. Local Teaching Activities

1. Lectures, small group conferences, laboratories and seminars for professional students, graduate students, residents and fellows

<table>
<thead>
<tr>
<th>Year</th>
<th>Course Title</th>
<th>Hours</th>
<th>Students</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-2009</td>
<td>SPEG/PBP II Intro to Human Body</td>
<td>10</td>
<td>31 undergrad students</td>
<td>4.23/4.07</td>
</tr>
<tr>
<td></td>
<td>BMS 6640 Gross Anatomy</td>
<td>111</td>
<td>106 dental students</td>
<td>3.83</td>
</tr>
<tr>
<td></td>
<td>BMS 5221 Research Methodology</td>
<td>4</td>
<td>32 grad students</td>
<td>3.68</td>
</tr>
<tr>
<td></td>
<td>DH 5201 Teaching Strategies</td>
<td>1</td>
<td>1 dental hygiene student</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>DH 5200 Educational Research</td>
<td>1</td>
<td>3 dental hygiene students</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>DH 3250 Biomedical Science I</td>
<td>11</td>
<td>30 dental hygiene students</td>
<td>4.24</td>
</tr>
<tr>
<td></td>
<td>BMS 5V04 Head and Neck Anatomy</td>
<td>2</td>
<td>25 grad students</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>6860 Evidence-based Dentistry D1</td>
<td>29</td>
<td>106 dental students</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>7400 Evidence-based Dentistry D2</td>
<td>26</td>
<td>100 dental students</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>BMS 5222 Applied Biostatistics</td>
<td>24</td>
<td>28 grad students</td>
<td>4.20</td>
</tr>
<tr>
<td>2009-2010</td>
<td>SPEG/PBP II Intro to Human Body</td>
<td>10</td>
<td>31 undergrad students</td>
<td>3.95</td>
</tr>
<tr>
<td></td>
<td>Evidence-based Dentistry Fundamentals for Faculty</td>
<td>20</td>
<td>11 faculty</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>BMS 5V04 Head and Neck Anatomy</td>
<td>2</td>
<td>25 grad students</td>
<td>3.7</td>
</tr>
<tr>
<td></td>
<td>DH 3250 Biomedical Science I</td>
<td>11</td>
<td>30 dental hygiene students</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>DH 5200 Educational Research</td>
<td>1</td>
<td>3 dental hygiene students</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>BMS 5221 Research Methodology</td>
<td>4</td>
<td>32 grad students</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>BMS 6640 Gross Anatomy</td>
<td>111</td>
<td>106 dental students</td>
<td>4.06</td>
</tr>
<tr>
<td></td>
<td>7400 Evidence-based Dentistry D2</td>
<td>26</td>
<td>100 dental students</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>6860 Evidence-based Dentistry D1</td>
<td>29</td>
<td>106 dental students</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>BMS 5222 Applied Biostatistics</td>
<td>24</td>
<td>28 grad students</td>
<td>4.20</td>
</tr>
</tbody>
</table>

2010-11
List dates in chronological order, beginning with the first and ending with the most recent.

1. **SPEP/PBP II Intro to Human Body**: 10 teaching hrs; class of 31 SPEP undergrad; teaching evaluation: 4.6
2. **Evidence-based Dentistry Fundamentals for Faculty**: 20 teaching hrs; class of 10 faculty
3. **8034 Evidence-based Dentistry D3**: 5 teaching hrs; class of 100 dental students; helped to plan the EBD component of the course as part of a team of clinicians and basic scientists; plan was undermined by a course director who left BCD abruptly
4. **DH3250 Biomedical Science I**: 11 teaching hrs; class of 30 dental hygiene students; teaching evaluation: 4.3
5. **BMS 5V04 Head and Neck Anatomy**: 2 recorded teaching hrs; class of 10 grad students; teaching evaluation: 3.7
6. **BMS 5221 Research Methodology**: 4 teaching hrs; class of 35 grad students; teaching evaluation: 3.8
7. **BMS 6640 Gross Anatomy**: 111 teaching hrs; class of 103 dental students; course materials developed; teaching evaluation: NA
8. **7400 Evidence-based Dentistry D2**: 26 teaching hrs; class of 102 dental students; course materials developed; teaching evaluation: 4.4
9. **BMS 5222 Applied Biostatistics**: 24 teaching hrs; class of 35 grad students; teaching evaluation: 4.3

**2011-2012**

1. **BMS 6640 Gross Anatomy**: 113 teaching hrs; class of 104 dental students; teaching evaluation: 4.7
2. **BMS 5222 Applied Biostatistics**: 24 teaching hours; class of 35 grad students; teaching evaluation: 4.3
3. **BMS 5221 Research Methodology**: 5 teaching hrs; class of 35 grad students; teaching evaluation: 4.0
4. **DH 5200 Educational Research**: 2 teaching hrs.; class of 3 grad students;
5. **DH3250 Biomedical Science I**: 11 teaching hrs; class of 30 dental hygiene students; teaching evaluation: 4.0
6. **SPEP Intro. to Human Body**: 10 teaching hrs., class of 41 undergrad students; teaching evaluation: 4.4
7. **6860 Evidence-based Dentistry D1**: 26 teaching hrs., class of 103 dental students; teaching evaluation: 4.5
8. **7400 Evidence-based Dentistry D2**: 23 teaching hrs., class of 102 dental students; teaching evaluation: 4.4
9. **8034 Comprehensive Care (D3) EBD Component**: 4 teaching hrs., class of 100 dental students;
10. **9030 Diagnosis and Treatment Planning (D4) EBD Component**: 5 teaching hrs., class of 100 dental students; teaching evaluation: NA
11. **Fundamentals of EBD for faculty**: 26 teaching hrs; 11 faculty; teaching evaluation: NA
12. **DH 4620 Theory of Dental Hygiene Practice II (EBD Component)**: 2 teaching hrs; class of 31 students; teaching evaluation: 4.4
13. **SGSI 601 Responsible Conduct in Research**: 1 teaching hr; class of 30 students; teaching evaluation: NA
14. **Fundamentals of EBD for faculty**: 26 teaching hrs; 9 faculty teaching evaluation: NA
15. **BMS5V04 Head and Neck Anatomy**: 2 recorded teaching hrs; class of 16 grad students; teaching evaluation: 4.1

**2012-2013**

1. **BMS 6640 Gross Anatomy**: 111 teaching hrs; class of 106 dental students; teaching evaluation: 4.7
2. **BMS 5222 Applied Biostatistics**: 24 teaching hours; class of 33 grad students; teaching evaluations: 4.3
3. **BMS 5221 Research Methodology**: 4 teaching hrs; class of 32 grad students; teaching evaluation: 4.0
4. **DH 5200 Educational Research**: 1 teaching hr.; class of 3 grad students; teaching evaluation: NA
5. **DH3250 Biomedical Science I**: 11 teaching hrs; class of 30 dental hygiene students; teaching evaluation: 4.1
6. **SPEP Intro. to Human Body**: 10 teaching hrs., class of 31 undergrad students; teaching evaluation: NA
7. **6860 Evidence-based Dentistry D1**: 29 teaching hrs., class of 106 dental students; teaching evaluation: 4.5
8. **7400 Evidence-based Dentistry D2**: 26 teaching hrs., class of 100 dental students; teaching evaluation: 4.3
9. **8034 Comprehensive Care (D3) EBD Component**: 5 teaching hrs., class of 100 dental students; teaching evaluation: NA
10. **9030 Diagnosis and Treatment Planning (D3) EBD Component**: 5 teaching hrs., class of 100 dental students; teaching evaluation: NA
List dates in chronological order, beginning with the first and ending with the most recent.

11. **SGSI 601 Responsible Conduct in Research**; 1 teaching hr; class of 30 grad students; teaching evaluation: NA
12. **Fundamentals of EBD for faculty**; 20 teaching hrs; 13 faculty; teaching evaluation: NA
13. **DH 4620 Theory of Dental Hygiene Practice II (EBD Component)**; 2 teaching hrs; class of 31 students; teaching evaluation: NA
14. **BMS5V04 Head and Neck Anatomy**; 2 recorded teaching hrs; class of 16 grad students; teaching evaluation: NA

---

2. **Clinical teaching for professional students, residents and fellows**

   List for each the topic of instruction/supervision; number of hours of direct instruction or supervision per year; approximate number of students, residents or fellows impacted; brief description of educational materials developed (slides, handouts, etc.). For Attachment A (1), attach teaching evaluations that are to be from the previous five years, not to exceed ten evaluations, which are felt to best exemplify your pedagogy. You may include peer teaching reviews as well as student evaluations.

---

B. **Non-Credit Instruction**

1. **Continuing Medical Education**
List dates in chronological order, beginning with the first and ending with the most recent.

List for each the topic of instruction; number of hours of direct instruction per year; approximate number of professionals impacted; brief description of educational materials developed (slides, handouts, etc.). For Attachment A (2), attach evaluations of CME activities presented by you that are to be from the previous five years, not to exceed ten evaluations, which are felt to best exemplify your pedagogy.

2. Educational activities for the lay public

List for each the topic of instruction; number of hours of direct instruction per year; approximate number of individuals impacted; brief description of educational materials developed (slides, handouts, etc.).

C. Mentoring and Advising

1. Graduate students

Are you a member of the graduate faculty? X Yes ____ No

If so, Date of Appointment: ___________ 2009

List the name of each graduate student for whom you served as a member of the thesis or dissertation committee. Underline the names of students for whom you served as Chairperson. Give the name of each student, the degree earned, the field of the student, the name of the department and institution where the degree was earned, and the date the degree was earned. Asterisk (*) those students who did not complete writing their dissertation under your supervision. Give each student's current title/position and location (if known).


List dates in chronological order, beginning with the first and ending with the most recent.


18. Tamara Gravely, Enrichment and recruitment programs at dental schools: Characteristics and impact on enrollment of underrepresented minority students, MS, Health Professions Education Baylor College of Dentistry – Texas A&M Health Science Center, 2004.

19. Kelly Muhney, the prevalence of academic dishonesty in Texas dental hygiene programs, MS
List dates in chronological order, beginning with the first and ending with the most recent.

<table>
<thead>
<tr>
<th>Number</th>
<th>Author(s)</th>
<th>Title</th>
<th>Institution</th>
<th>Date</th>
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<tbody>
<tr>
<td>21.</td>
<td>Amber Callis</td>
<td>Application of Basic Science to Clinical Problems: Traditional vs. Hybrid Problem-Based Learning</td>
<td>MS, Health Professions Education, Baylor College of Dentistry – Texas A&amp;M University System Health Science Center</td>
<td>2008</td>
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<tr>
<td>23.</td>
<td>Amanda McNiel</td>
<td>Use of prescription stimulants among Texas dental and dental hygiene students</td>
<td>MS Dental Hygiene, Baylor College of Dentistry – Texas A&amp;M Health Science Center</td>
<td>2009</td>
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<tr>
<td>24.</td>
<td>Danielle French</td>
<td>Evaluation of current dental delivery systems in nursing homes in Dallas, Texas</td>
<td>MS Dental Hygiene, Baylor College of Dentistry – Texas A&amp;M Health Science Center</td>
<td>2010</td>
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<tr>
<td>25.</td>
<td>Ryan Roberts</td>
<td>Safety and efficacy of an intramuscular sedation regimen using ketamine, midazolam, and glycopyrrolate in the pediatric dental office</td>
<td>MS Oral Biology, Pediatric Dentistry, Baylor College of Dentistry – Texas A&amp;M Health Science Center</td>
<td>2010</td>
</tr>
<tr>
<td>26.</td>
<td>Stacy Pettit</td>
<td>Factors affecting the oral care practices of Texas nurses employed in hospitals</td>
<td>MS, Health Professions Education, Texas A&amp;M University System Health Science Center</td>
<td>2010</td>
</tr>
<tr>
<td>27.</td>
<td>Lakshmi Gorungantula</td>
<td>Salivary biomarkers interleukin 6, 8 and basic fibroblast growth factor in oral lichen planus patients</td>
<td>MS Oral Biology, Biomedical Sciences, Baylor College of Dentistry – Texas A&amp;M Health Science Center</td>
<td>2011</td>
</tr>
<tr>
<td>28.</td>
<td>Sylvester Awagu</td>
<td>The uses of the internet to access oral health-related information by parents of pediatric dental patients</td>
<td>MS Oral Biology, Pediatric Dentistry, Baylor College of Dentistry – Texas A&amp;M Health Science Center</td>
<td>2011</td>
</tr>
<tr>
<td>29.</td>
<td>Shelby Nelson</td>
<td>Evaluation of soft tissue and bone resorption following routine extractions with and without ridge preservation</td>
<td>MS Oral Biology, Periodontics, Baylor College of Dentistry – Texas A&amp;M Health Science Center</td>
<td>2012</td>
</tr>
<tr>
<td>30.</td>
<td>Jie Liu</td>
<td>A prospective study of the effects of bone marrow penetration in horizontal alveolar ridge augmentation</td>
<td>MS Oral Biology, Periodontics, Baylor College of Dentistry – Texas A&amp;M Health Science Center</td>
<td>2013</td>
</tr>
</tbody>
</table>
List dates in chronological order, beginning with the first and ending with the most recent.

32. Mary Thao Pham Vu, The Cultural Climate of Southwest Dental Colleges: Dentistry and Dental Hygiene. MS Dental Hygiene, Baylor College of Dentistry – Texas A&M Health Science Center, Anticipated completion, 2013.

33. Stacy Beltran, Anti-inflammatory protein TSG-6 effects observed on rates with ligature-induced periodontitis. MS Oral Biology, Periodontics, Baylor College of Dentistry – Texas A&M Health Science Center, Anticipated completion, 2013.

34. Charmaine Porter-O-Reilly, Effectiveness of the Texas Dental First Dental Home program regarding parental knowledge and practice of oral health care for children. MS Oral Biology, Pediatric Dentistry, Baylor College of Dentistry – Texas A&M Health Science Center, Anticipated completion, 2014.


36. Maureen Libby, Assessment of unmet dental and medical needs in young adult cleft lip and/or palate and craniofacial patients in North Texas. MS Oral Biology, Prosthodontics, Texas A&M University Baylor College of Dentistry, Anticipated completion, 2014.


2. Postdoctoral fellows, research associates, residents, fellows and visiting scientists

List the name and beginning and ending dates of each person for whom you served as a research advisor or faculty mentor. Give each person’s current title/position and location (if known).


Haisong Xu, MD. 2008-2009. Cone bean CT imaging of craniofacial patients. Assistant Professor, Dept. of Plastic Surgery, Renji Hospital Shanghai Jiao Tong University School of Medicine.

Provided Statistical Mentoring:
Symone San Miguel, PhD, 2010
Maria Serrano, PhD, 2010- present
List dates in chronological order, beginning with the first and ending with the most recent.

3. **Professional students**


<table>
<thead>
<tr>
<th>Dental Students, Research Projects:</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Meredith Higgonbotham. Co-mentored undergraduate research project: Improving the EBD Skills of Dental Students through Curricular Innovation (IADR presentation), 2012.</td>
</tr>
</tbody>
</table>

**Graduate Student Mentees, other than Thesis Committee**

| 1. James H. Miller. The temporomandibular joint in juvenile rheumatoid arthritis. Chairman/Mentor of graduate certificate research project, Pediatric Dentistry, Baylor College of Dentistry/Baylor University, 1996. |
| 2. Sean Shih-Yao Liu. Mentored as graduate teaching assistant in Applied Biostatistics. 2007. Is now assistant professor at University of Indiana School of Dentistry, Department of Orthodontics and Oral Facial Genetics. |
3. Stacy Pettit RDH. Factors affecting the oral care practices of Texas nurses employed in hospitals. Mentored as graduate teaching assistant in Applied Biostatistics in addition to on her MS research, see above. 2010.


6. Veera Malavia, BDS. Mentored as graduate teaching assistant in Applied Biostatistics. 2011


9. Afsenah Rangiani, DDS. Mentored as graduate teaching assistant in Applied Biostatistics for 2 years; earned PhD, Spring, 2013.

4. Undergraduate students, high school students and other individuals

List the name, beginning and ending dates, and approximate number of hours/week of each undergraduate student, high school student or other individual for whom you served as a research advisor, and the name of the program (e.g., Prairie View Undergraduate Medical Academy Student). Give the person's current title/position and location (if known).

D. Other Teaching Activities

List lectures or Grand Rounds you have given. Underline those you presented at other institutions or at national meetings or symposia; include the topics and dates.

E. Enhancement of Teaching Skills

List teaching academy programs, continuing education programs and workshops you have attended and include the dates.
List dates in chronological order, beginning with the first and ending with the most recent.

F.  Education Administration

List courses, clerkships, graduate programs, residency programs and fellowship programs you have directed and include the dates.

G.  Education Committees

List state, regional and national education committees on which you have served (e.g., residency review committees, National Board of Medical Examiners), the dates of your membership, and any offices you have held (e.g., Secretary).

H.  Innovations in Education

List new courses, residency programs, fellowship programs, workshops, laboratory exercises and other educational components you have developed and the dates they were initiated.

Craniofacial Biology PhD Program, 1993 – I led the committee and co-authored the documentation required for approval that brought this program to fruition. It was the first free-standing PhD program at Baylor College of Dentistry and was aimed at developing academic dentists and specialists rigorous training in craniofacial and dental research. This program evolved into the broader biomedical science PhD program, that still thrives at BCD.

The following sets out my administrative initiatives which were intended to support, unambiguously, the didactic and clinical educational programs of the college. In 1995 I conceived of a new department of Academic Computing to better align computer and network resources with our academic mission and was appointed as its first director that year. As Executive Director of Information Technology Services from 1996-2006, I lead the modernization of IT systems to support all academic endeavors as well as the general functioning of the College: we introduced ubiquitous Internet access, email, remote and wireless access. Between 1996-1999, I established a good relationship with Texas A&M University IT staff, resulting in excellent high-speed and reliable Internet connections and access to A&M’s outstanding online library resources that have become essential in building contemporary and first class teaching and research programs at BCD.

In the early 2000s, under my leadership, ITS pilot tested and implemented the digital radiography systems (Soredex Optime, MiPACS, and integrated them into the College network and and electronic patient record (AXIUM). These are now in use chairside in about 300 operatories in BCD’s many clinics. We also implemented the Bacus virtual microscope system for the histology course and outfitted a 106 station lab with computer monitors for this purpose.

Beginning in 2008 I have been involved in expanded the Evidence Based Dentistry (EBD) program into nearly all curricula at BCD. This has included modifying the D2 course (7400) which I direct to emphasize practical applications; how research evidence must be used to inform clinical decisions and the way in which the dentist will present treatment options, risks etc. to the patient. This is achieved in small group sessions revolving around student Critically Appraised Topic (CAT) presentations (first group, and then individual), and discussion. I have also brought in residents from pediatric dentistry, prosthodontics and endodontics to co-lead these sessions so as to bring their clinical experience and serve as role models for the undergraduates. These same graduate students take my Applied Biostatistics Course (BMS 5222) that reinforces EBD concepts and the importance of sound statistical analysis in the generation of valid “research evidence”. I have co-taught the Summer Faculty EBD seminar (8 weeks, 24 hours total) since 2009; this is an intensive hands-on workshop, primarily for clinical faculty, to bring
them up to speed on what the students have learned and done (e.g. PICO & CATs) in this domain. We have trained 36 faculty members and are training 13 this summer.

As of 2012, I now give an EBD module to the dental hygiene students as part of DH 4620. The students learn how to develop a focused clinical question using the PICO method, and research it by doing an abbreviated CAT that is then formally presented to the whole class; Several other EBD-faculty and I then evaluate the CATS.

I. Education Awards

<table>
<thead>
<tr>
<th>List teaching awards you have received and the dates.</th>
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</thead>
<tbody>
<tr>
<td>July 2010 – “Most Patient Instructor Award” given by the Summer Enrichment Program Collegiate participants, Texas A&amp;M Baylor College of Dentistry</td>
</tr>
</tbody>
</table>
Research and Scholarship

A. Summary of Research and Scholarly Activity

|**Summary of Research and Scholarly Activity**| Summarize in 100 words or less your most important discoveries and your current scholarly activities or interests including research, contributions to education, and patient care. For Attachment B, attach representative publications that are to be from the **previous five years**, not to exceed ten publications, which are felt to best exemplify your scholarship. |

My extensive work in developing biostatistical & cephalometric software and now conebeam CT quantization tools has facilitated research on facial growth & development and has given me the ability to help many students and colleagues with their own research. My long-standing interest in facial growth disorders has culminated in the initiation of an adult cleft lip and palate clinic to better serve this “orphaned” population; I am working with Baylor College of Dentistry and University of Texas Medical Center faculty to realize this.

My most important discovery is the disparity between radiographic evidence of destruction vs. pain and dysfunction of the temporomandibular joint in children with juvenile rheumatoid arthritis.

B. Publications

1. Published articles and case reports

   *Give the complete citation of each published article or case report for which you are an author or co-author (chronological order, ending with the most recent). Place an asterisk (*) before those that received peer review. Give all of the authors' names exactly as they appear in the article or case report, print your name in bold letters and underline the name of the corresponding author (the person who submitted the article). Include the beginning and ending page numbers. Please use the format of the following example:*


List dates in chronological order, beginning with the first and ending with the most recent.


List dates in chronological order, beginning with the first and ending with the most recent.

program extending the two-stage polynomial model to allow missing data. *Int. J. Biomed. Comput.* 33, 287-296.


List dates in chronological order, beginning with the first and ending with the most recent.


**Continuing Education Courses Given**


2. **Articles and case reports in press**

<table>
<thead>
<tr>
<th>Name</th>
<th>Journal and Title</th>
<th>Date</th>
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<table>
<thead>
<tr>
<th>Name</th>
<th>Journal and Title</th>
<th>Date</th>
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</table>

3. **Articles and case reports submitted**

<table>
<thead>
<tr>
<th>Name</th>
<th>Journal and Title</th>
<th>Date</th>
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<tr>
<th>Name</th>
<th>Journal and Title</th>
<th>Date</th>
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4. **Books, chapters in books, and monographs**

<table>
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<tr>
<th>Name</th>
<th>Citation</th>
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<tr>
<th>Name</th>
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<tr>
<th>Name</th>
<th>Citation</th>
</tr>
</thead>
</table>
List dates in chronological order, beginning with the first and ending with the most recent.

5. Abstracts

<table>
<thead>
<tr>
<th></th>
<th>Author(s)</th>
<th>Year</th>
<th>Title</th>
<th>Journal</th>
<th>Volume</th>
<th>Pages</th>
</tr>
</thead>
</table>
List dates in chronological order, beginning with the first and ending with the most recent.


List dates in chronological order, beginning with the first and ending with the most recent.

Latham treatment. 7th International Congress on Cleft Palate, October 31 to November 5, 1993. Broadbeach, Queensland, Australia.


List dates in chronological order, beginning with the first and ending with the most recent.


6. Exhibits and productions

Describe any exhibits and productions for which you have been responsible (chronological order, ending with the most recent). Indicate which of these have won awards (e.g., the AMA Billings Silver Medal). Place an asterisk (*) before those that received peer review.

Software packages


Kowalski CJ, Schneiderman ED, Willis SM. TX: Treatment effects statistical software
package. (Set of 16 user friendly GAUSS microcomputer programs for the analysis of longitudinal data. Currently in use at approximately 60 universities and medical centers worldwide.) Public domain. 1994-1995.

C. Presentations

1. Invited

List the invited research presentations you have given at international or national meetings, symposia, workshops or conferences, and invited research lectures (chronological order, ending with the most recent). Underline those presented at other institutions. Give the title of your presentation, the name of the meeting, symposium, workshop, conference or institution, and the date. Place an asterisk (*) before those that received peer review.

Characterization of Normal Craniofacial Growth of the Rhesus Monkey
March 11, 1985
Washington University, School of Dentistry, Department of Orthodontics, St. Louis, Missouri

Craniofacial Adaptations to Altered Mandibular Position
August, 1986
Faculty of Colegio Odontologico Colombiano and the Department of Orthodontics at Universidad Javeriana, Bogota, Colombia

Growth of the Premaxillary Region - Basic Biological Considerations and Clinical Manipulation
February 16, 1988
Baylor College of Dentistry, Department of Orthodontics, Dallas, Texas

Tracking Growth in Children
January 21, 1990
Dallas Chapter of AADR, Baylor University Medical Center, Dallas, Texas

Developing a Competitive NIH Grant Proposal
April 25, 1995
Baylor Research Institute, Baylor University Medical Center, Dallas, Texas

Internet Resources for Assessment
August 2, 1997
Annual Meeting for Assessment Center for Health Professions Education, Dallas, Texas

Tools for Online Evaluation
August 16, 1998
Annual Meeting for Assessment Center for Health Professions Education, Dallas, Texas

*Services of the Assessment Center for Health Professions Education.
September 17, 1998.

Assessment of a New Information Technology Course in the Dental Curriculum. Continuing Education Course on Competency-Based Health Education,
October 23, 1998,
Baylor College of Dentistry, Dallas, Texas, Co-presentor: R. Figueroa.
*Creating a Culture of Assessment through the Assessment Center for Health Professions Education.
July 24, 1999.
11th International Conference on Assessing Quality in Higher Education. Manchester, United Kingdom. Co-author; Presented by A. McCann.

New Tools for Answering Old Questions on How Best to Repair Cleft Lip and Palate: Conebeam CT and Randomized Clinical Trials. November 14, 2009. Reconstructive Surgery Summit, Texas Hospital for Advanced Medicine (no longer extant), Dallas, TX.
List dates in chronological order, beginning with the first and ending with the most recent.

2. Non-invited Without Published Abstract

List the non-invited research presentations you have given at international or national meetings, symposia, workshops or conferences, and non-invited research lectures (chronological order, ending with the most recent). Underline those presented at other institutions. Give the title of your presentation, the name of the meeting, symposium, workshop, conference or institution, and the date.

D. Patents or Commercialization of Research

List the titles, authors and dates of award and/or application of those patents to which you have contributed (e.g., invention disclosures, patent applications pending, licensing of technology or collaboration with other faculty leading to product development/licensing and commercialization).

E. Extramural Professional Service

In chronological order under each of the following headings, give the beginning and ending dates for each appointment as a regular or ad hoc member.

1. Manuscript reviewer for the following journals

- International Journal of Oral Science 2013-
- Orthodontics & Craniofacial Research 2012-
- Journal of Dental Education 2010-
- American Journal of Public Health, 1999-
- Dental Materials, 1997-
- The Cleft Palate-Craniofacial Journal, 1993-
- American Journal of Physical Anthropology, 1990-
- American Journal of Human Biology, 1988-
- American Journal of Orthodontics and Dentofacial Orthopedics, 1988-

2. Consultant to government agencies, private industry, or other organizations

- Dr. Samuel Berkowitz, - University of Florida, Miami - Evaluation of Cleft Palate Data, 1994-1997
- Techmedica Inc., Camaillo CA – Evaluation of TMJ Clinical Data, 1994

3. Officer or committee member of scientific or professional organizations
List dates in chronological order, beginning with the first and ending with the most recent.

4. Member of research grant study sections (e.g., NIH, AHA Western Review Consortium)

Ad hoc grant reviewer for:
2008 - North and Central Texas Clinical and Translational Science Initiative pilot grant award
1996 - The Leakey Foundation
1992 - American Fund for Dental Health
1999 - The National Science Foundation

5. Member of editorial boards (e.g., Circulation Research)

6. Editor

2006 - Annual Newsletter for Biomedical Sciences Department, Texas A&M University Baylor College of Dentistry

F. Grants and Contracts to Support Scholarly Work

Under the categories listed below, list each grant or contract on which you were a principal investigator or co-investigator (not consultant) obtained to support your current scholarly activities or interests including research, contributions to education, and/or patient care. Include the granting agency, grant number, beginning and ending dates, name of the principal investigator, title of the grant/contract, percent effort, and total direct costs for the duration of the grant. Place an asterisk (*) before any grant or contract that was peer-reviewed. Please use the format of the following example:

NIH R01 HL 34567; 07/01/98 - 06/30/03; John Doe (PI); Bill Smith (CoI) Mechanisms of cardiac arrhythmias; 30% effort; $1,000,000.

1. Intramural awards (e.g., seed grants)

2. Extramural awards
   a. Local but not from HSC
   b. State and/or regional
List dates in chronological order, beginning with the first and ending with the most recent.

**c. National and/or international**


Between 1988 and 2010 I received or participated in 16 extramural grants, of which 7 were funded by NIH or HRSA; over the same period I was PI on 4 intramural grants (LIST ATTACHED). My current craniofacial projects and educational research projects are an outgrowth of many of these.

3. **Grants submitted and pending approval**

Give the date of submission.

<table>
<thead>
<tr>
<th>Grants submitted and pending approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIH/NIDCR – R21 – Roesch D (PI) C-peptide and Central Sensitization in TMJMD. $408,385 Co-I, 5%; submitted June 6, 2013,</td>
</tr>
</tbody>
</table>

Grants applications under construction to be submitted within the year to:

- NIDCR/ PBRN to construct a DNA repository of oral & craniofacial diseases, Co-PI with G Mues
- ADHA – National survey of dental hygienists’ compliance with the ADA x-ray guidelines for dental X-rays; with K Muzzin.
- BOHF - Development of CBCT protocols for children with craniofacial abnormalities; with A Kane & P Moura
- Moody Foundation & BOHF – Development of a cleft lip/palate clinic for young adults; with A Kane

4. **Grants approved but not funded**

Give the priority scores and percentile scores (if available).

<table>
<thead>
<tr>
<th>Grants approved but not funded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early indicators of treatment after cleft lip and palate repair, NIH; 1 R21HD067867-01A1 (resubmission); $301,062 (direct) and $118,858 (indirect costs); Submitted 11/10; 07/2011-06/2013; PI; Impact/Priority score of 44.</td>
</tr>
</tbody>
</table>

Page 31 of 40
List dates in chronological order, beginning with the first and ending with the most recent.

G. Sponsored Clinical Trials and Drug Studies

Supply the same information and use the same format as above for research grants
List dates in chronological order, beginning with the first and ending with the most recent.

Administrative Service

A. Elected, Appointed or Voluntary Positions

For each of the following categories, list the organizations, task forces, committees or programs on which you have served, the beginning and ending dates of your service, any offices you held, and whether you were elected, appointed or volunteered for that service (e.g. Admissions Committee, 1999-present, appointed).

1. Institutional (HSC or Texas A&M University System)

<table>
<thead>
<tr>
<th>Role and Task Force</th>
<th>Dates</th>
<th>Office Held</th>
<th>Appointment Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Review Board (IRB), member since 2007; Chairman, 2010 - present, appointed</td>
<td>2010-present</td>
<td>Chairman</td>
<td>Appointed</td>
</tr>
<tr>
<td>Compliance Taskforce – Human Subject Research Subgroup Meeting, 2010-2011, appointed</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Texas A&amp;M University Health Science Center Information Technology Advisory Committee, 2002-2006, appointed</td>
<td></td>
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<tr>
<td>Texas A&amp;M University Health Science Center Subcommittee on Information Technology Requirements, 1997, appointed</td>
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</table>

2. Component (College of Dentistry)

<table>
<thead>
<tr>
<th>Role and Task Force</th>
<th>Dates</th>
<th>Office Held</th>
<th>Appointment Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center for Craniofacial Research &amp; Diagnosis Task Force, Member, 2013-present, appointed</td>
<td>2013-present</td>
<td>Member</td>
<td>Appointed</td>
</tr>
<tr>
<td>Basic Science Curriculum subcommittee member Member, 2013-present, appointed</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Evidence Based Dentistry/R25 Steering Committee, member, 2012-present, appointed</td>
<td>2012-present</td>
<td>Member</td>
<td>Appointed</td>
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<tr>
<td>Research Advisory Council, Member, 2012-present, appointed</td>
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<tr>
<td>Faculty Grievance Committee, member, 2011-present, appointed</td>
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<tr>
<td>CARE (SACS Accreditation QEP project) Committee, member, 2011-present, appointed</td>
<td>2011-present</td>
<td>Member</td>
<td>Appointed</td>
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<tr>
<td>Appointment, Promotion &amp; Tenure Committee, Member, 2010-present, appointed</td>
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<tr>
<td>Judge of Graduate and DDS Oral Presentations, Student Research Day, 2009-2010, volunteered</td>
<td>2009-2010</td>
<td></td>
<td>Volunteered</td>
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<tr>
<td>Planning and Assessment Committee 2007-present, appointed</td>
<td></td>
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<tr>
<td>Search Committee for CIO, 2006, appointed</td>
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<tr>
<td>Instructional Technology Classroom Advisory Committee, 2001-2006, appointed</td>
<td>2001-2006</td>
<td></td>
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<tr>
<td>Digital Imaging Team, 1998-2005, appointed</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Teaching, Learning and Technology Roundtable; Chairman, 1996-1998, appointed</td>
<td></td>
<td>Chairman</td>
<td>Appointed</td>
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<tr>
<td>College Web Advisory Task Force 1996-1997, appointed</td>
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<tr>
<td>Dean’s Management Team, 1996-98, appointed</td>
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<tr>
<td>Information Resources Advisory Panel, 1995-97, appointed</td>
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<tr>
<td>Internet Team, 1994-1996, appointed</td>
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<tr>
<td>President’s Roundtable (leadership) Committee 1996-1997, appointed</td>
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<tr>
<td>Communications Task Force, 1994-1996, appointed</td>
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<tr>
<td>Scientific Misconduct Committee, 1994, appointed</td>
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<tr>
<td>Seminar Committee, Craniofacial Biology, 1994-1996, appointed</td>
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</tr>
<tr>
<td>Steering Committee for Ph.D. Program in Craniofacial Biology, 1993-95, volunteered</td>
<td>1993-95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Technology Advancement Committee, 1992-1994, appointed</td>
<td></td>
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</tbody>
</table>
List dates in chronological order, beginning with the first and ending with the most recent.

Graduate Curriculum Committee, 1991-1994, appointed
Task Force for Faculty Development, 1991-1992, appointed
Ad hoc Search Committee for a Biostatistician, 1991, volunteered
Ad hoc Planning Committee for Ph.D. Program in Craniofacial Biology, 1990-1993; Chairman, volunteered
Ad hoc Committee on Computers in Research and Advanced Education, 1989-1991, appointed
Graduate Admissions Committee, Oral and Maxillofacial Surgery, 1988-1996

3. Department/Unit

BMS Department Teaching Updates seminar series, co-chair, 2011-12, appointed
Faculty Search Committee, Oral and Maxillofacial Surgery and Pharmacology, 1993-1994, Chair, appointed
Committee to mentor new faculty member, Dr. Darren Roesch, 2010-present, Chair, appointed
Proctor exams for microbiology 2-4 hours per semester, 2010-present, volunteered

4. Hospital/Clinic

BaylorLink Committee, Joint committee between BCD and BUMC to build an intranet; 1994-1996, appointed

5. State and Regional

Great Expectations student mentoring program for BCD dental students, jointly sponsored by BCD & Dallas County Dental Society, 2007- present, invited

6. National and International

B. Recognition

List service awards you have received and the dates.
List dates in chronological order, beginning with the first and ending with the most recent.

C. Innovation

List organizations, task forces, committees or programs you have initiated and the dates of establishment.
List dates in chronological order, beginning with the first and ending with the most recent.

Public Service

A. Elected, Appointed or Voluntary Positions

For each of the following categories, list the organizations, task forces, committees or programs on which you have served, the beginning and ending dates of your service, any offices you held, and whether you were elected, appointed or volunteered for that position (e.g., Bryan/College Station Chapter, American Heart Association, 1995-present, voluntary).

1. Local

2. State and Regional

Advised Dr. N Sue Seale on the validity of a Texas Department of State Health Services report on the effectiveness of Medicaid in Texas as required by Frew v. Suehs, entitled “Assessment of Child Dental Health.”, 2010, volunteered

Research Consultant for planners of Texas Hospital for Advanced Medicine/Texas Reconstructive Surgery Institute, Farmers Branch TX, 2010, volunteered

Eastfield College, Dallas County Community College District, Business and Technology Advisory Council, Member, 2003-2007, volunteered

Curriculum, Instruction & Assessment subcommittee of Dallas Arts Magnet High School (Booker T. Washington High School for the Performing and Visual Arts), Site-Based Management Team, Member 2005-2009; Chair 2008-2009, appointed

The Texas A&M University System Community Development Database Coordinator for Baylor College of Dentistry, 1996-2000, appointed

3. National and International

External evaluator for promotion and tenure candidate at University of Pittsburgh, 2010, volunteered

B. Recognition

List public service awards you have received and the dates.
List dates in chronological order, beginning with the first and ending with the most recent.

C. Innovation

List public organizations, task forces, committees or programs you have initiated (e.g., Temple Task Force for a Smoke-Free Environment) and the dates of establishment.
Other Information

Briefly provide any other information that is pertinent to your professional or public activities. This may include items such as your involvement in religious organizations, former or current military experience, and awards or other pertinent information not mentioned above.

Founding member of the Belmont Addition Conservation District in Dallas, Texas. In 2004, after 3 years of planning and meetings, this conservation district ordinance was adopted by the City of Dallas. It is intended to preserve the architecturally unique character of this old East Dallas Neighborhood.
Attachments

The Faculty Record plus the attachments below, in the order listed, are to be submitted as a single PDF file. Identify the attachments appropriately.

A. Teaching Activities

1. Teaching Evaluations

These are to be from the previous five years, not to exceed ten evaluations, which are felt to best exemplify the pedagogy of the candidate. You may include peer teaching reviews as well as student evaluations. Submit as a PDF attachment to faculty record.

2. Continuing Medical Education

These are to be from the previous five years, not to exceed ten evaluations of CME activities presented by the candidate, which are felt to best exemplify the pedagogy of the candidate. Submit as a PDF attachment to faculty record.

B. Representative Publications

These are to be from the previous five years, not to exceed ten publications, which are felt to best exemplify the scholarship of the candidate. Submit as a PDF attachment to faculty record.

C. Brief statement of Philosophy of Teaching, Research, and Service

This statement is to be concise in form, being no more than 3 pages, single spaced at a maximum. It should provide a statement on goals, philosophy, strategies, and emphases in carrying out your professional responsibilities and performance in the broad areas of teaching, research and service. The purpose is not for you to make an argument for promotion or tenure; it is to provide a context for review of the file at each level of review. Submit as a PDF attachment to faculty record.

D. External References List #1
(For Component/Unit in soliciting external letters; list will not be submitted to HSC.)

Submit a list of 4 external references agreed upon collectively by the candidate and component department/unit chair, including a short one paragraph biographical sketch of each, title including academic rank, physical mailing address, e-mail address, phone number and contact information for an administrative assistant. External references must be contacted by component department/unit chair prior to faculty record submission to ensure availability to provide an external review. Submit as a PDF attachment to faculty record.

E. External References List #2
(For Component/Unit in soliciting external letters; list will not be submitted to HSC.)

Submit a list of 4 external references provided by the component department/unit chair in consultation with their respective departmental/unit representative on the Component Faculty Appointment Promotion and Tenure Review Committee and/or other senior faculty. The external references in List #2 should not be close friends of, colleagues of, or collaborators with the candidate. The list should include for each external reference a short one paragraph biographical sketch, title including academic rank, physical mailing address, e-mail address, phone number and contact information for an administrative assistant. The Component Committee and HSC Appointment, Promotion and Tenure Review Committee consider input from these unbiased sources essential to the decision making process concerning promotion and/or tenure. External references must be contacted by component department/unit chair prior to faculty record submission to ensure availability to provide an external review. Submit as a PDF attachment to faculty record.
Certification

I certify that, to the best of my knowledge, the information contained herein is true and correct.

______________________________________________________ ___________________________
Signature of Applicant  Date

I certify that, to the best of my knowledge, the information contained herein is true and correct.

______________________________________________________ ___________________________
Signature of Component Department/Unit Chair/Academic Officer  Date
Kathy Kay Hartford Svoboda
Regents Professor of Biomedical Sciences
Director Graduate Program in Biomedical Sciences
Adjunct Professor, UTSW

Texas A&M Health Science Center
Biomedical Sciences
Baylor College of Dentistry
3302 Gaston Ave.
Dallas, TX 75246

Phone (214) 828 8487
FAX (214) 874-4538
Cell (214) 557-8352
Email ksvoboda@bcd.tamhsc.edu
Web page: http://bcd.tamhsc.edu/education/bms/people/faculty/svoboda.html

Education
University of Nebraska, Omaha, Nebraska
B.S. in Biology, minor in Chemistry
December, 1974

University of Nebraska Medical Center
M.S. in Human Genetics
May, 1979
Advisor: Dr. James Eisen

University of Nebraska Medical Center
Ph.D. in Anatomy
August, 1982
Advisors: Drs. K. Sue O'Shea and W. K. Metcalf

Postdoctoral Training
Research Fellow in Anatomy and Cell Biology (1982-1985)
Department of Anatomy and Cellular Biology
Harvard Medical School
Advisor: Dr. Elizabeth D. Hay

1985-1986 Instructor in Anatomy and Cellular Biology
Harvard Medical School, Boston, Mass.

1987-1994 Assistant Professor of Anatomy and Neurobiology
Boston University School of Medicine, Boston, Mass.

1992-1998 Co-director of the Confocal Facility,
Boston University School of Medicine, Boston, Mass.

Academic Appointments
1994-1998 Associate Professor of Anatomy and Neurobiology
Boston University School of Medicine, Boston, Mass.

1996-1998 Associate Professor of Ophthalmology
Boston University School of Medicine, Boston, Mass.

1998-2001 Associate Professor of Biomedical Sciences
Baylor College of Dentistry, Dallas, TX.
1999-2006 Director of the Cell and Molecular Biology Core Facilities, Baylor College of Dentistry, Dallas, TX.
2001-present Professor of Biomedical Sciences with tenure Baylor College of Dentistry, Dallas, TX.
2001-present Adjunct Professor, Department of Ophthalmology, Southwestern Medical Center, Dallas, TX.
2007-2009 Director for Research Development Baylor College of Dentistry, Dallas, TX
2008-2009 Vice Chair, Biomedical Sciences Baylor College of Dentistry, Dallas, TX
2009-present Director, Graduate Program in Biomedical Sciences Texas A&M Health Science Center, School of Graduate Studies, Baylor College of Dentistry, Dallas, TX
2009 Regents Professor of Biomedical Sciences
2010 Chair of Texas A&M Health Science Center – Dallas campus IACUC
2011 Dental Antioxidant Board Director http://www.dentalantioxidants.com/

Leadership and Administrative Experience:
1992-1998 Co-director (with Drs. Doug Cotanche and Vickery Trinkaus-Randall) of the Confocal Facility, Boston University School of Medicine.
- Arranged a payment plan for the 1st Leica confocal in the USA, paid over 4 years from user fees with no interest.
- Developed a training program for new confocal users including a user manual.
- Responsible for the day to day operations.
- In 1997/98, I coordinated a shared instrument grant application and on site demonstrations of several instruments. The NIH grant was funded for Boston University School of Medicine.

1997-2003 Program Co-Chair – AAA representative for EB meetings
- Chaired the AAA program committee.
- Analyzed the existing meeting format and worked with the EB program committee to change the format.
- Organized 18 symposia, 2 workshops, 8-10 platform sessions and 15-20 poster sessions each year.
- Increased abstract submissions and meeting attendance.

1998-1999 Coordinated a new shared instrument grant for a confocal microscope for Baylor College of Dentistry (7 individual projects).
- Chaired the organizing committee that arranged for on site demonstrations of Leica and Zeiss microscopes.
- PI on the research grants (BOHF and NIH) that funded the purchase of a Leica SP2 microscope in 2000.
2003-2006  I organized a group of investigators (7 projects) and applied for a grant from NSF to acquire three instruments: Laser capture microscope, RT-PCR machine and a Bioanalyzer.

2005-2006  I organized a group of investigators (7 investigators and 6 projects) to apply for a shared instrument grant to purchase an ICP-mass spectrometer. This instrument was installed at Baylor College of Dentistry in 2006.

2003-2004  I was chair of the internal planning and assessment committee for a R24 grant to improve the research infrastructure.
- Co-PI on R24 grant (planning and assessment for U24 grant)
- Organized a SWOT analysis
- Developed a faculty survey on research practices and interests
- Developed faculty focus groups
- Organized strategic planning process based on SWOT analysis, faculty survey and focus group outcomes

2004-2006  I was chair of the intramural program to increase communication between IBT and BCD by organizing seminars and visits between faculty members.
- Increased joint projects including grant applications and publications between the faculties at the two institutions.
- Co-PI in writing the U24 grant that was awarded 2 million dollars to improve the infrastructure at Baylor College of Dentistry.

2006  As chair of the faculty search committee, I helped choose the candidates based on application materials, hosted and arranged their schedules. The search committee collected candidate evaluations and made recommendations to the chair and administration.

2006  Steering committee member for a training grant (T32).
- Gathered demographic data
- Designed supporting tables

2007  Ad hoc program committee for the American Association for Dental Research 2008 meeting located in Dallas, TX.

2007  Appointed Director for Research Development for the Department of Biomedical Sciences. In this role I will be responsible for coordinating research seminars, journal clubs and lab focus groups. In addition I will develop a symposia series with guest speakers.

2008  Appointed Vice Chair for the Biomedical Sciences Department, effective January 1, 2008. In this role I will assist the chair in many administrative duties and handle some of the day to day activities.

2008  Special Guest Editor for Developmental Dynamics volume 237, issue 10 (Oct.) Special issue entitled: Special Focus on the Extracellular Matrix, in Memory of Dr. Elizabeth D. Hay.
2009 Appointed Program Director of the School of Graduate Studies (SGS) Graduate Program at BCD –
   ➢ Participated in SACS accreditation
   ➢ Administered program and selected new graduate students
   ➢ Handle communication with graduate student applicants

2009 Received a Regents Professor Award from the Texas A&M Board of Regents

2010 Appointed as Chair of the BCD IACUC committee
   ➢ Reorganized the IACUC committee approval process
   ➢ Attended IACUC training and meetings for additional training
   ➢ Facilitated USDA and OLAW inspections and regulations
   ➢ Approve all animal and drug purchases

2010 Invited to be an external member of a Core Grant Advisory Committee for UTSWMC Ophthalmology Department Grant was funded in 2011.

2011 Invited to be an external reviewer for the University of Arizona Medical School Department of Cellular Biology (Feb. 2011).

2011 Organized a meeting to honor Bjorn R. Olsen, April 14-16, 2011, “Extracellular Matrix in Health and Disease”.

2011-2012 Chair of the T90/R90 training grant writing committee and PI of the grant

2012 Chair of the Center for Craniofacial Research and Diagnosis Faculty search Committee.

2012 Chair of the American Association of Anatomists 125th Anniversary Development Committee

2012-2013 Chair of the American Association of Anatomists South West Regional Meeting for 2013

Honors, Awards and Grants

Honors:
1974 Beta, Beta, Beta
2009 Regents Professor Award from the Texas A&M Board of Regents
2010 Fellow Award of the American Association of Anatomists
2010 Silver Fellow Award from the Association for Research in Vision and Ophthalmology
2014 American Association of Anatomists A. J. Ladman Exemplary Service Award

Awards and Grants:

NIH Research Grants as PI
1983-1985 NIH-NEI NRSA Postdoctoral Fellowship, “Corneal Epithelial Basal Lamina Differentiation”
1985-1988 NIH Young Investigator Award, “Biology of the Epithelial Basement Membrane”
1991-2002 NIH RO1 Award, “Biology of the Embryonic Corneal Epithelium”
2003-2006 NIH RO3 Award, “Plasmid delivery and expression in embryonic eye tissues”
2010-2011 NIH/NIDCR P30 “Baylor’s program for bioengineering sciences and translational research (B-BEST), Pilot Program sub award “Visualizing cell scaffold interactions in real time”

Infrastructure Grants
2003-2004 NIH R24 “Research Infrastructure Improvement Planning Award” Co PI
2004-2008 NIH U24 “BCD Research Infrastructure Enhancement Program” Award, Co PI

Training Grants
2005-2010 NIH K12 converted to CTSA “UT Southwestern Clinical Science Scholars Program” PI, Milton Packer, Role on Project: mentor
2008-2012 NIH T32 “Baylor’s Scientific Training Program for Dental Academic Researchers: B-STARs” PI, Rena D’Souza, Role on Project: Coordinate Track IV Non-degree Postdoctoral Fellowship training for DDS, DDS/PhD and PhD graduates.

Consultant on Grants
2006-2010 NIH U54 “UMDNJ/Rutgers University CounterAct Research Center of Excellence” PI Donald Gerecke, Role on Project: consultant
2008-2011 British government’s Engineering and Physical Sciences Research Council “New physical approaches to study avian corneal morphogenesis.” PI, Andrew Quantock, Role on Project: consultant

Equipment Grants
1997 NIH-DRG grant for BUSM: “Leica TCS SP Confocal Microscope”
1998 Baylor Oral Health Foundation matching grant for Leica TCS SP Confocal Microscope
1999 NIH-DRG shared instrument grant: Leica TCS SP Confocal Microscope
2003-2006 NSF Award, “Acquisition of laser capture microdissection and quantitative PCR systems”
2003 Baylor Oral Health Foundation Award for a microwave decalcification unit.
2006-2007 NIH DRG shared instrument grant: “ICP-MS instrument for Baylor College of Dentistry”
2008 NIH DRG shared instrument grant “Micro CT instrument for Baylor College of Dentistry”, Paul Dechow, PI, I helped write and package the grant for NIH.
2010 NIH DRG Shared instrument grant: Leica SP5 Tandem Scanning Confocal Microscope for Baylor College of Dentistry

Foundation Grants
2000 Baylor Oral Health Foundation (BOHF) grant “Chondrocyte-extracellular matrix interactions”
2006-2009 March of Dimes Research Grant “Regulation of EMT during palate development”
2006-2008 Texas A&M Health Science Center Vice President for Research pilot grant

Company Grants
2008-2011 PerioScience Grant “Antioxidant Effects on Gingival Fibroblast survival and wound healing”

Mentor for Student Grants
1995-1996 Mentor for Michelle Hirsch’s Dissertation Fellowship, American Assoc. of University Women Educational Foundation
2000-2006 Mentor for David Erik Kern Harrington’s NIH F30 Individual Predoctoral Dental Scientist Award
2000-2002 Mentor for Salvador Nares’s NIH K08 Award
2001 Mentor for David J. Coon’s summer research project supported by NIH T35 Award
2002 Mentor for J. Brandon Allen’s summer research project for NIH T35 Award
2003 Mentor for Mihir Patel’s summer research project for NIH T35 Award
2004 Mentor for Matthew Roberts’s summer research project supported by NIH T35 Award
2004 Mentor for Paul Denson’s summer research project supported by BOHF
2005 Mentor for Randy West’s summer research project supported by BOHF
2006 Mentor for Ursula Price’s summer research project supported by BOHF
2007 Mentor for Natasha Crespo’s summer research project supported by BOHF
2007 Mentor for Rob Cline’s summer research project supported by BOHF
2008 Mentor for Megan Miller’s summer research project supported by BOHF
2009 Mentor for Megan Millers AADR Fellowship
2010 Mentor for Maria Serrano’s F32 Postdoctoral Fellowship Grant
2010 Mentor for Larry Tam’s summer research project supported by BOHF
2010-11 Mentor for Brad Vermeulen’s summer research project supported by BOHF
2011 Mentor for Meera Grewal summer research project supported by BOHF
2011 Mentor for Sarah Wojciechowski’s summer research project supported by BOHF
2012

Professional Associations and Societies
American Association of Anatomists
   Education Affairs Committee 1990-1995
   Executive Board Member 1997-2000
   Experimental Biology 1997-2003 AAA Program Co-Chair
   Experimental Biology 97-99 AAA Signal Transduction Theme Organizer
   2nd Vice President 99-2000, 1st Vice President, 2000-01
   Finance Committee 2000-2007
   Nominations Committee 2001-2003
   President Elect and Membership Committee Chair 2003-2005
   President 2005-2007
   Experimental Biology Board of Directors, AAA representative 2007-2011, chair, 2011
   Past President 2007-2009
   125th Anniversary Task Force 2009-present
   Henry Gray Award Committee Chair 2007-2009
   Ladman Service Award Committee Chair 2007-2009
Honorary Membership Committee Chair 2007-2009
Nomination Committee Chair 2008-2009
Fellows Committee 2009-2012, chair 2011
Journal Oversight Committee 2011-2014
125th Anniversary Development Committee (Chair) 2011-present
Publications Committee Chair 2013-

American Association of Clinical Anatomists
Anatomical Services Committee 2006-2007

American Association for Dental Research
Ad hoc program committee for the AADR 2008 meeting

The American Society for Cell Biology
Congressional Liaison Committee

Association for Research in Vision and Ophthalmology Incorporated (ARVO)
Public Relations Subcommittee 2004
Public Relations Subcommittee Chair 2005-2006
Publications Committee 2007-2010
Women in Eye and Vision Research (WEAVR) Luncheon Program Committee 2009-12

East Coast Connective Tissue Society
Meeting organizer, 1997

Boston Biennial Cornea Conference Program Committee 1995-1997

International Society of Eye Research

Microscopy Society of America

Association for Matrix Biology

Society for Developmental Biology

TEMTIA - The EMT International Association
Board member 2008-11

Advisory and Peer Review Committees
1989 Ad hoc grant reviewer for March of Dimes
1990 Ad hoc grant reviewer for National Science Foundation
1991-1992 NIH Special Study Section -2 for Small Business Innovative Research
1994-1995 Ad hoc grant reviewer for Canadian Medical Research Council

1996 NIH Shared Instrument Study Section
1997 NIH NIDCR special study section
1999 Ad hoc grant reviewer for National Science Foundation
2000-2004 NIH Shared Instrument Study Section
2000 Guest editor for Investigative Ophthalmology and Visual Science
2001 NIH VIS A study section, ad hoc member
2003-present Editorial Board- Developmental Dynamics
2003-2006 Associate Editor - Anatomical Record
2006-present Editorial Board - Anatomical Record
2003 Ad hoc grant reviewer for The Netherlands Organization for Health Research and Development (ZonMw)
2004 NSF MRI grant study section member
2005-2007, 09 NIH Shared instrument study section – light microscopes
2006 - Editorial Board - The European Journal of Dentistry
2007 NIH Special Emphasis Panel/Scientific Review Group10 ZRG1 BDCN-F (12) B
2008 NIH Musculoskeletal Tissue Engineering Study Section
2008-09 NIH Anterior Eye Disease Study Section
2010 External reviewer for The NIEHS Center for Environmental Exposures and Disease (CEED) exploratory grant program.
2011 External Reviewer for the University of Arizona School of Medicine Cellular Biology Program.
2011 Medical Research Council – United Kingdom peer review of grant application
2012 Reviewed Book Proposal Gingivitis and Periodontal Disease as part of Springer’s series on Oxidative Stress.
2012 The Portuguese Foundation for Science and Technology (FCT), International peer review of grant: Kinetics and reactivity of oxygen species in dental tissues
2012 Associate Editor of Frontiers in Craniofacial Biology, special topic: Cleft Palate: Clinical and developmental aspects
2013 Reviewed grant for Biotechnology and Biological Sciences Research Council (BBSRC)

External Reviewer for Appointment Promotion and Tenure
Rutgers University, Department of Pharmacology and Toxicology, Ernest Marlo School of Pharmacology (3 AP&T applicants).
Brown University, Department of Orthopedics
Case Western Reserve University School of Medicine
Medical University of South Carolina, Department of Cell Biology and Anatomy
University of Medicine and Dentistry of New Jersey- New Jersey Medical School, Department of Cell Biology and Molecular Medicine
University of Nebraska, College of Dentistry
Medical University of South Carolina, Department of Cell Biology and Anatomy
University of Pennsylvania School of Veterinary Medicine, Department of Animal Biology
University of Hawaii Department of Anatomy, Biochemistry and Physiology at the John A Burns School of Medicine

Areas of Research Specialization
The long-term objective of my research is to determine how the extracellular matrix influences differentiation and cell regulation via second messenger pathways in whole tissues. Several whole tissue developmental model systems have been studied including embryonic
cartilage and corneal epithelia. We have established that as cultured cells form focal adhesions in response to extracellular matrix proteins our whole tissues also have similar structures termed cell-matrix attachment complexes (CMAX). Both the focal adhesion and CMAX contain cell adhesion molecules, actin associated proteins and signaling molecules. We have shown that these proteins and activated signaling pathways are necessary for reorganizing actin in the embryonic corneal epithelial model. The sequence of events that occur during actin reorganization in response to extracellular matrix molecules will be further dissected. We have also shown that cell-matrix interactions in whole cartilage are necessary for survival and differentiation. Understanding these relationships will help elucidate the events and interactions that are involved in tissue specific differentiation and matrix synthesis. My group has developed experimental approaches to examine the spatial relationships between specific cellular components in whole tissues. These cellular models have been used to determine the three dimensional relationships between organelles, cytoskeletal proteins and specific mRNA.

In 1998 I joined the faculty at Baylor College of Dentistry. Although I’m still pursuing the long-term goals of my research, in the last eleven years I’ve become involved in many other projects. The new projects (signal transduction pathways controlling palate development, condylar cartilage differentiation and gingival tissue response to nicotine) are related to craniofacial development or cell-matrix interactions in oral tissues.

A short list of highlights of my group’s accomplishments:

- The first to discover type IX collagen in the embryonic cornea. In addition, Svoboda was the first to discover that the mRNA for type IX collagen had a long and short form.
- The first to show that disrupting the actin cytoskeleton in epithelial cells disrupted the rough endoplasmic reticulum.
- The first to label two different populations of mRNAs in whole tissues.
- The first to demonstrate that actin mRNA in epithelial tissues had a polarized distribution, similar to the protein.
- The first to demonstrate that actin reorganization in embryonic corneal epithelia requires tyrosine phosphorylation of a number of proteins including: tensin, p190Rho Gap, FAK, and paxillin.
- Svoboda’s laboratory was the first to show that the MAP kinase, PI3 kinase and RhoGTP pathways are necessary for corneal epithelial response to extracellular molecules. She also advanced the field by discovering that these signaling pathways are necessary for increased extracellular protein binding.
- The first to describe the polarized distribution of the actin associated proteins, α actinin, zyxin, and vinculin in the freshly isolated corneal epithelia. This led to the discovery that epithelial cells have a unique area that has characteristics of both cell-cell and cell-matrix junctions. She calls this area the “CMAX” for Cell Matrix Attachment Complex.
- Svoboda’s student, Michelle Hirsch was the first to establish an organ culture model in defined media for cartilage development that recapitulated normal development.
- Svoboda’s student, Michelle Hirsch was the first to show that neutralizing antibodies to integrin molecules disrupted normal cartilage development establishing for the first time that this molecule was necessary for cartilage differentiation.
- Svoboda’s students, Leif Lunsford and D. Erik Kern Harrington have used the same whole organ system for cartilage development and shown that parathyroid hormone delays cartilage development and decreases programmed cell death.
- Svoboda’s student, Pei Kang has established a whole palate culture system and
shown that nicotine blocks palate fusion by inhibiting epithelial-mesenchymal transformation.

- Svoboda’s student, Pei Kang was the first to show that palate development depends on the PI3 kinase pathway.
- Svoboda’s student, Yiyu Fang was the first to show that nicotine blocks myofibroblast differentiation in human gingival fibroblasts.
- Svoboda’s student, Yiyu Fang was the first to show that nicotine decreases human gingival fibroblast migration by down regulating the Rac pathways.
- Svoboda’s student, Erik K. Harrington has shown that PTH increases cyclin d1 in chondrocytes and Ki67 in chondrocytes.
- Svoboda’s student, Erik K. Harrington has shown that the sternal increased growth stimulated with PTH is PI3 kinase, MAP kinase and PKA dependent. In addition type X collagen was rescued in PI3 kinase and MAP kinase inhibitor treated sterna that were stimulated with PTH.
- Svoboda’s student, Wenli Yu has shown that palate fusion is Twist dependent and that blocking Tgfβ3 or PI-3 kinase decreased Twist expression in palatal tissues. Furthermore when chicken palates are treated with Tgfβ3, Twist expression increased at 3 and 6 hrs, but returned to baseline by 24 hrs.
- Svoboda’s postdoctoral fellow, Maria Serrano has shown that the mouse genotype influences it’s response to nicotine and that inbred strains are more susceptible to palate defects.
- Svoboda’s postdoctoral fellows, Maria Serrano and Symone San Miguel have shown that cells decrease migration in the presence of nicotine because the leading edge cells lose RacGTP. In addition, Dr. San Miguel has shown that specific antioxidants can counteract the effects of nicotine on cell migration and RacGTP increased.

Committee Service

BOSTON UNIVERSITY SCHOOL OF MEDICINE:
Coordinator of Anatomy and Neurobiology Departmental Seminar Series, 1987-89
Academic Adviser to Medical Students, 1990-present
Ad Hoc Facilities Advisory Committee, 1989-90
Graduate Student Curriculum Committee, Department of Anatomy and Neurobiology, 1989-92
Confocal Facility Committee, 1991-98
Committee to Revise Graduate Student Guidelines and Departmental Courses, 1992-94
Anatomy and Neurobiology Faculty Search Committee - 1994
Anatomy and Neurobiology Graduate Student Advisory Committee - 1992-97

BAYLOR COLLEGE OF DENTISTRY
Biomedical Science Department Resource Committee 1998-present
Chairman’s Advisory Committee, 1999-2005
Research Advisory Council for Associate Dean for Research and Advanced Education 1999-
Research Committee 1999- 2003, Chair, 2001
Research Facilities Task Force 2002-present
Internal Planning Committee for R24 grant 2002
Faculty Development Committee 2002-2005
Appointment, Promotion and Tenure Committee – alternate 2001-2003; member 2004-2009
Commission on Dental Accreditation Committee- Research Resources 2002-2004
Internal Planning Committee U24 2004-2005
Seminar organizer for U24, 2005-2006
Faculty search committee chair 2006
T32 steering committee, 2006
Training Track Coordinator, NIDCR T32 grant 2006-2009
BMS Appointment, Promotion and Tenure Review Committee, 2003-2010.
BMS CLAC, 2007-2010
BMS "Pathways to Excellence" Seminar Series committee chair, 2007-2009, member 2009-
BMS "Bring your Own Lunch" seminar series, committee chair, 2007-2008
BCD Dean Search Committee 2010-2011
BCD Center for Craniofacial Research and Diagnosis Faculty Search Committee - Chair

TEXAS A&M HEALTH SCIENCE CENTER
Institutional Animal Care and Use Committee, 1999-present (assistant chair 2004-2009), Chair 2010-present
Committee on Special Programs and Centers of Excellence of the Graduate School 2000
Interim Vice President for Research Search Committee 2001,
Research Executive Council 2001-2003
Vice President for Research Search Committee, 2002-03
Research Advisory Council for the Vice Pres for Research and Graduate Education, 2003-08
Faculty Senate – 2006-2009
Faculty Senate Speakers Series Committee – 2009-2010 (chair, 2010)
Compliance Task Force- 2010-present
HSC Appointment, Promotion and Tenure Committee
HSC Research Compliance Advisory Council (RCAC) 2012-present

TEXAS A&M
Azimuth Team 4 Member, (Increase the Value of Our Scholarship and Research)
MRI research grant committee 2005-2006

BOSTON UNIVERSITY SCHOOL OF MEDICINE - GRADUATE SCHOOL:
Cell Biology Graduate Student Course Committee - Chairman 1991-1994
Graduate School Steering Committee- 1995-1997

NON-UNIVERSITY: (committee work in scientific societies, governmental or civic agencies)
Experimental Biology Board of Directors, American Association of Anatomists representative 2007-2010
Executive Committee, American Association of Anatomists, 1995-2009
Experimental Biology 97-98 Program Co-Chair, American Association of Anatomists, 1996-2003
Chair of the Henry Gray/Lippincott Williams & Wilkins Scientific Achievement Award Committee, 2007-2009
Chair of the AAA/Wiley A.J. Ladman Exemplary Service Award Committee, 2007-2009
Fellows Committee, American Association of Anatomists, 2009-2012
Biennial Cornea Conference Planning Committee, 1995-1997
East Coast Connective Tissue meeting planning committee, 1997.
Co-organizer for Symposium on “ECM in Health and Disease” that honored Bjorn R. Olsen, April 14-15, 2011

Teaching Experience
1979-1980 Assisted in teaching Histology, Neuroanatomy,
Embryology, and Gross Anatomy, University of Nebraska Medical Center – M1 students

1986
Gross Anatomy, Harvard Medical School - 1st year medical students

1987-1997
Gross Anatomy, Boston University School of Medicine - 1st year med and dent students

1991, 92, 97
Section Leader in Gross Anatomy, Boston University School of Medicine - M1 students

1988, 1990
Course Director of Cell and Developmental Biology, Boston University School of Medicine - graduate students

1992-1994
Course Director of Cell Biology, Graduate Division, Boston University School of Medicine - graduate students

1991-1997
Coordinator of the Confocal Laser Scanning Microscope Training Course

Baylor College of Dentistry

1999
Co-Coordinator of Cartilage Cell Biology Course - graduate students

1999-2003
Director of the Signal Transduction journal club and reading course – graduate students

1999-2009
Course Director of the Craniofacial Growth Track, that includes three courses: Mechanisms of Development, Advanced Human Craniofacial Development and Growth, Physical Growth and Maturation for graduate students.

1999-2006
Course Director of the Cell and Molecular Biology of Oral and Craniofacial Tissues Track for graduate students

2006-2011
Lecturer - Cell and Molecular Biology of Oral and Craniofacial Tissues Track for graduate students

2000-2001
Coordinator of the Techniques in Cell and Molecular Biology - graduate students

2000-2002
Lecturer – General Biochemistry – 1st year dental students

2000-2012
Lecturer – Growth and Development – 1st year dental students

2003-2012
Lecturer and Lab instructor - Histology – 1st year dental students

2003-2012
Lecturer – Microscopy Course – Graduate Students

2004-2006
Course Director – Cell and Molecular Biology - 1st year dental students

2007-2010
Lecturer – Biochemistry, Cell and Molecular Biology – 1st year dental students

2006-2010
Coordinator - palate journal club for summer students

2007-2008
Course Director – Techniques in Cell and Molecular Biology – graduate students

2009-2012
Course Director – Preparation and Analysis of Mineralized Tissues - graduate students

Post Doctoral Fellows

Wende R. Reenstra, Ph.D. obtained a Ph.D. in Pathology, 1994, and completed a Postdoctoral Fellowship in Dermatology. She joined my laboratory from September, 1995- August 1998 and obtained an NRSA grant: NIH AG, “The role of threonine phosphorylation in EGFR signaling” to support the work. Wende was a faculty member at the Harvard Affiliated Emergency Medicine Residency Program and an Assistant Professor at Beth Israel Hospital. Dr. Reenstra is currently at the Tripler Army Medical Center in Hawaii.

Jon A. Buras, M.D/Ph.D., obtained his M.D./Ph.D. in Pathology in 1995 and completed his Residency at Harvard Affiliated Emergency Medicine Residency Program. His was supported with two peer reviewed Brigham and Women’s Hospital grants. Jon was an
Assistant Professor and attending physician at Beth Israel Hospital. Dr. Buras is currently at the Tripler Army Medical Center in Hawaii.

**Maria Serrano, D.D.S., M.S.** in molecular biology. Maria was supported by the March of Dimes grant to investigate the effects of nicotine on palate development in different strains of mice. She was transferred to the T32 in 2008. Maria received her own funding (a F32 grant) in 2011.

**Symone San Miguel, D.D.S., Ph.D.** is supported by the March of Dimes Grant and a PerioScience Grant.

**Students**

**D.D.S. /Ph.D. Candidates**

**Erik Kern Harrington**, Department of Biomedical Sciences, Baylor College of Dentistry. Erik completed the DDS in 2005 and Ph.D. in 2007, he is currently a resident in pediatric dentistry.

**Salvador Nares**, D.D.S./Ph.D/Periodontics Specialty, Baylor College of Dentistry. Sal was an Associate Professor with tenure at North Carolina. In 2013 he became the chair of Periodontics at the University of Illinois Dental School in Chicago.

**Ph.D. Candidates**

**Michelle Hirsch, Ph.D.** in Anatomy & Neurobiology, 1996. MD, 1999; Michelle completed a residency in anatomic pathology from 1999-2002 at Brigham and Women's Hospital & Harvard Medical School; fellowship training in Women's and Perinatal Pathology from 2002-2003 at Brigham and Women's Hospital & Harvard Medical School; staff pathologist at Brigham and Women's Hospital 2003-present; instructor of pathology at Harvard Medical School 2003-2006; Assistant professor of Pathology at Harvard Medical School 2006-present.

**Pei Kang, DDS/PhD.** Department of Biomedical Sciences, Baylor College of Dentistry. Pei completed an Endodontic residency and is currently practicing Endodontics in the Dallas area.

**Yiyu Fang**, Department of Biomedical Sciences, Baylor College of Dentistry. Yiyu just completed a residency in the Orthodontic program at BCD. Yiyu is practicing orthodontics in Seattle.

**Wenli Yu**, Department of Biomedical Sciences, Baylor College of Dentistry. Wenli is a postdoctoral fellow at the University of California, San Francisco.

**Julia Chang**, Department of Oral Pathology, Baylor College of Dentistry

**Ashneet Sachar** Department of Biomedical Sciences, Baylor College of Dentistry.

**Maria Serrano, Ph.D.** in Biomedical Sciences, Baylor College of Dentistry

**M.A. Candidates**


**Guy Jirawuthiworavong**, M.A. in Anatomy, 1995, graduated from BUSM 1999, resident at Yale in Ophthalmology. Guy is currently a faculty member at Jules Stein Eye Institute, UCLA.

**Leif Lunsford**, M.A. in Medical Sciences, December 1996, graduated from BUSM in 2002, and is an Intern at UCLA, then entered an Emergency Medicine residency at USC.

**Chia Lin Chu**, M.A. in Anatomy, September 1997, She completed and Ph.D. in Biochemistry and is currently a scientist at Momenta Pharmaceuticals, Inc.
**Thesis Committee Member**


*Haiyan Gong*, Ph.D. in Anatomy & Neurobiology, 1991, second reader, completed a Postdoctoral Fellowship and is now a faculty member in the Ophthalmology Department at Boston University School of Medicine.

*Jennifer Stone*, Ph.D. in Anatomy & Neurobiology, 1994, second reader, she completed a Postdoctoral Fellowship in 1997 at the University of Washington in Seattle. She is now a faculty member, in the Otolaryngology Department at University of Washington, Seattle, WA

*Kathleen L. Krenzer*, Ph.D. in Pathology, 1995. She was a Postdoctoral Fellow at the Schepens Eye Research Institute and is now a faculty member at the Boston Optometry School.

*Kenneth H. Lee*, M.D./Ph.D. in Anatomy & Neurobiology, December, 1995. He is an Otolaryngology specialist at University of Texas, Southwestern Medical Center

*Anna Lavda*, M.S. in Biomedical Sciences, 2000.

*Robert Spears*, Ph.D. in Biomedical Sciences, 2002. He is an Associate Professor in Biomedical Sciences at Baylor College of Dentistry

*Kathy Adab*, Ph.D. in Biomedical Sciences, 2004. She completed a resident program in Orthodontics at Harvard Dental School. She is currently in private practice in Washington.

*John Roberts*, D.D.S/M.S. in Biomedical Sciences, Baylor College of Dentistry. Private Pedo practice

*Joe Rawlins*, D.D.S/Ph.D in Biomedical Sciences, Baylor College of Dentistry, Private Pedo practice

*Steve Lin*, M.S. in Biomedical Sciences, Baylor College of Dentistry, Non science employment

*Katherine Regan*, Ph.D. in Biomedical Sciences, Baylor College of Dentistry, Industry employment

*John Bonds*, D.D.S./Ph.D. in Biomedical Sciences, Baylor College of Dentistry, current student

**Advisor for Medical & Dental Students, Summer Fellows program:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Class Year</th>
<th>Specialty</th>
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<tr>
<td>Berhan Yeh</td>
<td>Class of 1995</td>
<td>Surgeon</td>
</tr>
<tr>
<td>Wissam Khoory</td>
<td>Class of 1995</td>
<td>Internal Medicine</td>
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<tr>
<td>Elisa Wu</td>
<td>Class of 1995</td>
<td>Family Practice</td>
</tr>
<tr>
<td>William Trotter</td>
<td>Class of 1995</td>
<td>Ophthalmologist</td>
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<tr>
<td>Ashrafzadeh, Amin</td>
<td>Class of 1996</td>
<td>Ophthalmologist</td>
</tr>
<tr>
<td>Stephen Cook</td>
<td>Class of 1997</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>Fatema Azam</td>
<td>Class of 2000</td>
<td>Family Practice</td>
</tr>
<tr>
<td>David Coon</td>
<td>Class of 2004</td>
<td>Endodontics</td>
</tr>
<tr>
<td>Brandon Allen</td>
<td>Class of 2005</td>
<td>General Practice</td>
</tr>
<tr>
<td>Mihir Patel</td>
<td>Class of 2006</td>
<td>General Practice</td>
</tr>
<tr>
<td>Matt Robert</td>
<td>Class of 2007</td>
<td>General Practice</td>
</tr>
<tr>
<td>Paul Denson</td>
<td>Class of 2007</td>
<td>General Practice</td>
</tr>
<tr>
<td>Randy West</td>
<td>Class of 2008</td>
<td>General Practice</td>
</tr>
<tr>
<td>Ursula Price</td>
<td>Class of 2009</td>
<td>Periodontics Residency</td>
</tr>
<tr>
<td>Natasha Crespo</td>
<td>Class of 2010</td>
<td>AGED Residency</td>
</tr>
</tbody>
</table>
Rob Cline  Class of 2010  Periodontics Residency
Harold Kamara  Class of 2011
Megan Miller  Class of 2012
Paul Dryer  Class of 2011
Jesse Parsons  Class of 2012
Larry Tam  Class of 2013
Brad Vermeulen  Class of 2014
Meera Grewal  Class of 2015
Sarah Wojciechowski  Class of 2015
Prashan Shanthakumar  Class of 2016
Jordan D. Payne  Class of 2016
Ryan Schmidgall  Class of 2016
Patricia Ashley Hills  Class of 2016

Advisor to Undergraduate Students
Daniel Orlow  Graduated with B.S. in 1997 and is now a lab technician
Karen Chang  Dentist
Chia Lin Chu  Scientist at Momenta Pharmaceuticals, Inc.
Gavin W. Roddy  Completed a MD/PhD at Texas A&M College of Medicine, and is currently an Ophthalmology Resident at Mayo Clinic in Rochester, MN.

Advisor to High School Students in the NIH NCRR program
Chandra Mohammad, summer of 1991. She graduated from Weston High School and attended Brown University.
Melina Fan, summer of 1992. She graduated from Brookline High School and was accepted at Brown University and M.I.T.
Cymande Baxter, summer of 1993. She graduated from Gloucester High School in 1994 and attended Stanford University.
Phyllis Itoka, summer of 1994. She graduated from Cambridge Ridge and Latin High School, and attended Wellsley College.
Richard Caban, summer of 1995. He attended Boston English High school and went to pharmacy school.
Andrew Campbell, summer of 1996. He attended University of Mass.
Courtney Herman, summer of 1999.
Elsie Aton, summer of 1999. 2007 update. Elsie is now a school teacher.
Isabella Chiodini, summer of 2013

STUDENT AWARDS, HONORS
Michelle S. Hirsch, Ph.D.
  1993  Jan Langman Award 2nd place, American Association of Anatomists
  1994  President’s Award--Boston University Graduate Student Science Research Day
  1994  Grant supporting her work: Graduate Student Research Award, Boston Univ. School of Medicine, Division of Graduate Medical Sciences
  1995  Travel Award-Northeast Regional Developmental Biology Conference
  1995  Henry I. Russek Student Achievement Award--Boston University School of Medicine
  1995  Grant supporting her work: Dissertation Fellowship, American Assoc. of University Women Educational Foundation
  1997  Jan Langman Award 2nd place, American Association of Anatomists
  1997  Dissertation Award, 2nd place, American Association of Anatomists

Wende Reenstra, Ph.D.
1995-2000 NIH AG NRSA grant: “The role of threonine phosphorylation in EGFR signaling”
1996 SCOMSA, Travel Award to attend the Pan Pacific Extracellular Matrix Meeting.
1997 Jan Langman Award finalists, American Association of Anatomists
1997 Best platform presentation by a student or Postdoctoral Fellow, East Coast Connective Tissue Society (Matrix ’97).

Chia Lin Chu
1997 Jan Langman Award finalists, American Association of Anatomists

Leif E. Lunsford
1997 Jan Langman Award finalists, American Association of Anatomists

Pei Kang
2000 Best platform presentation by a student or Postdoctoral Fellow, Texas Mineralized Tissue Society
2001 Jan Langman Award Finalists, American Association of Anatomists
2001 Student Travel Award, American Association of Anatomists
2001 Hatton Award Finalist, American Association for Dental Research
2001 1st place graduate student presentation, Tri-School Student Research Day, BCD
2002 Jan Langman 1st runner up, American Association of Anatomists
Grant based on her work: Texas A&M Tobacco Endowment Fund, Nicotine effects on palate development, Kathy K.H. Svoboda, PI 00/12/01 to 02/11/30, $75,000.

Salvador Nares
2000 Balint Orban Research Competition- Honorable Mention

Yiyu Fang
2004 Student Travel Award, American Association of Anatomists
2004 1st place graduate student presentation, Student Research Day, BCD
2005 Student Travel Award, American Association of Anatomists

Erik Kern Harrington
2000-2006 NIH/ NIDCR F30-DE05743 Individual Predoctoral Dental Scientist Fellowship, Ruth L. Kirchstein National Research Service Award
National Student Research Group, (NSRG);
Secretary, 2002-2003
President, 2003-2004
American Association of Dental Research, Member – Board of Directors, as President of NSRG
International Association of Dental Research, Member – Board of Directors, as President of NSRG
American Dental Education Association, Regional Representative for Council of Students – 2003-2004;
ADEA Delegate for Baylor - 2001-2004
American Student Dental Association, Secretary, Baylor Chapter, 2002
Baylor Student Research Group, President, 2002-2003, President-elect, 2001-2002,
Councillor, 2000-2001
2002-04 Baylor Curriculum Committee, Class Representative
2004 American College of Dentists: Outstanding Leader Award
2004 The Academy of Operative Dentistry: Outstanding Senior Award
2004 Dallas Section of the American Association of Dental Research: Outstanding Senior Award
2004 American Association of Dental Research: Distinguished Service Award
2005 Student Travel Award, American Association of Anatomists

Wenli Yu
2006 Student Travel Award, American Association of Anatomists
2006 1st place graduate student presentation, Student Research Day, BCD
2007-2009 Student Travel Award, American Association of Anatomists

Julia Chang
2005 Dr. Konrad and Clara Lux Trust Scholarship, Baylor College of Dentistry, TX
2006 Student Travel Award, American Association of Anatomists
2006 Diplomate, American Board of Oral and Maxillofacial Pathology
2007 One-Month Donald West King Fellowship at the Armed Forces Institute of Pathology
2010 K08 Award

Megan Miller
2009 AADR Student Research Fellowship

Maria Serrano
2009 Student/Postdoctoral Fellow Travel Award, American Association of Anatomists
2009 NIH-NICDR T32 Training grant DE 018380; P.I. Rena D’Souza.
2010 Finalist in the competition of AADR/Johnson &Johnson Healthcare Products Hatton Award.
2010 AAA Student/Postdoctoral Fellow Travel Award
2010 FASEB Postdoctoral Professional Development and Enrichment Award
2011 Finalist in the competition of AADR/Johnson &Johnson Healthcare Products Hatton Award.
2011 AAA Student/Postdoctoral Fellow Travel Award
2011 AAA Postdoctoral Poster Award Finalist
2011 F32 grant DE020964 Genome impact on nicotine induced cleft palate in mice.
2012 AAA Student Travel Award
2012 FASEB MARC Travel Award

Symone San Miguel
2009 Student/Postdoctoral Fellow Travel Award, American Association of Anatomists
2010 AAA Student/Postdoctoral Fellow Travel Award

Ashneet Sachar
2011 AAA Student/Postdoctoral Fellow Travel Award
2011 AAA Graduate Student Oral Presentation (Langman Award) finalist.
2011 Second Place Oral Presentation, BCD Student Research Day
2011 July cover of BioTechniques.

BIBLIOGRAPHY

Original Reports and Reviews
(Graduate Student Work)


(Postdoctoral Work)


(Independent Work)


47. Maciejewska, I., Cowan, C., Svoboda, K., D’Souza, R., Butler, W.T., and Qin, C. The NH2-terminal and COOH-terminal fragments of dentin matrix protein 1 (DMP1) localize differently in the compartments of dentin and growth plate of bone. J Histochem & Cytochem, 57 (2) 155-166, 2009. PMCID 2628324, PMID 18854597


52. Harrington, E.K., Coon, D.J., Kern, M.F. and Svoboda, K.K.H. PTH Stimulated Growth and Decreased Col-X Deposition is Phosphotidylinositol-3,4,5 triphosphate kinase (PI3K) and Mitogen Activating Protein Kinase (MAPK) Dependent in Avian Sterna. The Anatomical Record: Advances in Integrative Anatomy and Evolutionary Biology Published Online: Dec 2 2009, DOI: 10.1002/ar.21072. PMID: 19957341, v293:225-234, 2010.


Papers submitted or in revision


Abstracts – Over 200 abstracts have been published. A list is available upon request. In the last 5 years I have regularly participated in the ARVO, AADR/IADR, EB and ASCB meetings. In many cases I’ve organized and chaired symposia at these meetings (see Oral Presentations).

Other Publications

In 1988 my husband, John Svoboda died from cardiac arrest. He was an artist and writer. As a memorial, his daughter and I assembled, edited and published his poetry with some of his drawings.

Edited books


Newsletter and other short papers:

1. Svoboda, KKH, 2005, View from the Top: Give the gift that keeps on giving! American Association of Anatomists NEWS, 14:4, 2, December Newsletter.


10. Svoboda, K.K.H. Dr. Robert McCuskey receives the 2008 Henry Gray Award, AAA Award banquet program, April, 2008.


20. Svoboda, K.K.H. “Preparation and Analysis of Mineralized Tissues” course was a big hit with the graduate and dental students, Baylor Record. August, 2010.


**Personal Complete Grant Record- Independently funded from 1983-2010.**

Corneal Epithelial Basal Lamina Differentiation. NIH Postdoctoral Fellowship, Kathy K.H. Svoboda, P.I., E.D. Hay supervisor, August 1, 1983 to July 31, 1985, $50,000. **Funded.**

Biology of the Epithelial Basement Membrane. NIH/NIAMSD Young Investigator Award, Kathy K.H. Svoboda, P.I., July 1, 1985 to June 30, 1988, $107,500. **Funded.**


Extracellular matrix influence on the epithelial cell metabolism. BUSM Biomedical Research Support Grant, Kathy K.H. Svoboda, P.I., February 1, 1987 to January 31, 1988, $7,500. **Funded.**


Small instrument grant-scintillation counter, NIHDRR-BRS Shared Equipment Grant, Kathy K. H. Svoboda, P.I., July 30, 1989 to October 1, 1989. $22,000, **Funded.**

Spatial localization of mRNAs for secreted ECM proteins. Whitaker Health Sciences Fund BUMC-MIT Collaborative Research Grant, Kathy K. H. Svoboda (BUMC) and Sheldon Penman (MIT), Co-P.I.’s, July 1, 1989 to June 30, 1990, $48,000. **Funded.**


Renewal of: Biology of the embryonic corneal epithelium, NIH/NEI RO1, Kathy K.H. Svoboda, P.I., July 1, 1994 to January 31, 1998 $475,876 direct costs, $785,195 total costs, **Funded.**


Chondrocyte-ECM interactions, Baylor Oral Health Foundation seed grant, Kathy K.H. Svoboda, P.I., December 1, 1998 to November 30, 1999 $50,000 direct costs, Funded.


Texas A&M Tobacco Endowment Fund, Nicotine effects on palate development, Kathy K.H. Svoboda, PI 00/12/01 to 02/11/30, $75,000, Funded.


Plasmid delivery and expression in embryonic eye tissues. NIH NEI R03 EY014389. 8/1/03 to 7/31/06, Kathy K. H. Svoboda, PI, $300,000 direct costs, Funded.

Acquisition of laser capture microdissection and quantitative PCR systems. NSF 0321207, 8/1/03 to 7/31/06 MRI instrument grant program. Kathy K. H. Svoboda, P.I. $416,802 direct costs, Funded.

Growth Factor regulation of cranial suture morphogenesis, NIH R01-DE11978, 12/1/02-11/30/07, K. Svoboda 10%, Co-investigator, Lynne Opperman, PI, Not Funded.
Vector Delivery to whole embryonic craniofacial tissues, R21, 12/1/02 –11/30/04, K Svoboda, 10%, Co-investigator, Lynne Opperman, PI, Not Funded

Regulation of Mandibular Condylar Cartilage Growth, NIH NIDCR-RO1, Robert Hinton, P.I., K. Svoboda collaborator, 5%, Funded.

Research Infrastructure Improvement Planning Award, NIH NIDCR R24 DE015478, David Carlson, P.I., K. Svoboda, Co-PI, 10%, $100,000 direct costs, Funded.

BCD Research Infrastructure Enhancement Program Award, NIH NIDCR U24 David Carlson, P.I., K. Svoboda, Co-PI, 15%, 9/01/04-8/31/06, $2 million direct costs, Funded.


K12 HD052225-01, PI: Milton Packer, M.D., UT Southwestern Clinical Science Scholars Program, 9/30/05 to 9/29/10, total direct costs $9,700,000. K. Svoboda, Mentor, Funded.

Texas A&M Vice President for Research - Research Development and Enhancement Program Grant, “Nicotine effects on gingival fibroblast wound healing”, 08/01/06 to 7/31/07, $15,000. Funded.

T32, Training Program in Dental and Craniofacial Research, total direct costs Rena D’Souza, PI, Kathy Svoboda – Track coordinator and mentor, Funded.

Sponsor for Julia Chang for a K08, “The role of Epithelial-mesenchymal transition and stroma in oral carcinogenesis” 7/01/07 to 6/30/12. Direct cost/year $88,126 TC $94,854. Total DC all years 458,865, TC $494,607. (withdrawn).


NIH Challenge Grant “Genome impact on nicotine detoxification in mouse model” Kathy K.H. Svoboda, P.I., $500,000, April 2009, not funded.

NIH-R01DE020875-01 “The Role of Twist and Snail in Palate Development and Fusion” Kathy K.H. Svoboda, P.I., $1,000,000, April, 2009, 12/01/10-11/30/14 (First review completed, score 73, 59th percentile. Resubmitted in 3/2010, score 50, 42nd percentile), not funded.

NIH-R01DE021492-01 “Antioxidant protection mechanisms in oral cells and tissues” Kathy K.H. Svoboda, P.I., $1,000,000, 12/01/10-11/30/14, unscored in 1st round.

Sponsor for Maria Serrano NIH F32 DE020964 Genome impact on nicotine induced cleft palate in mice. Scored 60 in first round, resubmitted and scored 28. Funded


**Oral presentations:**


Invited Speaker, at the Scanning 90 meeting in Arlington, Virginia April 20, 1990. Published in the *Proceedings of Scanning 90* vol. 12 5:157-58.

Invited Speaker, Symposia on "Frontiers of Confocal Microscopy," at the 9th International Congress of Eye Research. in Helsinki, Finland, July 31, 1990.

Invited Speaker, Session on "Confocal Microscopy, 3rd International Conference on Confocal Microscopy, Session IV part 1" at the Scanning 91 meeting in Atlantic City, New Jersey, April 12, 1991.


Invited Speaker, Symposia on "Fluorescent In Situ Hybridization And Nonisotopic Detection," at the Science Innovation ‘93 Meeting in Boston, August 8, 1993


Invited Speaker, "Intracellular Localization of mRNA In Whole Tissues Using FISH." at the Leica confocal user meeting, Dec. 16, 1995

Invited Speaker, "Terminal Chondrocyte Differentiation And Type X Collagen Expression Are Dependent On Cell-Matrix Interactions" FASEB meeting "The Molecular Genetic Basis Of Cell And Tissue Structure And Function," Copper MT. Colorado August 5, 1996

Invited Speaker, "Signal Transduction Pathways Involved In ECM Stimulated Actin Reorganization In Corneal Epithelia" XII International Congress of Eye Research, Yokohama, Japan October 3, 1996


Organized and Chaired a Symposium on Regulation of Epithelial-Mesenchymal Transformation in Palate Development and Tumor Metastasis. American Association for Dental Research, March 14, 2003 in San Antonio, TX.

Invited Speaker, "Integrating confocal microscopy with biochemical data to investigate cell-matrix interactions in embryonic corneal epithelium" Western Eye Research Conference, Laguna Beach, California, and September 14-17, 2003.

Organized and chaired "Tips on Microscopy" Hands on Workshop at the International Association for Dental Research, March 11, 2004 in Honolulu, HI. Included two presentations titled “Useful probes for confocal microscopy” and “National funding programs for microscope systems”.


Moderator: ARVO platform session “Corneal Stroma and Keratocytes II” ARVO annual meeting, May, 2005.


Invited speaker “Current evidence for EMT during Palate Development,” at the 2008 Epithelial-mesenchymal transition meeting at Cold Spring Harbor Laboratory, March 17-20, 2008.


Invited speaker - Organized Symposium “Physiological EMT: Palate EMT? “ title ‘Palate Fusion is Twist and Snail Dependent Downstream of Tgfβ3 and PI3 kinase.’ At the 4th

Invited speaker – Symposium “Orofacial Clefting in Mouse Models” presentation title “Epithelial-mesenchymal Transformation during Craniofacial Development” AADR Annual Meeting (March 3-6, 2010), Washington, D.C.


Speaker – Session 4: Developmental EMT “Ephrin reverse signaling promotes palate fusion through PI-3 kinase dependent mechanism” 5th International Epithelial-Mesenchymal Transition Meeting, October 10-13, 2011, Singapore.


Speaker and Moderator - Session Title: New Approaches to Treat Periodontal Diseases Session Sequence, “Combinations of antioxidants protect oral fibroblasts from ROS inducing agents” The IADR/LAR General Session in Iguaçu Falls, Brazil, June 20-23, 2012

Seminars

Cell Shape Changes During Optic Vesicle Development In The Mouse Embryo. Department of Anatomy and Cellular Biology, Harvard Medical School, 1983.


The Role Of Actin In Collagen Expression During Corneal Epithelial Development. Department of Anatomy and Cell Biology, University of Connecticut, Farmington, CT, March, 1986

The Actin Cortical Mat Is Required For Collagen Expression During Corneal Epithelial Development. Department of Anatomy, Boston University School of Medicine, May, 1986.

Dynamics of Actin during Corneal Epithelial Development. Department of Anatomy, University of Nebraska Medical Center, Omaha, Nebraska, June 1987.

Collagen Expression In The Avian Embryonic Cornea. Department of Biochemistry, Boston University School of Medicine, March, 1988.


Extracellular Matrix Influence On Corneal Epithelial Cell Biology, Department of Anatomy and Cell Biology, University of Michigan Medical School, Ann Arbor, Michigan, March, 1990.


Intracellular Localization of Actin, RER, and types I and II Collagen mRNA in Embryonic Corneal Epithelia. Department of Biochemistry, Boston University School of Medicine, March, 1991.


How to Make Anything Look Good: Use of Confocal Microscopy. Department of Anatomy and Neurobiology, Boston University School of Medicine, November, 1991.

What Is A Confocal Microscope? What Can It Do For Your Research? Department of Anatomy and Neurobiology, Boston University School of Medicine, February, 1992.

The Theory Of CLSM And Whole Mount Tissue Preparation, Department of Anatomy and Neurobiology, Boston University School of Medicine, June, 1992.


Through The Looking Glass: Whole Tissue Analysis with Confocal Microscopy. Department of Pediatrics, College of Medicine University of Cincinnati, Cincinnati, Ohio, March, 1993

Through The Looking Glass: Applications For The Confocal Microscope” Department of Pathology Boston University School of Medicine. April, 1993

The Theory Of CLSM And Whole Mount Tissue Preparation. Department of Anatomy and Neurobiology, Boston University School of Medicine, June, 1993.

Through The Looking Glass: Whole Tissue Analysis With Confocal Microscopy. Cardiovascular Research Seminar, Department of Cardiovascular Research, Tufts, University School of Medicine, St. Elizabeth's Hospital, Boston, Mass. November, 1993
The Theory Of Confocal Laser Scanning Microscopy (CLSM) And Whole Mount Tissue Preparation. Department of Anatomy and Neurobiology, Boston University School of Medicine, July 20 1994.


The Theory Of Confocal Laser Scanning Microscopy (CLSM) and Whole Mount Tissue Preparation. Department of Anatomy Boston University School of Medicine, July, 17 1995.

Corneal Epithelia Provide A Model For Whole Tissues Examination Of Cell-Cell And Cell-Matrix Interactions. NIH/NCRR seminar, Boston University School of Medicine, August 7, 1995.


Embryonic Cartilage Growth, Differentiation And Gene Expression May Be Regulated By The "Cell-Matrix Attachment Complex" (CMAX). Arthritis Group Seminar, Boston University School of Medicine, May 1, 1996.


ECM Stimulated Actin Reorganization in Embryonic Corneal Epithelial Sheets Requires Intact Rho, MAP Kinase and PI3 Kinase Pathways. Department of Ophthalmology, Southwestern Medical School, University of Texas, Dallas, TX. Nov. 24, 1997.

The Role Of Cell Matrix Attachment Complexes (CMAX) In Cartilage Growth, Development And Differentiation. Medical Science Department, Baylor Dental School, Dallas, TX, Jan 26, 1998.

Signal Transduction Pathways Involved In ECM Stimulated Actin Reorganization in Corneal Epithelial Sheets Include Rho, MAP Kinase and PI3 Kinase. Department of Anatomy, University of North Dallas Health Science Center, Fort Worth, TX, Feb. 27, 1998.

The Role of the Cell Matrix Attachment Complex (CMAX) in Cartilage and Corneal Epithelial Models. Molecular and Cell Biology Department, University of Texas-Dallas, TX, March 5, 1998.


Actin reorganization in embryonic corneal epithelia stimulated by ECM involves Rho and it's downstream kinases. Texas A&M Health Sciences Center, College of Medicine, College Station, TX. February 20, 2001.

BCD Core Facilities – How we can help your research. Baylor College of Dentistry Technology Day Seminar, July 25, 2002.

Digital Technology and It's Impact on Scholarly Activity And/or Publications, Baylor College of Dentistry Faculty Retreat, January 7, 2003.
Review of R24 Activities, Baylor College of Dentistry External Advisory Committee Meeting Presentation, Dallas, TX, February 24, 2004.


The Future of BMS at BCD: Evolution, Revolution or Intelligent Design, Baylor College of Dentistry, Dallas, TX, October 10, 2005.

Integrating Confocal Microscopy with Biochemical Data to Investigate Cell-Matrix Interactions in Embryonic Corneal Epithelium, Department of Comparative Ophthalmology, School of Veterinary Medicine, University of Wisconsin-Madison, July 10, 2006.

Cell- Matrix Interactions in Developmental Processes and Wound Healing, Department of Genetics, Cell Biology and Anatomy, University of Nebraska Medical Center, October 25, 2006.

Teaching, Research and Life Philosophy, University of Central Florida, School of Medicine, Orlando, FL., August 24, 2007.

Combining structural and functional studies to understand corneal development: A tribute to Elizabeth D. Hay, Department of Anatomy and Cell Biology, University of North Dakota, Grand Forks, ND. October 11, 2007.

Protect your baby—environmental risk factors for cleft palate, Department of Pharmacology and Toxicology, Rutgers University Pharmacy School, September 19, 2008.

Grant Consultation
I have consulted on other investigator’s grants as co-director of the Boston University School of Medicine’s and Baylor College of Dentistry’s confocal facilities and as an expert in immunohistochemical techniques.

Consultant on NIH Grant, ‘Macrophage development in intact and cultured fetal lungs,’ Sergei P. Sorokin P.I., Department of Anatomy and Neurobiology, Boston University School of Medicine, Funded.

Consultant on NIH Grant, ‘Characterization of small-granule cells in the lungs,’ Richard Hoyt, P.I., Department of Anatomy and Neurobiology, Boston University School of Medicine, Funded.

Consultant on Grant, Nancy Bucher, P.I., Department of Pathology, Boston University School of Medicine, Funded.

Consultant on NIH Grant, "Alterations in adhesion proteins with chemical anoxia" Vasken Kroshian, M.D., P.I. Renal Division, Department of Medicine Boston University School of Medicine, Pending.

Consultant on NIH Grant, "Retrograde protein transport in renal epithelial cells". Steven Borkan M.D., P.I., Renal Division, Department of Medicine, Thorndyke Memorial Laboratory, Boston City Hospital, Pending.
Consultant on NIH Grant, "Mechanism of hemoglobin induced nephrotoxicity" Dr. Wilfred Lieberthal, P.I., Department of Renal Pathology, Boston University School of Medicine, Funded.

Consultant on Grant, "The effect of donor age on the molecular mechanism of EGF signal transduction". Wende Reenstra, Ph.D., P.I., Department of Dermatology, Boston University School of Medicine, not funded.

Consultant on NIH Grant, "The immune response to cryptococcal infections." Stuart Levitz, P.I., Department of Medicine, Boston University School of Medicine, Funded.

Consultant on NIH Grant, Thomas Linsenmayer, P.I., Department of Anatomy and Cell Biology, Tufts University School of Medicine, Funded.

Consultant on NIH Grant, "Cysteine proteininases: stage-specific expression in colorectal tumors." Mary Jo Murnane, Ph.D., P.I., Department of Pathology, Boston University School of Medicine, Funded.

Consultant on NIH Grant, "Inhibition of HIV infections of human lymphoid cells." Hugues J.-P. Ryster., Ph.D. P.I. Department of Pathology, Boston University School of Medicine, Funded.

Consultant on NIH Grant, "HIV-1 Infection in Oral Mucosal Langerhans Cells", Dr. Lee Chou, P.I. Director, Oral AIDS Clinic, Department of Diagnostic Sciences, Goldman School of Graduate Dentistry, Boston University, Funded.

Consultant on NIH Grant, "Regulation and localization of aortic lysyl oxidase" Dr. Herbert Kagan, Department of Biochemistry, Boston University School of Medicine, Funded.

Consultant on NIH Grant, “Expression of collagens in the cornea” Dr. Marion Gordon, EOHSI Toxicology Division, Rutgers University, New Jersey, Funded.

Consultant on Texas A&M grant, “Nicotine’s mechanism of action on food intake and body weight.” Dr. Larry Bellinger, Department of Biomedical Sciences, Baylor College of Dentistry, Funded.

Consultant on NIH Grant, “Dendritic cell-based approach for oral cancer treatment.” Dr. Mahyar Nouri-Shirazi, Department of Biomedical Sciences, Baylor College of Dentistry, Not Funded.

Consultant and collaborator on NIH Grant, “Regulation of Mandibular Condylar Cartilage Growth” Dr. Robert Hinton, Department of Biomedical Sciences, Baylor College of Dentistry, Funded.

Consultant and collaborator on NIH Grant, “3-D Tissue Model for Periodontal Ligament Cells”, Dr. Allen Honeyman, PI, Department of Biomedical Sciences, Baylor College of Dentistry (not funded).
Advisor on NIH K02 grant “Analysis of the Roles of DMP1 and DSPP in Osteogenesis and Dentinogenesis” Chunlin Qin, PI, Department of Biomedical Sciences, Baylor College of Dentistry, Funded.

Consultant on British government’s Engineering and Physical Sciences Research Council on “new physical approaches to study avian corneal morphogenesis.” Andrew J. Quantock, PI Structural Biophysics Group, School of Optometry and Vision Sciences, Cardiff University, Funded.

Consultant on grant entitled “Identification of Endothelin-A receptor dependent genes in subpopulations of cardiac neural crest cells” L-Bruno Ruest, PI Department of Biomedical Sciences, Baylor College of Dentistry (not funded).

Consultant on NIH R01 grant ““Runx2 function in palate formation” for Co-PIs L-Bruno Ruest and Robert Spears, Department of Biomedical Sciences, Baylor College of Dentistry (not funded).

Consult on a NIH grant entitled, "Laminins, matrix metalloproteinases and protection against vesicant-induced skin injury". Donald Gerecke, PI. 1U54AR055073-01, "UMDNJ/Rutgers University CounterAct Research Center of Excellence. Funded.

Consultant on NIH K01 grant “C5a, Trigeminal Neurons and Inflammatory Pain”, Jayne Reuben, PI, Department of Biomedical Sciences, Baylor College of Dentistry (not funded).

Consultant on NIH R01 grant "Mitochondrial ATP sensitive K+ channels and cardiomyocyte dysfunction in sepsis", Avadhesh Sharma, PI, Department of Biomedical Sciences, Baylor College of Dentistry (not funded).

Consultant on NIH R44 grant “Fullerene-based PDT for Dysplastic and Malignant Oral Keratinocytes” PI- Sanjiv Lalwani, Research Scientist, Lynntech, Inc

Consultant on NIH RO1 grant “Identification and Function of nuDMP1 in Odontoblast Differentiation” PI Yongbo Lu, Assistant Professor, Department of Biomedical Sciences, Baylor College of Dentistry, Funded.
Venu G. Varanasi, Ph. D.
Curriculum Vitae

I. BACKGROUND

Education

2004-2009  Postdoctoral Fellow  Biomaterials & Bioengineering  UCSF  San Francisco, CA
1998-2004  Ph. D., M.S.  Chemical Engineering  UF  Gainesville, FL
1993-1998  B. S.  Chemical Engineering  USF  Tampa, FL

Professional Experience

2004–pres, Guest Researcher  Lawrence Berkeley National Laboratory  Berkeley, CA
2000–2004  Guest Researcher  Oak Ridge National Laboratory  Oak Ridge, TN
1997–1997  Consultant  Florida Power Corporation  St. Petersburg, FL
1996  Research Scholar  NASA Langley Research Center  Hampton, VA

II. RESEARCH

Peer-Reviewed Publications


**Grant Support: Pending**

NIH Grant # 1R03DE022839-01 (Varanasi, PI) $150,000  
07/01/2012-06/30/2014  
National Institutes of Health/National Institute for Dental and Craniofacial Research (NIH/NIDCR)  
“Bioactive Glass Silicon Ions: Pivotal Role in Bone Healing”  
This proposal is designed to study the effects of ionic products of bioactive glass dissolution on osteogenic marker expression. The approach is to use transgenic mice to knockdown specific osteogenic markers and then use these implant materials to recover the lost function. The goal is to determine the mechanism for which these ions stimulate osteogenesis and determine a tissue engineering strategy to utilize this pathway of action.  
Role: PI

**Grant Support: Current**

Departmental Start-up Grant, Varanasi (PI)  
8/1/2011 - 6/30/2013  
Baylor College of Dentistry  
This grant is aimed to set up the PI’s Laboratory and fund preliminary studies needed to become competitive for extramural research support.  
Role: PI

B-BEST Intramural Research Grant Varanasi (Co-I)  
8/1/2011 - 6/30/2012  
Baylor College of Dentistry  
This grant is aimed to build a stronger base for translational research and tissue engineering at Baylor College of Dentistry.  
Role: PI

Center for Nanophase Materials Sciences (CNMS2010-080, Varanasi, PI) $0 (User Facility Proposal)  
02/01/2010 – 01/31/2012  
Oak Ridge National Laboratory  
“PECVD of Smart Bioinductive Glasses for Combinatorial Gene Control of Cellular Function”  
The proposal expands our current technological development into smart implant interfaces. The purpose of the proposed experiments is to determine if an interface can be constructed on a nano-scale that can better accommodate biomechanical stress, distribute such stresses evenly throughout the interface, and provide a substrate layer for bioactive glass coatings on Ti implants to facilitate their longer term osteointegration.  
Role: Principal Investigator

**Grant Support: Past**

NIH Grant # 1 K25 DE018230-01 Varanasi (PI), $575, 000  
07/01/07 – 06/30/2012  
National Institutes of Health/National Institute for Dental and Craniofacial Research (NIH/NIDCR)  
“Improving Biomaterials from a Cellular Point of View”  
This award is physical sciences to biosciences transitional career award. This grant proposal focuses’ biomaterial cellular interactions. Specifically, the interaction of bioactive glass dissolution products and osteoblast behavior is proposed. These materials are studied for their mitogenic influence on osteoblast behavior. We propose to develop materials based on the results of in vitro testing.  
Role: Principal Investigator

NIH Supplement # A107380 Varanasi (PI), $50, 000  
10/01/2009 – 09/30/2011 $50, 000  
National Institutes of Health/National Institute for Dental and Craniofacial Research (NIH/NIDCR)  
Award Modification for “Improving Biomaterials from a Cellular Point of View”  
This award modification was submitted to request additional funding in response to the American Recovery and Reinvestment Act of 2009. This award modification is intended to increase the throughput of research conducted in our laboratory to further our knowledge of how bioactive glass ions can combinatorially control osteoblast gene expression.  
Role: Principal Investigator
American Academy of Implant Dentistry Research Foundation

"Silicon and Calcium Synergistically Control over Osteoblast Function"
This grant explores the synergy of silicon and calcium ions on osteoblast function. The goal of this research is to determine a range of Si and Ca ion concentrations that can increase the rate of mineralized tissue production.
Role: Principal Investigator

American Academy of Implant Dentistry Research Foundation

Student Fellow: Bishop, Timothy
"Mechanistic Impact of Bioactive Glass Ions on Osteoblast Mineralization"
This proposal is aimed at studying the intracellular mechanisms that are enhanced under the influence of bioactive glass ion treatments. The goal is to identify signaling pathways that are involved in the enhanced expression of osteoblast-specific markers and mineralized tissue formation.
Role: Co Investigator and Primary Mentor

American Academy of Implant Dentistry Research Foundation

Student Fellow: Barkhordar, Nicole S.
"Bioactive Glasses Enhance Osteoblast Matrix Formation and Mineralization"
This submitted proposal details the investigation of how bioactive glasses enhance osteoblast matrix mineralization. This study isolates the effect of corrosion of bioactive glasses and its effect on gene and matrix protein expression and its implications on osteoblast mineralization.
Role: Co Investigator and Primary Mentor

NCA Grant # 440000 Varanasi (Co-PI), $40, 000, 07/01/07
University of California at San Francisco Academic Senate Shared Equipment Grant
“Nikon TE2000S Motorized Microscope with Cage Incubator”
This grant was awarded to our research group in support of current cell culture research. The microscope purchased from this grant is intended for imaging cellular activity on bioactive glass surfaces.
Role: Co-Investigator

HTML Grant # 2004-029 Anderson (PI), $0 (User Facility Proposal), 4/01/2004 -10/01/2006
Department of Energy / High Temperature Materials Laboratory (DOE/HTML)
“Chemical Vapor Deposition of Yttria-Stabilized Zirconia as Thermal Barrier Coatings in Gas Turbines”
The goal of this proposal was to characterize materials fabricated via chemical vapor deposition Using Scanning Electron Microscopy and X-ray Diffraction facilities at the HTML.
Role: Co-Investigator

III. TEACHING, MENTORING, AND PRESENTATIONS

Formal Teaching
2011-pres Nanobiomaterials for Tissue Engineering Lecturer 1.0 Units 9 students
2008-2011 Biomaterials 118: Dental Implant Materials Lecturer 9.5 Units 88 Students
2007-2011 Biomaterials 203: Endosseous Implant Materials Lecturer 2 Units 15 Students

Informal Teaching
2004 V. G. Varanasi, "CVD Coatings for Biomaterials Applications", Department of Chemical Engineering Seminar Series, Doctoral Seminar, University of Florida, Gainesville, FL.

Mentoring
2009 Student Fellowship, American Association for Implant Dentistry, Timothy Bishop (Student), V. G. Varanasi (Mentor) (UCSF)
2008 Student Fellowship, American Association for Implant Dentistry, Nicole Barkhordar (Student), V. G. Varanasi (Mentor) (UCSF)
2008 First Place, Alumni Meeting Student Table Clinic Competition, Nicole Barkhordar (Student), V. G. Varanasi (Mentor) (UCSF)

2004 Actively mentoring dental volunteers, students and residents in biomaterials research (UCSF)

2002–2003 Directed research of two undergraduate students on their contributions to thermal barrier coatings research (ORNL)

Conference Presentations


Invited Talks and Seminars

• **V. G. Varanasi**, "Biomaterials for Enhanced Osteogenesis", Department of Chemical Engineering Seminar Series, Invited Talk, University of South Florida, Tampa, FL. (October 2009).


• **V. G. Varanasi**, “Chemical Vapor Deposition for Biomaterial Fabrication,” Department of Preventive and Restorative Dental Sciences, UCSF, San Francisco, California (2003)

• **V. G. Varanasi**, "Chemical Vapor Deposition of Protective Coatings in Gas Turbine Engines", Department of Chemical Engineering Seminar Series, Invited Talk, University of South Florida, Tampa, FL. (October 2003).

IV. SERVICE AND DISTINCTION

Service
2008-2009 Faculty Advocate to Chancellor’s Advisory Committee on Disability Issues (UCSF)
2006-2007 Postdoctoral Scholars Association Representative to Chancellor’s Advisory Committee on Disability Issues (UCSF)

Professional Societies
2011 American Association of Anatomists
2006 Materials Research Society
2004 American Association for Dental Research
2004 American Ceramic Society
1996 American Institute of Chemical Engineers

Honors and Awards
2009 National Institutes of Health (NIH) / National Institutes of Dental and Craniofacial Research (NIDCR) ARRA Supplemental Grant (UCSF)
2008 First Place, Postdoctoral Scholar Competition, School of Dentistry Research Day (UCSF)
2007 National Institutes of Health (NIH) / National Institutes of Dental and Craniofacial Research (NIDCR) Mentored Career Award (UCSF)
2006 First Place, Postdoctoral Scholar Competition, School of Dentistry Research Day (UCSF)
2004 NIH / NIDCR National Research Service Award (UCSF)
2001 Higher Education Research Experience Fellowship (ORNL)
2000 Professional Internship Program Fellowship (ORNL)
1998 Hawkins Fellowship (UF)
1998 Graduated with Distinction (USF)
1996 Alumni Scholarship, (USF)
1996 Phi Kappa Phi Junior Inductee in Engineering Award, (USF)
1996 Langley Aerospace Research Summer Scholarship (NASA LARC)
1995 Faculty/Staff Scholarship, (USF)
Curriculum Vitae

Xiaofang Wang, BDS., MS., Ph.D.
Assistant Professor
Department of Biomedical Sciences, Texas A&M Baylor College of Dentistry
3302 Gaston Ave, Rm437, Dallas, TX, 75246

Gender: Male
Birth date: April 2, 1972
Email: xwang@bcd.tamhsc.edu
Phone: 214-828-8436
Fax: 214-874-4538

EDUCATION:
- B.D.S. (the equivalent of an American D.D.S. degree), Fourth Military Medical University School of Dentistry, Xi'an, China (1995)
- M.S., Fourth Military Medical University School of Dentistry, Xi'an, China (2000)
- Ph.D., Fourth Military Medical University (2003) (Dissertation research done at Shanghai Institutes for Biological Sciences, Chinese Academy of Science)

PROFESSIONAL APPOINTMENTS:
- Instructor and Attending Doctor, Department of Conservative Dentistry, Fourth Military Medical University School of Dentistry, Xi'an, China (2003-2006)
- Short-term Visiting Scientist, Center for Oral Biology, University of Rochester Medical Center, (April-August, 2005)
- Postdoctoral Fellow, Division of Oral Biology, Ohio State University, College of Dentistry (2006-2008)
- Postdoctoral Research Associate, Department of Biomedical Sciences, Texas A&M Health Science Center Baylor College of Dentistry (2008-2012)
- Assistant Professor, Department of Biomedical Sciences, Texas A&M Health Science Center Baylor College of Dentistry (Sep,2012-present)

RESEARCH SUMMARY
My main research interests are to study the formation and mineralization of bone and tooth. In the past three years, I have published 14 papers related to the functions and properties of the SIBLING proteins and FAM20C in the mineralized tissues; these articles have been published in well recognized journals such as PLoS Genetics, J. Biol. Chem., and J. Dent. Res. The research projects I have been involved in mainly focus on the new molecule FAM20C (family with sequence similarity 20-member C), and the SIBLING proteins including dentin matrix protein 1 (DMP1), dentin sialophosphoprotein (DSPP), bone sialoprotein (BSP) and osteopontin (OPN).

FAM20C is a new gene of which little was known before my works. I was the first generated genetically engineered mouse models to study the biological function of this gene. My research unraveled that FAM20C regulates phosphate homeostasis by mediating a phosphorus hormone FGF23 through the bone–kidney–parathyroid endocrine axes, which highlighted the crucial role of this molecule in the development and mineralization of mineralized tissues. More recent studies from us and other groups indicated that FAM20C is a kinase that can phosphorylate SIBLING proteins \textit{in vitro}. We found that phosphoproteins in the non-collagenous proteins extracted from FAM20C knockout mice had a significantly lower phosphorylation level than WT. This finding suggests that the mineralization defects in \textit{Fam20C} knockout mice may be
related to the phosphorylation failure of certain SIBLING proteins in these mice. Moreover, the hypophosphatemia and FGF23 overproduction in Fam20C knockout mice are very similar with those in DMP1-inactivated subjects. The significant downregulation of DMP1 transcription and an potential phosphorylation failure in DMP1 protein may be associated with the FGF23 elevation in the Fam20C-KO mice. We also observed severe dental defects in the Fam20C-knockout mice, and revealed the molecular mechanisms underlying the tooth defects in the Fam20C-knockout mice. These results indicated that Fam20C is essential to the development of dentin and enamel, and is extremely important to the mineralization of these tissues. My recent data further showed that Fam20C is an autonomous molecule during tooth development, i.e., Fam20C is not involved in the reciprocal interactions between dental epithelium and dental mesenchyme. In addition, the mechanism that Fam20C regulate phosphate homeostasis through the mediation of FGF23 significantly affects osteogenesis, but does not apply to odontogenesis, i.e., hypophosphatemia does not significantly contribute to the dental defects in the Fam20C knockout mice.

The important findings outlined above enhanced our understandings of the role of Fam20C in biomineralization and will eventually help developing novel medicines and therapeutic strategies for hard-tissue diseases such as rickets, osteoporosis, dentinogenesis imperfecta, and amelogenesis imperfecta, which are affecting tens of millions of Americans.

**MEMBERSHIPS**

- International Association of Dental Research (IADR)
- American Association for Dental Research (AADR)
- American Association for the Advancement of Science (AAAS)

**HONORS & NATIONAL/INTERNATIONAL RECOGNITIONS**

- ASBMR Harold M. Frost Young Investigator Award (the 43rd Sun Valley Workshop on Musculoskeletal Biology in Sun Valley, Idaho, USA, August 4-7, 2013.)
- Organizer and Co-Chair of symposium “New Players and New Concepts in an Old Subject” of the IADR/AADR/CADR General Session, Seattle, WA, USA, Mar 21, 2013
- Co-Chair of Enamel Development and Diseases session of the annual AADR meeting, Tampa, FL, USA, Mar 21, 2012
- Key contributor to the grant application funded by the National Institute of Health and National Institute of Dental and Craniofacial Research (NIH/NIDCR) (R01DE022549-01A1 $1.825 million)
- Principal Investigator of the grant proposal with a fundable score 23 (by NIH/NIDCR, R03DE023873 $ 218,250.00)
- The paper to PLoS Genetics (a top-ranked biomedical journal) was selected as the cover story of May issue, 2012
- Scientific Advisory Board of the Journal of Endodontics
- International Reviewer of Research Grant Council (RGC) Hong Kong
- Reviewer of Journal of Molecular Endocrinology
- Reviewer of Connective Tissue Research
- Reviewer of Archives of Oral Biology
- Reviewer of International Journal of Developmental Biology
- Reviewer of International Journal of Biological Sciences
- Reviewer of Cell Biology International
SELECTED PUBLICATIONS


CONFERENCE PRESENTATIONS

- **Poster**: The Expression of FAM20C (DMP4) during Odontogenesis and Osteogenesis (33rd Annual Meeting of AADR, Washington, DC, USA, Mar 03, 2010)
- **Poster**: The Expression of FAM20C (DMP4) in Parietal Bone and Brain (33rd Annual Meeting of AADR, Washington, DC, USA, Mar 03, 2010)
- **Poster**: The Expression of FAM20C in the Tooth and Skeleton Indicates a Unique Role of This Protein in Odontogenesis and Osteogenesis (10th International Conference on the Chemistry and Biology of Mineralized Tissues, Scottsdale, AZ, USA, Nov 07, 2010)
- **Oral Presentation**: Inactivation of FAM20C (DMP4) Causes Hypophosphatemic Rickets and Dental Defects (41st Annual Meeting of AADR/ 36th Annual Meeting of the CADR, Tampa, FL, USA, Mar 21, 2012)
- **Symposium Oral Presentation**: New Players and New Concepts in an Old Subject (the IADR/AADR/CADR General Session, Seattle, WA, USA, Mar 21, 2013)
- **Poster**: The Specific Role of FAM20C in Dentinogenesis (the IADR/AADR/CADR General Session, Seattle, WA, USA, Mar 23, 2013)
- **Oral Presentation** (direct mentor and second author of this presentation): FAM20C Plays a Critical and Unique Role in Amelogenesis (the IADR/AADR/CADR General Session, Seattle, WA, USA, Mar 23, 2013)
- **Oral Presentation**: FAM20C is Essential to the Biomineralization of Bone and Tooth. (special session presentation in the 43rd Sun Valley Workshop on Musculoskeletal Biology in Sun Valley, Idaho, USA, August 4-7, 2013.)
Appendix C

Curriculum Vitae for Support Faculty
Appendix C

Curriculum Vitae for Support Faculty
CURRICULUM VITAE

Ibtisam Al-Hashimi, BDS, MS, PhD

Address: Baylor College of Dentistry
3302 Gaston Avenue
Dallas, TX 75246

Telephone: 214-828-8490
Fax: 214-874-4505
Email: alhashim@ont.com
IAl-Hashimi@bcd.tamhsc.edu

EDUCATION/TRAINING

<table>
<thead>
<tr>
<th>INSTITUTION AND LOCATION</th>
<th>DEGREE</th>
<th>YEAR(s)</th>
<th>FIELD OF STUDY</th>
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<tr>
<td>University of Baghdad</td>
<td>B.D.S.</td>
<td>1973</td>
<td>Dentistry</td>
</tr>
<tr>
<td>University of Baghdad</td>
<td>Diploma</td>
<td>1974</td>
<td>Oral Surgery</td>
</tr>
<tr>
<td>State University of New York at Buffalo</td>
<td>M.S.</td>
<td>1985</td>
<td>Oral Sciences</td>
</tr>
<tr>
<td>State University of New York at Buffalo</td>
<td>Ph.D.</td>
<td>1989</td>
<td>Oral Biology</td>
</tr>
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Professional Appointments
2006- Professor, Dept. Periodontics, Baylor College of Dentistry, Dallas, Texas
2003-04 Visiting Professor, Queens University, School of Dentistry, Belfast, Northern Ireland
1999-2006 Associate Professor, Dept. Periodontics, Baylor College of Dentistry, Dallas, Texas
1997- Graduate Faculty, Baylor- Texas A&M University System, Dallas, Texas.
1997- Adjunct & Associate Faculty, Dept. Biomedical Sciences, Baylor College of Dentistry
1996- Clinical Assistant Professor of surgery, Division of Oral Surgery, the University of Texas Southwestern Medical Center, Dallas, Texas.
1992- Director, Salivary Dysfunction Clinic, Dept. Periodontics, Baylor College of Dentistry, Dallas, Texas
1992- Director, Stomatology Research Laboratory, Dept. Periodontics, Baylor College of Dentistry, Dallas, Texas
1991-97 Graduate Faculty, Baylor University, Waco, Texas.
1991-1999 Assistant Professor, Dept. Periodontics, Baylor College of Dentistry, Dallas, Texas.
1989-90 Assistant Professor, Dept. Diagnostic Sciences, University of The Pacific, San Francisco, California.
1988-89 Assistant Professor, Dept. Oral Medicine, State University of New York at Buffalo, Buffalo, New York.

Other Professional Societies/ Groups Appointments
2013-2014 Consultant, ADA Council on Scientific Affairs
2011-12 External Reviewer, Promotion and Tenure Committee, University Of Sharjah, UAE
2010 ADEA-Reviewer 2011 Annual Meeting
2010- Program Chair, Salivary Research Group/IADR
2009- ADA Evidence Reviewer, American Dental Association, U.S.A.
2008- Consultant, Reuters Insight Expert, U.S.A
2008- Consultant, Sacoor Medical Group, U.K.
2007 Consultant, Pacgen Biopharmaceuticals Corporation, Vancouver, BC
2006 Chief Reviewer, World Workshop in Oral Medicine
2005-06 President-Dallas Chapter, American Association for Dental Research (AADR)
2004- National Faculty, Core Content Review of Family Medicine
2004-05 Vice President-Dallas chapter, AADR
2003-04 Secretary Treasurer-Dallas chapter, AADR
2003-04 Consultant, Daichi Pharmaceutical Corporation
2001-03 Program Chair, Salivary Research Group/ IADR
2000 Councilor, Salivary Research Group/ IADR
1999-03 Member, IADR Salivary Research Award Subcommittee, AADR/ IADR
1999 President, Salivary Research Group/ IADR
1998 President, Sigma Xi Scientific Research Society, Baylor College of Dentistry
1998 President Elect, Salivary Research Group/ IADR
1997 Secretary/ Treasurer, Sigma Xi Scientific Research Society
1997 Vice President, the Salivary Research Group/ IADR
1995-00 Medical Advisory Board, Sjögren's Syndrome Foundation, Jericho, NY
1994- Special Emphasis Panel- Scientific Review Branch/ NIDCR

Awards, Recognitions
2010 Salivary Researcher of the Year Award, Salivary Research Group (IADR/ NIDCR)
2010 Academy of Oral Medicine (AAOM) Award
2004 Visiting Professorship Award, Queen’s University, Belfast, Northern Ireland, UK
2003 Sheelagh Murnaghan Visiting Professorship Award, Queen’s University, Belfast, N Ireland, UK
1994 Leadership Award, Outstanding Service to the Health Profession, International Directory of Distinguished Leadership.

Others

National/ International Citations
2009 Guide to America's Top Dentists, 2009 CRC, Consumer Research Council of America
2006 Who’s Who in America, 60th Diamond Anniversary edition
1995 Who’s Who in the South and Southwest, twenty fourth edition

Professional Group Recognition
2012 Certificate, Chairperson, AEEDC, Dubai, UAE
2010 Certificate for outstanding contributions to AEEDC, Dubai, UAE
2003 Certificate of Appreciation, IADR 2003
2003 Certificate of Appreciation AADR 2003
1996 Certificate of Excellence, Proposal for Advancing the Curriculum, Baylor College of Dentistry, Dallas, TX

Publications


25. Vanatta JC. Frazier LW and **Al-Hashimi I**: The Effects of Potassium (K) and Bicarbonate (HCO3) Treatment on Protein Synthesis and Expression in the Frog Skin Of Rana pipiens. *XXXII Congress of the International Union of Physiological Sciences (Glasgow, 1993)*. 102-Protein Synthesis I: 361.1/P, 1993


81. Struckfus C, Bigler L, Navazesh M, and Al-Hashimi I: Cytokine concentration in stimulated whole


**Invited**


121. McCann, AL, Hinton R, Al-Hashimi I, Yunus M. Faculty satisfaction. ADEA, Abst# 104, 2008, Dallas TX


Underline denotes students/ trainee

5. **Patients’ Education Publications**


6. **Public Relations Publications**

- Predicting Sjögren’s syndrome/ Doctor of Dentistry, November 2002, Dallas/ Fort Worth
• Questionnaire helps predict Sjögren's syndrome, Baylor Dent J, Fall 2001
• Predicting Sjögren's syndrome/ December 3, 2001, News Release (TAMUS-HSC)
• Dry Mouth, contributing author, Doctor Book of Prevention, Rodale Press, Inc. 1998
• College offers new resource for Sjögren's syndrome patients. Baylor Byline, Dallas County Dental Society/ Dateline, pg 4, May 1997
• Interview with prevention magazine Health Books on Dry mouth. 1997
• Baylor and UT-Southwestern co-sponsor Sjögren’s syndrome symposium, the Dallas County Dental Society, Dateline, September, 1994.
• Off beat experts, the Dallas Morning News/Feature, 1C, May 23, 1994.
• Doctors compare notes on ailment that dries up mouth and eyes, the Dallas Morning News/Science, 7D, October 3, 1994.
• Sjögren’s group to hold symposium, ADA News Brief, September 19, 1994.
• Baylor College of Dentistry hosts Sjögren’s syndrome support group, Baylor Dent. Record, Jan-Feb, 1993.
• When warm and dry are not good, Dallas County Dental Society, Between the lines, September, 1992.

7. Other Educational Material
• Sjögren’s syndrome: Early detection (2000). Distance Learning Program.
• Sjögren’s syndrome: Current approaches to diagnosis and treatment, program brochure (1994).
• Salivary Gland Dysfunction, brochure for patients describing clinical features of salivary gland dysfunction (1993)
• Salivary Dysfunction Clinic, colored booklet describes the unique features of the clinic and laboratory services at Baylor College of Dentistry, Dallas, TX (1992)

7. Dissertations


Invited Speaker/ Scientific Presentations
2013 June 8, SSF, Dallas TX
2013 February 21, NTDHS, Dallas TX
2012  May 24-26, Invited Speaker, IAOR/IADR, London, UK
2012  Jan 31-Feb 2, Invited Chairperson, AEEDC, Dubai, UAE
2010  November 18  Oral Biology Seminar Series, Boston University, Henry M Goldman School of Dental Medicine, Boston MA
2010  April 8, Rheumatology Grand Round, UT-Southwestern Medical Center.  Dallas TX
2010  March 9-11, Guest Speaker, AEEDC International Dental meeting, Dubai, UAE
2010  March 10, Session Chairperson, AEEDC International Dental meeting, Dubai, UAE
2009  Sept 8, Oral, Head, and Neck Cancer support group, Sammons Cancer Center, Dallas, TX
2008  Sept 6, Sjögren's syndrome Foundation Dallas-Chapter, Dallas TX
2008  April 5, “Ask the Doctor” Spring Sjögren’s Syndrome Foundation Meeting, Dallas-Chapter, TX
2007  June 21, Rheumatology grand Round, UT-Southwestern Medical Center.  Dallas TX
2007  June 4, Invited Speaker, Scientific Medical Advisory Board Meeting, Vancouver, BC. Canada
2007  April 21, Thyca Dallas Spring Workshop, Allen, TX
2006  November 14, Oral, Head, and Neck Cancer support group, Sammons Cancer Center, Dallas,TX
2006  August 9-10, SUNY at Buffalo. Buffalo NY.
2005  August 24-27, Invited Speaker, FDI World Dental Federation, 2005 Annual Congress, Montreal, Canada
2004  October 12, Oral, Head, and Neck Cancer support group, Sammons Cancer Center, Dallas, TX
2003  November 15, Lone Star Celiac Support Group. Presbyterian Hospital, Dallas, TX
2003  October 16, Rheumatology Grand Rounds, UT-Southwestern Medical Center, Dallas TX
2003  October 18, Lupus Foundation of America, Inc, North Texas Chapter.
2003  September 17, Queens University, Belfast, Northern Ireland. U.K.
2003  June 10, Support & Education for Oral & Head and Neck Cancer,  Virginia Cvetko Education Conference Center, Dallas, TX
2003  June 9, Lunch and Learning, Baylor College of Dentistry, Dallas TX
2003  May 19, Ankara University, 40th Anniversary of Ankara School of Dentistry, Turkey
2002  Guest Speaker, Dental hygiene, Baylor College of Dentistry, Dallas TX
2002  Oct 19, Sjögren’s Syndrome: New Remedies and Research Findings, Dallas, TX
2002  October, Seminar series, - AADR/ Dallas chapter, Dallas TX
2002  July 25, Rheumatology Grand Rounds, UT-Southwestern Medical Center, Dallas TX
2002  July 25, Technology Day - AADR/ Dallas chapter, Dallas TX
2001  September 20, Greater Fort Worth Dental Hygienists' Society, Fort Worth, TX
2001  September 15, Lone Star Celiac Support Group. Presbyterian Hospital, Dallas, TX
2001  August 2, International Periodontics Symposium, Baylor College of Dentistry, Dallas, TX
2001  August 2, Rheumatology Grand Rounds, UT-Southwestern Medical Center, Dallas TX
2001  July 3, Nagasaki School of Dentistry, Nagasaki, Japan
2001  May 20, MW-Physicians of North Texas, Dallas TX
2001  April 18, CE course, Academy of General Dentistry-Dallas chapter, Dallas TX
2001  March 13, CME course, Ob/Gyn at Presbyterian Hospital, Dallas TX
2001  February 27-28, San Antonio Rheumatology Association, San Antonio, TX.
2000  December 7-8, New Mexico Dental Association, Farmington, NM.
2000  December 4, Rheumatology Associate, Ft Worth TX.
2000  UT-Southwestern Rheumatologists. Ball Park. Arlington, TX
2000  November 14, ENT, Seminar series, Dallas, TX.
2000  July 14, CE course, Grayson County Dental Society, TX.
2000  June 2-4, Speakers Bureau meeting, Daiiichi Pharmaceutical Corporation Phoenix, Arizona.
2000  May 26, ENT Resident, UT-Southwestern Medical Center, Dallas TX
2000  February 14, UT-San Antonio, San Antonio, TX.
1999  November 15-20, NIDCR sponsored LAASR-US Conference. Santiago, Chile
1999  Rheumatology Grand Rounds, the University of Texas Southwestern Medical Center.
1999  Admiral Vaughn Naval Reserve Dental Seminar, Ft Worth, TX
1999  Boston University, Goldman School of Dental Medicine. Boston,
1999  The University of Texas Southwestern Medical Center, Rheumatology Fellows, Dallas TX
1998  The University of Texas Southwestern Medical Center, Rheumatology Fellows, Dallas TX
1998  State University of New York at Buffalo, Buffalo, NY
1998  School of Clinical Dentistry, The Queen’s University of Belfast, UK
1997  Visiting Lecturer, The Guy’s, King's and St Thomas' Dental Institute. London, UK
1996  Dental hygiene Association, Dallas, TX
1996  Meet the Experts. A joint meeting between the National Sjögren’s syndrome Association and
Sjögren’s syndrome Foundation, Orlando, FL
1995  Dental Technician Society, Dallas, TX
1990  Dental Medical Guild, San Francisco, CA

**Continuing Education Courses given**

2000-11 Online CE course for dentist, Baylor CE Dept. Baylor College of Dentistry
2001  Sjögren’s syndrome-CE course for Dental Hygienists, Fort Worth, TX
2000  Diagnosis of Sjögren’s syndrome. Texoma Dental Society and Dental Hygiene Society - CE
course for dentists and dental hygienists, Texoma, TX
1999  Salivary gland dysfunction - CE course for dentists, Baylor College of Dentistry, Dallas, TX
1998  Sjögren’s Syndrome - CE course for dentists and physicians, UT-Southwestern Medical
Center, Dallas, TX
1996  Selected Topics in Periodontology - CE course for dentists, Dallas, TX
1996  Oral aspect of Sjögren’s syndrome - CE course for dental hygienists, Dallas, TX
1995  Dental Technical Terminology - Baylor College of Dentistry, Dallas, TX
1994  Sjögren’s Syndrome: Current Approaches to Diagnosis and Treatment - CE course for
dentists and physicians, Dallas, TX
1994  Dental Technical Terminology - Baylor College of Dentistry, Dallas, TX

**Programs and Symposia Organized**

1994  National Sjögren’s syndrome Symposium - In collaboration with the University of Texas
Southwestern Medical Center, Dallas, TX
1999  IADR Symposium - Pathogenesis of Sjögren’s syndrome (Sponsored by the Salivary Research,
Microbiology/Immunology and Experimental Pathology Groups of the NIH), Vancouver,
British Columbia, Canada

**State, National or International Committees**

2010-current Working Group for development of Clinical Practice Guidelines for Sjögren's syndrome-
Oral section
2008-09 American Academy for Oral Medicine
  ▪ Scientific Session- Abstract subcommittee
- Research Investigation Committee
1994- Special Emphasis Panel/Scientific Review Group. Division of Extramural Activities, National Institute for Dental and Craniofacial Research (NIDCR)
2002 Grant Review, Chinese Research Grant Council
1999 Team Member, NIDCR Workshop on development of new technologies for saliva and other oral fluid-based diagnostics”
1993 American Fund for Dental Health

Scientific Journal
- Associate Editor
  • The Open Dentistry Journal (2010-ongoing)

- Editorial Advisory Board:
  • The Open Pathology Journal (2008-ongoing)
  • The Open Dentistry Journal (2008)

- Reviewer (Ad hoc)
  1. Quintessence International
  2. Journal Dental Research
  3. The Journal of Histochemistry and Biochemistry
  4. International Journal Biological Macromolecules
  5. Special Care Dentistry
  6. American Journal of Clinical Nutrition
  7. Journal of the American Pharmaceutical Association
  8. Infection and Immunity
  9. Journal of Gerontology
  10. Journal of Clinical Microbiology (JCM)
  11. Clinical and Diagnostic Laboratory Immunology (CDLI)
  12. The Journal of Rheumatology
  13. Applied and Environmental Microbiology (AEM)
  14. The Journal of Peptide Research
  15. Journal of Oral Pathology and Medicine
  16. Anatomical Record
  17. Acta Odontologica Scandinavica
  18. Biochemistry
  19. Archives Oral Biology
  20. Pediatric Research
  21. Journal of General Dentistry
  22. Journal of Oral Pathology & Medicine
  23. Drugs & Aging
  25. The Open Pathology Journal
  26. The Open Dentistry Journal
  27. Clinical Medicine: Therapeutics
  28. Current Pharmaceutical Design
  29. Seminars in Arthritis and Rheumatism
  30. Australian Dental Journal
31. Respiratory Research
32. Oral Diseases
33. Journal of Dental Education
34. International Journal of Dentistry
35. European Journal of Pharmacology
36. International Journal of Clinical Rheumatology
37. The Open ornithology journal
38. Iranian Red Crescent Medical Journal
39. Pharmaceutical Nanotechnology
40. Journal of the American Geriatrics Society
41. Journal of Immunotherapy
42. European Journal of Oral Sciences

Book Review

Other reviews
- NIDCR Independent reviewers: Census Development on Diagnosis and Management of Dental Caries Throughout Life. (2002)

Professional Services
1994 Planned, developed, and implemented the Southwestern Comprehensive Sjögren’s Referral Center, a collaboration of Baylor College of Dentistry, University of Texas Southwestern Medical Center, and Baylor University Medical Center. Dallas, Texas.
1992 Developed and implemented the Salivary Dysfunction Clinic at Baylor College of Dentistry, Dallas, Texas.
1992 Organized the Dallas/ Fort Worth Chapter of the Sjögren's Syndrome Foundation (SSF). Established the Stomatology Research Laboratory at Baylor College of Dentistry, Dallas, TX
1985 Organized the Western New York Chapter of the Sjögren's Syndrome Foundation, Buffalo, New York
1984 Developed and implemented the Salivary Dysfunction Clinic, School of Dental Medicine, State University of New York at Buffalo

Memberships (Institutional Committees)
Current
- Institutional Review Board

Other/ Previous
- Promotion and Tenure
- Planning and Assessment Task Force (Special Project Group to develop an assessment of student digital teaching/learning needs, 2008)
- Research Committee
• Institutional Review Board (IRB) Task Force (Special Project Group to evaluate and integrate IRB documents in order to reduce the burden on the Principal Investigators and the reviewers, 2008-09)
• Planning and Assessment (Several terms)
• BMS Faculty Search Committee (06)
• Research Committee (several terms)
• Planning and Assessment (Faculty Satisfaction Task Force, 2007)
• Baylor College of Dentistry 2005-2012 Strategic Plan Task Force
• Faculty Development Committee (several terms)
• Ad Hoc Committee on Research Grant Incentive
• Ad Hoc Committee to Review Research and Procedures at Baylor College of Dentistry
• Committee on Committees
• Awards Committee
• Minority Affair Committee
• Diversity Committee

Professional Associations/ Affiliations
• National Faculty of the Core Content Review of Family Medicine
• American Academy of Oral Medicine (AAOM)
• AADR Science Advocate
• American Association for the Advancement of Sciences (AAAS)
• New York Academy of Sciences (NYAS)
• International/ American Association for Dental Research (IADR)
• American Association of Dental Schools (ADEA)
• American Dental Association (ADA)
• Texas Dental Association (TDA)
• Dallas County Dental Society (DCDS)
• AADR-Dallas Fort Worth Chapter (AADR)
• Salivary Research Group, IADR
• AADR Science Advocate
• American Society for Investigative Pathology (Inactive)
• Sigma Xi Society (In Active)
• International Platform Association (In active)
• Library Of Congress Association (In active)

Funded Research Grants
2007-2009 Protocol Number 03HUH119 Evaluation Of Natural Human Interferon Alpha Administered Oromucosally In The Treatment Of Oral Warts In HIV- Seropositive Subjects Receiving Combination Anti-Retroviral Therapy: A Phase 2 Clinical Trial P.I.
2005-2010 K12 HD052225-01 UT Southwestern clinical science scholars program Role: Mentor (P.I. Packer M)
2001-2005 T32 DE07188-14 Training Program in Dental and Craniofacial Research
2004-2005 VA North Texas healthcare system: Survey of oral conditions in veterans diagnosed with the hepatitis C virus

2002-03 A Phase III, Multicenter, Randomized, Double-blind, Placebo-controlled study to assess the Efficacy and Safety of Cevimeline in the Treatment of Xerostomia secondary to Ration therapy for cancer in the Head and Neck region

2000-01 Veldona USA, Inc.: HBL IFN alpha administered by the oral mucosal route for the treatment of primary Sjögren’s syndrome a phase III- clinical study- Open Label.

1999-01 Low-dose natural human interferon alpha (HBL IFN alpha) administered by the oral mucosal route for the treatment of primary Sjögren’s syndrome a phase III clinical study.

1998-99 Colgate-Palmolive Company: “Dry Mouth Toothpaste - Phase - Proof of Concept”

1997-98 Low-dose natural human interferon alpha (HBL IFN alpha) administered by the oral mucosal route for the treatment of primary Sjögren’s syndrome a phase II clinical study


1995-96 A Multi-center, randomized, double-blind, placebo controlled evaluation of Pilocarpine HCl for the treatment of xerostomia associated with Sjögren’s syndrome”

1995-2002 T32 DE07256 Craniofacial Biology Training Program


Educational Grants

2000 Unrestricted Educational Grant “Sjögren’s syndrome: Early Detection”. In collaboration with the Department of Continuing Education. (Daiichi Pharmaceutical)

1999 Unrestricted grant to support Sjögren’s syndrome symposium/ IADR Veldona USA, Inc)

1999 Unrestricted grant to support Sjögren’s syndrome symposium (MGI Pharma)

1998 Unrestricted grant for continuing education on Sjögren’s syndrome (MGI Pharma)

1998 Unrestricted grant for continuing education on Sjögren’s syndrome (Veldona USA, Inc)

1998 Unrestricted grant for continuing education on Sjögren’s syndrome (Colgate)

1998 Unrestricted grant for continuing education on Sjögren’s syndrome (Block Drug Co)
Unrestricted grants for “National Sjögren’s syndrome symposium”, Baylor College of Dentistry, U-T Southwestern Medical Center, Baylor University Medical Center (Procter Gamble Company, Block Drug Company, Inc., Laclede Research Laboratories)

Role: P. I.

Visiting Scientists/ Trainee

1. Visiting Scientist/ Scholar, Fellows/Postdoctoral/Residents
   - Dr. Myrna Karina Gonzalez Cantu - University Autonoma Nuevo Leon, Mexico (2013)
   - Dr. Elena Dervilia Balcazar Arevalo University Autonoma Nuevo Leon, Mexico (2013)
   - Dr. Isis Marcela Sierra Romero - University Autonoma Nuevo Leon, Mexico (2013)
   - Dr. Lucas de Gracia Nieto - University Panamá, Ciudad de Panamá, Panamá (2013)
   - Dr. Mayra Gabriela Gonzalez Gonzalez - University Panamá, Panamá (2013)
   - Marcelo Javier Treviño Valdés- University Autonoma Nuevo Leon, Mexico (2012)
   - Jesús Ramón Gavito Escobedo- University Autonoma Nuevo Leon, Mexico (2012)
   - Katia Raquel Alicia SierraRomero- University Autonoma Nuevo Leon, Mexico (2012)
   - Leticia Adela Cantú Llanes - University Autonoma Nuevo Leon, Mexico (2012)
   - Claudia Fontes Álvarez - University Autonoma Nuevo Leon, Mexico (2011)
   - Gustavo Martínez López - University Autonoma Nuevo Leon, Mexico (2011)
   - Hiram S Aguirre - University Autonoma Nuevo Leon, Mexico (2011)
   - Vanessa Sousa Moreno - University Autonoma Nuevo Leon, Mexico (2011)
   - Carlos Gómez Míreles - Universidad de Guadalajara, Guadalajara, México (2011)
   - Claudia Tinoco Cabral - Universidad de Guadalajara, Guadalajara, México (2011)
   - Dr. Brenda Garza, Visiting Scholar, University Autonoma Nuevo Leon, Mexico (2010)
   - Dr. Gaby Chapa, Visiting Scholar, University Autonoma Nuevo Leon, Mexico (2010)
   - Philip J Lamey, Visiting Professor, Queen’s University, School of Dentistry Belfast, Northern Ireland (2006)
   - Fionnuala Lundy, Visiting Scientist, Queen’s University, School of Dentistry Belfast, Northern Ireland (Visiting Scholar 2005)
   - Fulya Cizmeci, (Ph.D. student at Ankara School of Dentistry, Ankara Turkey (2003)
   - Amanda Willis, Visiting Fellow, Queen’s University, School of Dentistry Belfast, Northern Ireland (2001)
   - Fionnuala Lundy, Visiting Fellow, Queen’s University, School of Dentistry Belfast, N Ireland (1995)
   - W. Mustafa (Ph.D. student at Karolinska Institute (1998)

Laboratory Post–doc and trainee
   - Hongtao Ma (2011- )
   - Mohammad Jahngir Alam (2011)
   - Padma Das (2010-2011)
   - Cixin He, (2008-2010)
   - Michele Zipp (1997-99)
2. Thesis/Dissertation Committees
   a. Mentor/Co-Mentor
      - Harrison Parks, M.S. Periodontics (2014), Co-Mentor
      - Blansett, Jonathan A, M.S. Periodontics (2014), Co-Mentor
      - Mohammed Mansour, DDS, M.S. Biomedical Sciences (2011)
      - Ben Meyrat, Clinical Research Scholar (2009)
      - *Fanasy Deming, DDS, M.S. Periodontics (2006)
      - Fulya Cizmeci, DDS, Ph.D. Co-Mentor (2004)
        Ankara School of Dentistry
      - Bercier JG, DDS, M.S. Periodontics (1997)
      - **Najera M, DDS, M.S. Periodontics (1996)

*1st Place Clinical Sciences Award 2006, Baylor College of Dentistry
**1st Place Winner - Prichard Competition, 1996

b. Graduate Committee Member
   - Joseph D. Everett, M.S. Periodontics (2015)
   - Lui, Jie, M.S. Periodontics (2013)
   - Steffer, Matthew R., M.S. Periodontics (2011)
   - Brent Gabriel, D.D.S-, M.S. Periodontics (1996)
   - Jeff Hollister, DDS, M.S. Periodontics (1995)
   - Michelle R. Fix, M.S. Pharmacology (1994)
   - David Lipson, D.D.S-, M.S. Periodontics (1993)
   - Brian Pitfield, D.D.S-, M.S. Periodontics (1992)
   - Eduardo Tanur, D.D.S-, M.S. Periodontics (1992)

c. Other graduate Student trainee
   - Lee S-H (Periodontics Resident from Korea)- Research project "Titanium Pellicle"
     (1993) Mentor
   - *Shelly Kolavic (Geriatric Dentistry)- Training in the Salivary Dysfunction Clinic.


3. Pre-doctoral Dental/Medical (Non-BCD)
   - Yasbin L – Lorn I Yasbin, College student, Philadelphia University of Pennsylvania
   - Helen Bui - College student, Houston, Helen Bui, Baylor University, Waco
     “Clinical and laboratory manifestation of Sjögren’s syndrome” (1994) Mentor
   - Ban Haider - Guy's-St Thomas Medical School, London, UK
     "Naturally occurring autoantibodies" (2000) Mentor
- Raed, School of Dentistry, UT San Antonio  
  "Studies on cell matrix proteins in saliva" (1998) Mentor
- Imran Aaron Plumb - College graduate (2004) Mentor
- Todd Gibson - College graduate (2004-05) Mentor
-Nicole O'Kane - Externship, School of Dentistry Belfast, Queen’s University, Northern Ireland (2006)
-Jenny Scott - Externship, School of Dentistry Belfast, Queen’s University, Northern Ireland (2006)
- Orla McCaffery - Externship, School of Dentistry Belfast, Queen’s University, Northern Ireland (2006)
-Caitriona McGrade - Externship, School of Dentistry Belfast, Queen’s University, Northern Ireland (2006)

4. Undergraduate BCD students
- Keith Gerber “Change of the molecular composition of the in vivo enamel pellicle with NAC rinse” (1991) Co-Mentor
- Kevin Bui “The role of calmodulin in salivary gland dysfunction” (1994) Mentor
- Robbie Hashem “Pharmacological protection of the salivary gland from irradiation" Co-Mentor
- Jason Kirkland “Salivary fluoride levels in women on slow release fluoride therapy" (1999) Co-Mentor
- Chet A Cooley "Comparison of the intensity of lymphocytic infiltration at various depths of minor salivary gland biopsy in Sjögren’s syndrome" (1999) Mentor
- Sal Taiym "Hormone levels in patients with Sjögren's syndrome and healthy Controls" (2001) Mentor
- Melodie Balarsky "Frequency of amyloidosis in sclerosing sialadenitis" (2009) Mentor
- **Charlene Garcia “Parasympathomimetic Sialogogue And Salivary Gland Dysfunction” (2011) Mentor
- **Jordan Luna “Parasympathomimetic Sialogogue And Salivary Gland Dysfunction”
(2011) Mentor
-***Armin Aliefendic “Serum And Salivary CTX, ICTP, IL-1B In Periodontal Diseases”
(2012) Mentor
-***Rachel Zimmerer“Serum And Salivary CTX, ICTP, IL-1B In Periodontal Diseases”
(2012) Mentor

* 3rd Place Winner, Student Research Award, Baylor College of Dentistry (1993)
**First Place Winner, Student Research Award, Baylor College of Dentistry (2011)
*** 2013 Salivary Research Group Award/ IADR
CURRICULUM VITAE

I. Personal Information

Name: Charles W. Berry, Ph.D.
Address:
Office of Academic Affairs
Baylor College of Dentistry
Texas A&M University System
Health Science Center
3302 Gaston Avenue
Dallas, Texas 75243-4613

Residence:
10015 Silver Creek Drive
Dallas, Texas 75246-2098

Phone: (214) 828-8208
Fax: (214) 874-4575

Present Position: Associate Dean for Academic Affairs

Birthplace: San Antonio, Texas
Birthdate: May 31, 1945
Marital Status: Married, 1970 (Sandra Gayle Baskin)
Children, (Jessica Lynn, 1979 and Amanda Gayle, 1981)

II. Education

Hendrix College (1963-1967), Bachelor of Arts in Biology/English.
Louisiana Tech University (1968-1970), Master of Science in Botany and Bacteriology.

III. Professional Appointments

Associate Dean for Academic Affairs, 1999 – Present. BCD TAMUSHSC
Graduate Faculty, TAMUSHSC Graduate School of Biomedical Sciences, December, 1999 – Present.
Associate Chairman, Department of Biomedical Sciences, BCD TAMUSHSC, June, 1994 - 1999.
Vice-Chairman, Department of Biomedical Sciences, BCD TAMUSHSC, July, 1992- June, 1993.
Acting Chairman, Department of Microbiology, BCD, January- July, 1991.
Professor, Department of Microbiology, BCD, 1984- Present.
Interim Chairman, Department of Microbiology, BCD, July- December, 1982.
Associate Professor with tenure, Department of Microbiology, BCD, 1978-1984.
Graduate Faculty, Baylor University, 1977- Present.
Assistant Professor, Department of Microbiology, BCD, 1973-1978.
Adjunct Professor of Microbiology, Dallas Institute, 1978- 2005.
Adjunct Instructor of Microbiology, Dallas Institute, 1973- 1978.
Research Assistant, School of Forestry, Louisiana Tech University, 1969-1970.
Teaching Assistant, Department of Botany and Bacteriology, Louisiana Tech University, 1968-1969.

IV. Current Duties and Descriptions
Administration
Chief Academic Officer for Baylor College of Dentistry
Member of deans and directors advisory panel for Baylor College of Dentistry
Member of the Administrative Council for Baylor College of Dentistry
Member of the Associate Deans for Academic Affairs for the TAMUS Health Science Center

Faculty
Recruitment, development and credentialing oversight
Appointment, promotion and tenure policy and oversight
Post-tenure review of all tenured faculty including chairs at five year intervals
Construction and maintenance of the faculty manual
Coordinate requests for annual faculty evaluation
Collect and publish annual faculty scholarly activity summary

Staff
Mediator of staff differences
Elected representative of TAMUS Health Science Employee Benefits Advisory Committee

Students
Academic promotion – Academic due process
Discipline – Disciplinary Due Process and Student Honor Council
Oversee leave of absence requests and remediation of academically deficient students
Coordinate the D.D.S./M.S., D.D.S./Ph.D., M.D./D.D.S. programs at BCD
Developed and coordinate the five-year D.D.S. program for special needs students

Academic Policies and Procedures
Faculty Appointment, Promotion and Tenure Document
Student Academic and Disciplinary Due Process Document
College Five-year Strategic Plan
Competency Document for the New Dentist

Accreditation
Regional – Southern Association of Colleges and Schools Self Study Steering Committee Member for HSC; Self Study Steering Committee Chair for BCD
Professional – American Dental Association Commission on Dental Accreditation Self Study Steering Committee Chairman for BCD Comprehensive Institutional Site Visit of predoctoral, dental hygiene and eight (8) advanced dental education programs

Curriculum
Director of Curriculum and Chair of the Curriculum Committee reports to my Office of Academic Affairs

Strategic Planning and Development
Directed the BCD 2005/2012 strategic plan and the Director of Planning and Assessment reports to my Office of Academic Affairs
Institutional Research/Effectiveness records and reports generated, managed and presented by Academic Affairs
Institutional Budgetary Issues
Coordinate uncompensated part-time faculty hires with department chairs
Managed two budget reductions of 12.5 and 7.5 % in academic years 2002/03 and 2003/04

V. Teaching
A. Baylor College of Dentistry - Dental Microbiology 6740 (1973 - ) Lecture topics include: host-parasite relations, pathogenic bacteriology, rickettsiae, chlamydiae, transitional bacteria, the normal oral flora and the microbiology of dental caries.

B. Baylor College of Dentistry - Dental Hygiene Microbiology 345 (1971 - ) Lecture topics include: bacterial physiology, genetics, transitional bacteria and sanitary bacteriology.

C. Baylor College of Dentistry - Graduate Oral Microbiology 5303 (1977-) Lecture topics include: the normal oral flora and the microbiology of dental caries and periodontal disease.

D. Baylor College of Dentistry - Graduate Pathogenic Bacteriology 5330 (1977-) Lecture topics include: Staphylococcus, Streptococcus, Neisseria, the spore-forming bacilli, Corynebacterium, Actinomyces, the gram-negative enteric bacilli, Hemophilus, the spiral bacteria, Mycoplasma, rickettsiae and chlamydiae.

E. Dallas Institute - Microbiology 302 and 402 (1973 - ) Lecture topics include: introduction to microbiology, bacterial anatomy and physiology, microbial control methods, host-parasite relationships, immunology, pathogenic bacteriology and virology.

F. Cardiopulmonary Resuscitation (1975 - 1989)
1. Basic Provider Course (6 hour curriculum)
2. Basic Provider Instructor Course (8 hour curriculum)
3. Basic Provider Instructor-Trainer Course (4 hour curriculum)
4. Annual Recertification of Instructors, Instructor-Trainers and Affiliate Faculty (4 hour curriculum)

VI. Research

A. Areas of Interest - Effect of adsorption on bacterial metabolism, cariogenic potential of non-caloric and non-nutritive sweetening agents, effect of smokeless tobacco extracts on bacterial metabolism, genotoxicity of tobacco extracts, antimutagenic potential of glycyrrhizin, the antibacterial activity of dental implant metal ions and the reduction in aerosols generated by ultrasonic scaling.

B. Areas of Technical Ability - Chromatography (column, gas and HPLC), computer analysis of data, cryo- preservation, microbial quantitation (Coulter counting, ATP photometry, liquid scintillation counting, turbidimetry, and automated spiral dilution plating), microscopy (light, phase-contrast, fluorescent
and electron), photomicrography, radioisotope handling and counting, tissue culture, ultrafiltration and dialysis.

C. Grants
1. Texas Medical Research Foundation

2. Baylor College of Dentistry Intramural Research Funds
   "Gas Chromatographic Analysis of Bacterial End-Products and Water-Soluble Carbohydrates", $2,211. 1982-83.

3. Smokeless Tobacco Research Council, Inc.

4. Baylor University (006-S85-URC)
   "Potential Mutagenic Activity of Smokeless Tobacco Extracts". $1,474.00. 1985-86.


7. Dentsply Preventive Care.

8. Dentsply Preventive Care.

   A Changing the Faculty Reward Structure Through a "Self-Study" Model for Documentation of Teaching Effectiveness. $34,500.00. October, 1998
A Changing the Faculty Reward Structure Through a "Self-Study" Model for Documentation of Teaching Effectiveness. $20,000.00. September, 1999 - August, 2000. (Year Two)

10. The W.W. Kellogg Foundation and the American Dental Education Association.
A Comprehensive Minority Dental Faculty Development Program. $640,482. March, 2004 - 2010.

VII. Society and Organization Membership
American Association of Dental Schools
Microbiology Section - Secretary, 1989, 1995
Councilor, 1990
President Elect, 1990, 1996

International and American Associations for Dental Research
American Society for Microbiology
Beta Beta Beta Biological Society (Eta Xi Chapter)
Dallas Chapter, American Association for Dental Research
Secretary/Treasurer, 1979 and 1980
President Elect, 1981
President, 1982

International Association for Dental Research
Pi Sigma Eta (Epsilon Chapter)
Sigma Xi (Baylor University and Baylor College of Dentistry Chapters)

VIII. Honors and Awards
McIntire-Stennis Cooperative Forestry Research Project MRP-22 (Research Assistant), 1969-70.
Public Health Service Training Grant DE00226, 1971-73.
Second Place Institutional Division, Dallas Mid-Winter Dental Clinic, 1977.
First Place Institutional Division, Dallas Mid-Winter Dental Clinic, 1979.
Honorable Mention Institutional Division, Dallas Mid-Winter Dental Clinic, 1981.
First Place Institutional Table Clinic Award, Texas Dental Convention, 1981.
"Most Professional Teacher Award" MU Upsilon Class, 1981.
First Place Institutional Division, Dallas Mid-Winter Dental Clinic, 1983.
Volunteer Recognition Award, American Heart Association (Texas Affiliate), 1986.
First Place Institutional Division, Dallas Mid-Winter Dental Clinic, 1987.
Outstanding Table Clinic Institutional Division, Texas Dental Convention, 1989.
Outstanding Teacher of the Year Award, Baylor Dental Alumni Award, April, 1991.
Thirty-Year Service Award, 2003.

IX. Professional Development and Service
A. Professional Contributions
1. **Oral presentations**

   Texas Dental Convention (Galveston, TX). May, 1976. Dextran and Bacterial Adhesiveness.
   Baylor Alumni Homecoming (Dallas, TX). September, 1981. Cariogenicity of Non-Prescription Pharmaceutical Products.
   Texas Dental Convention (San Antonio, TX). April, 1983. Cariogenic Potential of Fruit Juice.
   Baylor Faculty Research Seminar. April, 1984. Fermentability of Sugar Substitutes by Oral Bacteria.
Student Chapter of IADR (Baylor Chapter). September, 1984.
Student Involvement in Dental Research.

2. **Invited Guest Lecturer to Seminars on Infectious Disease**
   Jackson, Mississippi. September, 1983.
   Atlanta, Georgia. December, 1984.
   Macon, Georgia. April, 1985.
   Columbus, Georgia. May, 1986.
   Oklahoma City, Oklahoma. April, 1987.

3. **Publication Reviewer**
   *Bioscience*
   *Journal of Periodontology*
   *Journal of Dental Hygiene*
   *Quintessence International*

B. **Committee Activities and Offices**

1. **Standing Committees by Appointment**

   Continuing Education Committee, 1985.
   Promotion and Tenure Review Committee, 1987-1988

2. **Ad Hoc Committees**

Chair of the SEBAC, 2003-4.
Chair, Selection Committee for the Gaylord Endowed Chair, 2006
Chair, New Building Planning Committee, 2006-2008

C. Graduate Steering Committees

1. Mentor

2. Committee Member
h. Robin Hunter (M.S. Microbiology) 1983. "Use of Cytoplasmic Antigen for Detecting Systemic Candidiases."


m. Helen Skiles (M.S. Microbiology) 1988. "Susceptibility of Viruses to Photoinactivation."


o. Melanie B. Martin (M.S. Candidate Oral Biology). "A Profile of Saliva and Calculus in Patients with Gastric Tubes."

p. Mary Davis (M.S. Candidate Biomedical Science). "Improved Methods to Determine Culture and Sensitivity of Medical Pathogens."

D. Faculty Advisor for Predoctoral Student Fellowships


5. Gladys Au (1985) "Evaluation of the Fermentability and the Effects on Carbohydrate Metabolism of the Sweet-Tasting Protein, Thaumatin on Selected Cariogenic Microorganisms." $1,750.00.


E. Extramural Committees
1. American Association for Dental Research Cohort Program
   1984 - present
2. American Heart Association
   a. Dallas Division
      (3) Youth Education Taskforce Member 1981-1985, Chairman 1982, 1983.
      (4) Wellness at the Worksite Taskforce Member 1984-1985.
   b. Texas Affiliate
      (1) CPR Advisory Committee Member 1982-1988, Chairman 1983-1986.
      (2) Medical and Scientific Committee Member 1983-1986.

F. Private Practice Consultation
One-half day per week is utilized to teach Microbiology 302 and 402 at the Dallas Institute.

X. Publications
A. Theses

B. Manuscripts


Oral Medicine, Oral Pathology 71(1): 89-95.

C. Abstracts
Berry, C.W. and C.A. Henry, 1975. The Influence of Adsorption on the
Metabolism of *Streptococcus mutans* and *sanguis*. *Journal of Dental Research* 54(A): 102.


Yoon, N.A. and C.W. Berry, 1979. An *in vivo* Study of the Effects of Fluoride (SnF2, 0.4%; APF, 1.23%; and Neutral NaF, 0.05%) on Levels of Organisms Requiring *Actinomyces*, Gingival Inflammation and Plaque Accumulation. *Journal of Dental Research* 58(1): 535.


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D. Books or Chapters


CURRICULUM VITAE
DAVID S. CARLSON, Ph.D.

Vice President for Research and Graduate Studies
Texas A&M University System Health Science Center

PERSONAL INFORMATION
Business Address: 147 Reynolds Medical Building
Texas A&M Health Science Center
Texas A&M University
College Station, Texas 75843-1114
Tel. (979) 436-0581
e-mail: carlson@tamhsc.edu

EDUCATION
Undergraduate-Graduate
Dean College, AA 1968, Liberal Arts
University of Massachusetts (Amherst), BA 1970, Biological Anthropology
University of Massachusetts (Amherst), MA 1972, Biological Anthropology
University of Massachusetts (Amherst), PhD 1974, Biological Anthropology

Postdoctoral Training
University of Michigan, NIH Postdoctoral Fellowship in Craniofacial Anomalies
T32 DE00193, (R.E. Moyers, Mentor)
University of Michigan, NIH Postdoctoral Research Fellowship, "Function and Adaptation in the
Primate Masticatory Complex," F32 DE05101

PROFESSIONAL APPOINTMENTS
Texas A&M University System
2003- Vice President for Research & Graduate Studies, Texas A&M University System Health
Science Center
2008-2011 Interim Director, Institute of Biosciences and Technology
1999- Graduate Faculty, Graduate School of Biomedical Sciences, Texas A&M University System
Health Science Center
2003- Graduate Faculty, Department of Anthropology, Texas A&M University
2010-2012 Chief Research Compliance Officer, The Texas A&M University System
1999-2004 Associate Dean for Research and Advanced Education, Baylor College of Dentistry
1993-2004 Chairman and Robert E. Gaylord Endowed Professor, Department of Biomedical Sciences,
Baylor College of Dentistry

Previous Appointments: University of Michigan
1983-1993 Professor (1988), Associate Professor (1983), Department of Orthodontics and Pediatric
Dentistry, School of Dentistry
1978-1993 Professor (1988), Associate Professor (1983), Assistant Professor (1978), Department of
Anatomy and Cell Biology, School of Medicine
1978-1993  Professor (1988), Associate Professor (1983), Assistant Professor (1978), Department of Anthropology

Previous Positions: Other Universities
1974-1976  Assistant Professor, Department of Anthropology, Wayne State University
1974-1976  Associate, Department of Anatomy, Wayne State University School of Medicine
1972-1974  Lecturer, Department of Anthropology, University of Massachusetts (Amherst)
1971  Instructor, Department of Anthropology, University of Massachusetts (Dartmouth)

SOCIETY AND ORGANIZATION MEMBERSHIPS
International Association for Dental Research; Craniofacial Biology Group, IADR (Board of Directors 1987; Secretary-Treasurer 1988; President 1993); American Association for the Advancement of Science; Cleft Palate Association; Great Lakes Society of Orthodontics; American Association of Orthodontics; Association of Anatomy, Cell Biology, & Neurobiology Chairpersons; Friends of the National Institute of Dental and Craniofacial Research; American Anatomical Association; American Association of Physical Anthropologists; Sigma Xi Society; World Orthodontic Federation

RESEARCH GRANTS
Funded Research Grants: Extramural
Principal Investigator, Danish-American Foundation for Research in Denmark. TDC $4,500. 1973-1974
Co-Investigator, "Adaptations to Changes in Muscle Length," R01-DE04227 (J.A. McNamara, Jr., Principal Investigator). TDC $125,500. 1975-1978
Principal Investigator, "Growth and Function of the Muscles of Mastication," NIH-NIDR Grant DE05232. TDC $75,000. 1978-1981
Co-Principal Investigator, "Adaptations to Changes in Muscle Length," NIH-NIDR R01 DE04227 (with J.A. McNamara, Jr.). TDC $507,850. 1978-1981
Co-Investigator, "Effect of Intermaxillary Fixation on Skeletal Relapse," NIH-NIDR Grant R01-DE06874 (E. Ellis, Principal Investigator). TDC $107,760. 1984-1987


Principal Investigator, "Growth and Function of the Muscles of Mastication." NIH-NIDR Grant R01-DE05232. TDC $731,985. 1985-1989

Principal Investigator, "Muscloskeletal Adaptation to Increased Midfacial Height," NIH-NIDR Grant R01-DE05232. TDC $456,223. 1985-1989


Principal Investigator, "Rigid Fixation of LeFort I Osteotomies with Biodegradable Plates and Screws." Storz Instrument Corp. (Steven R. Cohen, Co-Principal Investigator) TDC $15,475. 1991-1993

Principal Investigator, "Effect of Rigid Fixation with and without Biodegradable Implants on Cranial Growth." Plastic Surgery Education Foundation (Steven R. Cohen, Co-Principal Investigator) TDC $35,259. 1991-1993


Principal Investigator, “BCD Research Infrastructure Improvement Grant.” NIH-NIDCR R24 DE015478. TDC $100,000. 2003-2004

Co-Investigator, “Estrogenic Regulation of Inflammation Related to TMJD.” NIH-NIDCR DE15372. TDC $700,000. 2003-2007


**Funded Training Grants: Extramural**


Program Director/Principal Investigator, "Short Term Training for Students in Health Professional Schools." NIH NIDCR T35 DE07188, 2001-2006.

**HONORS, AWARDS, AND RECOGNITIONS**

- Robert E. Gaylord Endowed Professor of Orthodontics, 1994-2006
- Regents Professor, Texas A&M University System, 2002-
- Thomas M. Graber Endowed Lecturer in Orthodontics, The University of Michigan, 1993
DS Carlson

Phi Kappa Phi, elected 1970; Sigma Xi, elected 1972; University Fellowship, University of Massachusetts (Amherst), 1972-74; George C. Marshall Fellowship, 1973-1974; Research Career Development Award, National Institute of Dental Research, National Institutes of Health K04 DE00109, 1982-1987; University Distinguished Seminar, The University of Michigan, 1985; Honorary Membership, American Association of Orthodontists, 1990; Omicron Kappa Upsilon, 1996

PROFESSIONAL DEVELOPMENT AND SERVICE

Grant Reviewer at State or National Level

Panels, study sections, and site visitor
- NIH-NIDR, University of California, San Francisco, 1984
- NIH-NIDR Panel on Institutes, Centers, and Program Projects, Bethesda, 1985
- NIH-NIDR Special Review Panel on Temporomandibular Disorders, April, 1996
- NIH-NIDCR Study Section (Regular Member), Oral Biology and Medicine-2, 1995-1999
- NIH Active Reviewer Reserve, NIDCR, 1999-
- NIH-NIDCR Special Study Section on International Oral Health Research Centers, 1999
- Member, NIDCR Special Study Section for Centers for Research to Reduce Oral Health Disparities, 2000-2001
- NIH-NIDCR Special Emphasis Section for Oral Health Research Curriculum Grants, 2003, 2004 (Chair), 2005 (Chair), 2006 (Chair), 2007 (Chair)
- NIH College of Scientific Reviewers, 2010-004 and DE-14-005): Craniofacial Development and Dysmorphology 1 and 2 (U01), 2013
- Ad-hoc
- National Science Foundation (Integrative Biology Program; Biological Anthropology)
- Medical Research Council of Canada
- American Association of Orthodontics Foundation

Consultantships
- Council on Scientific Affairs, American Dental Association, 2002-

Relevant Educational Activities
- Founding Director, Ph.D. Program in Oral Health Sciences, School of Dentistry, University of Michigan, 1990-1993
- Director, Ph.D. Program in Craniofacial Biology, Baylor College of Dentistry, 1993-1998

Chief, Associate, or Assistant Journal Editor, Review Board
- Interim Managing Editor, Human Biology, Wayne State University Press, 1976-1980
- Editorial Review Board, American Journal of Orthodontics

Ad Hoc Journal Reviewer
Related Professional Service

University Advisory Committee, Cancer Prevention and Research Institute of Texas (CPRIT), 2010-
Scientific and Prevention Advisory Committee, Cancer Prevention and Research Institute of Texas
(CPRIT), 2012-
Program Reviewer, Craniofacial Biology, International Association for Dental Research, 1985-1993.
Session Chair, Craniofacial Biology, International Association for Dental Research, 1978, 1983-1988,
Executive Board, Life Enhancement for People, 1998-2002
Alliance Internet2 Research Steering Committee, Alliance for Higher Education, 2000-2001
Committee of Research Associate Deans, American Association for Dental Research, 2000-2005
Executive Committee and Secretary, Friends of the National Institute of Dental and Craniofacial
Research, 2003-2005
Board Member, Texas Institute of Genomic Medicine, 2005-2009
Board of Directors, Texas A&M Research Foundation, 2006-2011
Board of Directors, Rural Community Health Institute, Texas A&M Health Science Center, 2006-
Graduate Education Advisory Committee, Texas Higher Education Coordinating Board, 2007-2013

POSTDOCTORAL, GRADUATE, AND PREDOCTORAL ADVISORY COMMITTEES

Postdoctoral Fellows
   and Chair of Biomedical Sciences, Texas A&M Health Science Center)
   of Biomedical Sciences, Texas A&M Health Science Center)
4. Yang, Qiong (Beijing Medical and Dental University, D.D.S., M.D., 1986). 1987-1989
   L. Opperman)
   NIH-NIDCR DE07256. 1998-2000. (with L. Opperman; Professor of Orthodontics, University of
   Texas San Antonio Health Science Center)
   Faculty of Orthodontics, Japan)

Doctor of Philosophy: Committee Chair
   Health Science Center)
3. Sciote, James J. Oral Biology, The University of Michigan, 1990. (Professor and Chair of
   Orthodontics, Temple University)
4. Cope, Jason. Biomedical Sciences, Graduate School of Biomedical Sciences, Texas A&M University
   System Health Science Center (M. Samchukov, Co-Chair), 1999. (Clinical Associate Professor of
   Orthodontics, Texas A&M Health Science Center)
5. Fields, Theodore. Biomedical Sciences, Graduate School of Biomedical Sciences, Texas A&M University System Health Science Center, 2000.

**Doctor of Philosophy: Committee Member**

2. Womble, Mark. Anatomy and Cell Biology, The University of Michigan, 1983. (Professor, Youngstown State University)
4. Boyd, Scott. Cell Biology, University of Texas Health Science Center, Dallas, 1984. (Chair of Oral & Maxillofacial Surgery, Henry Ford Hospital)
5. Anapol, Fred. Anatomical Sciences, SUNY-Stonybrook, 1984. (Professor of Anthropology, University of Wisconsin-Milwaukee)
7. Schepartz, Lynn A. Anthropology, The University of Michigan, 1987. (Professor and Head of Biological Anthropology, University of Witwatersrand)
9. Iwasaki, Laura. Department of Graduate Studies, University of Manitoba, 1992. (Professor of Orthodontics, University of Iowa)
11. Sinsel, Nadja K. Medical Science, Katholic University Leuven, 1999. (Clinical faculty, University of Limburg, Netherlands)
12. Fuentes, Maria A. Biomedical Sciences, Graduate School of Biomedical Sciences, Texas A&M University System Health Science Center, 2001.
13. Talwar, Reena. Biomedical Sciences, Graduate School of Biomedical Sciences, Texas A&M University System Health Science Center, 2001. (Associate Professor of Oral & Maxillofacial Surgery, University of Alberta)
14. Spears, Robert. Biomedical Sciences, Graduate School of Biomedical Sciences, Texas A&M University System Health Science Center, 2002. (Professor of Biomedical Sciences, Texas A&M Health Science Center)
15. Visnapuu, Vivian. Faculty of Medicine, Institute of Dentistry, University of Turku, Finland, 2002. (Researcher, University of Turku, Finland)
16. El-Salanty, Mohammed. Biomedical Sciences, Graduate School of Biomedical Sciences, Texas A&M University System Health Science Center, 2004 (Associate Professor of Oral Biology, Georgia Health Sciences University)
17. Adab, Kateyuna. Biomedical Sciences, Graduate School of Biomedical Sciences, Texas A&M University System Health Science Center, 2004.
18. Butaric, Lauren. Anthropology, Texas A&M University, 2010

**Master of Science: Committee Chair**

1. Ellis, Edward III. Oral and Maxillofacial Surgery, The University of Michigan, 1982. (Professor and Chair of Oral & Maxillofacial Surgery, University of Texas San Antonio Health Science Center)

**Master of Science: Committee Member**

18. Livieratos, F. M.S., Orthodontics & Pediatric Dentistry, The University of Michigan, 1993. (*Milo Hellman Award* winner)
PUBLICATIONS

Refereed Articles


Books and Edited Volumes


**Chapters in Books**


Abstracts


Other Publications


INVITED TALKS AND LECTURES (major presentations indicated in bold)

1978

Diffusion, biological determinism and biocultural adaptation in the Nubian corridor. Lecture Series in Anthropology, The University of Michigan.

Musculoskeletal adaptation following orthognathic surgery, Department of Anatomy, Washington University School of Dentistry.

Experimental studies of the muscles of mastication. Department of Cell Biology and Anatomy, Johns Hopkins University School of Medicine.

Musculoskeletal adaptation following orthognathic surgery: An experimental study. Department of Orthodontics, Case Western Reserve University.

Experimental studies of the function of the muscles of mastication in nonhuman primates. Departments of Anatomy and Orthodontics, University of Chicago.

1979

Experimental studies of the growth and function of the muscles of mastication in rhesus monkeys. Lecture Series on Growth and Muscle, Division of Biological Sciences, The University of Michigan.

Growth and evolution of the muscles of mastication in primates: An experimental study. Department of Anatomical Sciences, State University of New York at Stony Brook.

1980

The structure, function and evolution of the masticatory apparatus. Department of Anatomy, West Virginia School of Osteopathic Medicine.

Control of relapse following maxillofacial surgery to correct mandibular deficiency. Student Medical Association, West Virginia School of Osteopathic Medicine.


Appearance on "Day by Day," Public Broadcasting Service, WUCM-TV.

Ontogeny and phylogeny: Biological mechanisms of adaptation. Division of Biological Sciences, The University of Michigan.

Experimental studies of skeletal relapse following orthognathic surgery. Great Lakes Orthodontic Association Annual Meeting.

1981

Experimental models of the effect of surgical intervention on the growing face. Symposium on Craniofacial Growth, Ann Arbor, Michigan.

Maxillofacial surgery in growing patients. Department of Orthodontics, Case Western Reserve University.

Physiological basis of mastication and muscle adaptation. Departments of Orthodontics and Anatomy, University of Detroit.


1982


Muscle physiology and facial growth. Department of Orthodontics, University of Detroit.

Craniofacial biology as "normal science." Twenty-fifth Anniversary of the St. Louis Orthodontic Education and Research Foundation. The State of the Art in Orthodontic Education and Research, St. Louis.
1983  
*Muscle function and relapse.* Department of Orthodontics, University of Detroit.  
*New concepts in craniofacial growth and development.* XIV International Symposium in Dentistry, Universidad de Antioquia, Medellin, Columbia, South America.  
*The role of muscle function in craniofacial growth and modification of the growth process.* Eastman Dental Center, Rochester.

1984  
*Relapse following orthognathic surgery:* Experimental studies. Department of Orthodontics, University of Kentucky.  
*Current concepts on the growth and adaptation of the temporomandibular joint.* Special Presentation, 43rd Annual Meeting of the Japan Orthodontic Society, Kurashiki, Japan.  
*Muscle adaptation and relapse following surgical treatment.* Department of Orthodontics, University of North Carolina.

1985  
*Muscle function and craniofacial growth.* Eastman Dental Center, University of Rochester.  
*Paradigms in craniofacial biology.* Department of Orthodontics, University of Detroit.  
*Craniofacial biology as "normal science."* University Seminar, The University of Michigan.

1986  
*In vitro, in vivo and in situ studies of the structure and function of the muscles of mastication.* Department of Anatomy, Duke University.  
*Physiologic adaptation to altered jaw function.* Department of Orthodontics, University of North Carolina.  
*Muscle structure, function and growth in the craniofacial region: Experimental studies.* Distinguished Speaker, School of Dentistry, Ohio State University.  
*Neuromuscular adaptation to altered function.* Department of Orthodontics, University of Toronto.  
*Adaptation to mandibular advancement in growing and adult subjects.* School of Dentistry, University of Florida.  
*Muscle function and craniofacial adaptation.* Department of Orthodontics, University of Tennessee.  
*Physiological studies of the muscles of mastication.* School of Dentistry, Baylor University.  
*Relapse and growth after orthognathic surgery.* Department of Oral and Maxillofacial Surgery, Southwestern Medical School, Dallas.

1987  
*Current concepts in craniofacial growth: Orthodontic cant and the elusive theory of craniofacial growth.* Featured Essayist, American Association of Orthodontists, Montreal, Canada.  
*Experimental models of growth and relapse after orthognathic surgery.* Boone Lectureship, School of Dentistry, University of Southern California, Los Angeles.
1988

Metabolic and physiologic studies of the growth and adaptation of the muscles of mastication. University of Lund, Malmo, Sweden

Current research in craniofacial biology. University of Copenhagen, Denmark.

Current research in craniofacial biology. University of Aarhus, Denmark.

Physiological studies of the muscles of mastication during growth and after orthodontic-surgical intervention. University of Goteborg, Sweden.

TMJ growth and adaptation: The role of the lateral pterygoid muscle. Karolinska Institute, Stockholm, Sweden.

Motivations for choices and decisions in research. Vth Biannual Symposium on Methodological Aspects in Craniofacial Research, University of Strasbourg, Strasbourg, France.

1989

Structure and function of the lateral pterygoid muscle in the rhesus monkey. 15th Annual Conference on Craniofacial Biology, Ann Arbor.


Can the growth of the face be influenced by orthodontic treatment? Tandlakarhogskolan, University of Lund, Malmo, Sweden.

Experimental studies of craniofacial orthopedics. Royal Dental College, University of Copenhagen, Denmark


1990

Current concepts on the postnatal growth of the midface. Preconference Symposium, American Cleft Palate Association, St. Louis. May.


1991


Sternoclavicular joint as a model for the temporomandibular joint. Department of Orthodontics, University of Turku, Finland. September.

Lateral pterygoid muscle function and condylar growth. Department of Orthodontics, University of Helsinki, Finland. September.


The role of the lateral pterygoid muscle in mandibular growth: Clinical implications. 2nd International Symposium of Orthodontics, Greek Orthodontic Society, Athens, Greece. December.

1992

Correlated histochemical and physiologic studies of the lateral pterygoid muscle following mandibular protrusion: A test of the Servosystem Theory of Mandibular Growth. Medical Research Council of Canada Visiting Professor, School of Dentistry, University of Manitoba, February.
Function and fatigue of the lateral pterygoid muscle. Baylor College of Dentistry, Dallas, September.


1993
Orthodontic cant and the elusive theory of craniofacial growth. Graduate Orthodontic Residents Program (GORP), University of Kentucky, August.


Research in craniofacial biology. Baylor College of Dentistry Chapter of the International Association for Dental Research, November.

1994
Current concepts of craniofacial growth: Theory and practice. Department of Surgery, University of Texas-Southwestern Medical Center, February.

Development of concepts of facial form, growth, and beauty. Magistral (Graduation) Lecture, School of Dentistry, University of Latin America, December.

Current concepts of craniofacial growth: Theory and practice. School of Dentistry, The Ohio State University, December.

Ontogeny of secondary cartilage and growth of the mandibular condyle. Department of Orthodontics, University of North Carolina, December.

1996
Craniofacial growth: Theory and practice. Department of Orthodontics, School of Dentistry, The Ohio State University, December.


1997
Current concepts of craniofacial growth: Theory and practice. University of Medicine and Dentistry of New Jersey, September


1999

Genetics and craniofacial growth. School of Dentistry, The University of Michigan, July

Current concepts of craniofacial growth. University of Medicine and Dentistry of New Jersey, September

2000
Das Kieferwachstum (Growth of the Jaws). Österreichischer Zahnärztw-Kongress 2000, Österreichische Gesellschaft fur Zahn-, Mund- und Kieferheilkunde, Vienna, Austria, September

Current concepts of craniofacial growth. University of Medicine and Dentistry of New Jersey, October

Developmental genetics and concepts in craniofacial biology. School of Dentistry, University of California San Francisco, October

2001
Development of concepts in craniofacial biology. School of Dentistry, University of Texas, Houston, January

Craniofacial development, growth, and adaptation. Eastman Dental Center, University of Rochester, March
Craniofacial growth and development. The University of Michigan, July


Craniofacial growth and development. The University of Michigan, July

Craniofacial growth research in the 21st century. Keynote speaker. Third Symposium of the Nordic Countries on Craniofacial Growth—From Genes to Clinics, Turku, Finland, August


Development of Concepts in Craniofacial Growth and Dentofacial Orthopedics. University of Texas Dental Branch at Houston, May

Craniofacial growth and development. The University of Michigan, July

Development of Concepts in Craniofacial Growth and Dentofacial Orthopedics. Department of Orthodontics, The Ohio State University, August

2004 Genomics of Craniofacial Growth. The University of Michigan, July


Myosin expression, muscle function, and craniofacial form. American Association of Physical Anthropologists, Milwaukee, April

2006 Development, Growth & Adaptation of the Temporomandibular Joint as a Basis for Understanding TMJ Disorders. American Association of Orthodontists, Las Vegas, May


Craniofacial Growth and Treatment. The University of Michigan, June

Craniofacial Growth and Orthodontic Treatment in the Epigenomic Era. Ortho 2006: Standpoints and Perspectives, Zurich, September

Genomics and Craniofacial Growth: Challenges for the Future of Orthodontic Treatment, American Association of Orthodontists, Denver, May

Craniofacial Growth and Treatment. The University of Michigan, July

Developmental Aspects of Craniofacial Asymmetries: Biological basis of Treatment. XIX SIDO International Conference on Dentoalveolar and Skeletal Asymmetries. Societa Italiana di Orthodontia, November


2010 Keynote Lecture: Craniofacial Biology and Treatment in the Post-Genomic Era. World Foundation of Orthodontics, Sydney, Australia

Keynote Lecture: Treatment of Dentofacial Deformities in an Epigenomic Era. 11th PanHellenic Orthodontic Congress, Athens, Greece

2011 Mechanisms of Tissue Engineering in the Craniofacial Region. American Association of Orthodontists, Chicago, May


24


**Toward a Modern Synthesis for Craniofacial Biology: A Genomic-Epigenomic Basis for Dentofacial Orthopedic Treatment. 40th Annual Moyers Symposium, The University of Michigan, Ann Arbor, March**

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**Continuing Medical/Dental Education Courses**

1987  
*Craniofacial growth, adaptation, and orthopedic treatment.* University of North Carolina Orthodontic Alumni Association, Raleigh, North Carolina. Two-day course with Dr. J.A. McNamara).

1988  
*Craniofacial growth and orthodontic treatment.* Mexican Association of Orthodontics, Guadalajara, Mexico. Three-day course. November.


*Current concepts in craniofacial growth.* Greater Harrisburg Dental Society, Harrisburg, Pennsylvania. One-day course with Dr. J.A. McNamara, Jr. October.

1989  
*Craniofacial growth, adaptation, and orthopedic treatment.* American Academy of Pediatric Dentistry, Orlando, Florida. One-day course with Dr. J.A. McNamara, Jr. May.

*Orthognathic surgery: Muscle adaptation, relapse and fixation techniques.* Royal Danish Society of Oral and Maxillofacial Surgeons, Copenhagen, Denmark. One-day course with Dr. Edward Ellis. October.


*Growth, adaptation, and treatment of the craniofacial complex.* South Carolina Orthodontic Association, Hilton Head. Two-day course with Dr. James McNamara. April.

1990  
*Craniofacial growth, adaptation and orthopedic treatment.* William H. Gensley Memorial Lecture, Cincinnati Dental Society, Cincinnati, Ohio. One-day course with Dr. J.A. McNamara, Jr. October, 1990.

1991  
*Craniofacial development, growth and adaptation.* Ohio State University. One-day course. January.

*Craniofacial growth and orthodontic treatment.* Kansas State Society of Orthodontists. Two-day course with Dr. James A McNamara. Kansas City, Missouri. April.

*Effect of muscle function and soft tissue on skeletal relapse following orthognathic surgery.* Finnish Orthodontic Society. One-day course. Turku, Finland. September.

1992  
*Die Möglichkeiten der Steuerung des craniofacialen Wachstums durch die kieferorthopädische Therapie (Craniofacial growth, adaptation and orthodontic treatment), Internationale Kieferorthopädische Fortbildungstagung.* Two-day course with Dr. J.A. McNamara, Jr. Kitzbühel, Austria. January, 1992.


1993  
*Advanced Study in Surgical/Orthodontic Treatment.* Five-day course organized by Dr. A. Athanasiou (nine speakers). Corfu, Greece. June.


*Craniofacial Growth Theories.* Mexican Orthodontic Society. One-day course. Mexico City, January.

*Current Concepts and Theories of Craniofacial Growth and Dentofacial Orthopedics.* University of Naples, Italy. One-day course. May.


*Development of Concepts in Craniofacial Growth and Dentofacial Orthopedics.* One-day course. The Ohio State College of Dentistry, February.

2002  *Current Concepts and Theories of Craniofacial Growth and Dentofacial Orthopedics.* One-day course. University of Alabama-Birmingham, September

2006  *Development of Concepts in Craniofacial Growth and Dentofacial Orthopedics.* One-day course. The Ohio State College of Dentistry, October.

2007  *Development of Concepts in Craniofacial Growth and Dentofacial Orthopedics.* One-day course. Nova Southeastern University

*Current Concepts and Theories of Craniofacial Growth and Dentofacial Orthopedics.* One-day course. St. Louis University

2009  *Craniofacial Growth and Orthodontic Treatment.* 1-day course, Department of Orthodontics, University of Alabama

2010  *Craniofacial Growth and Orthodontic Treatment.* 1-day course, Department of Orthodontics, St. Louis University

Programs and Symposiums Organized

*Co-Organizer of the Craniofacial Growth Symposium, University of Michigan, Ann Arbor*

1975  Determinants of Mandibular Form and Growth. Craniofacial Growth Symposium, University of Michigan, Ann Arbor

1976  Development of the Midface. Muscle Adaptation in the Craniofacial Region. Craniofacial Growth Symposium, University of Michigan, Ann Arbor

1977  Biology of Occlusal Development. Craniofacial Growth Symposium, University of Michigan, Ann Arbor

1978  Muscle Adaptation in the Craniofacial Region. Craniofacial Growth Symposium, University of Michigan, Ann Arbor

1979  Nasorespiratory Function and Craniofacial Growth. Craniofacial Growth Symposium, University of Michigan, Ann Arbor

1980  Psychological Aspects of Facial Form. Craniofacial Growth Symposium, University of Michigan, Ann Arbor

1981  The Effect of Surgical Intervention on Craniofacial Growth. Craniofacial Growth Symposium, University of Michigan, Ann Arbor

1982  Clinical Alteration of the Growing Face. Craniofacial Growth Symposium, University of Michigan, Ann Arbor

1983  Malocclusion and the Periodontium. Craniofacial Growth Symposium, University of Michigan, Ann Arbor
1984  Developmental Aspects of Temporomandibular Joint Disorders. Craniofacial Growth Symposium, University of Michigan, Ann Arbor
1985  Science and Clinical Judgment in Orthodontics. Craniofacial Growth Symposium, University of Michigan, Ann Arbor
1987  Craniofacial Morphogenesis and Dysmorphogenesis. Science and Clinical Judgment in Orthodontics. Craniofacial Growth Symposium, University of Michigan, Ann Arbor
1988  Orthodontics in an Aging Society. Craniofacial Growth Symposium, University of Michigan, Ann Arbor
1989  Craniofacial Growth Therapy and Orthodontic Treatment. Craniofacial Growth Symposium, University of Michigan, Ann Arbor
1990  Clinical Research as the Basis of Clinical Practice. Craniofacial Growth Symposium, University of Michigan, Ann Arbor
1991  Bone Biodynamics in Orthodontic and Orthopedic Treatment. Craniofacial Growth Symposium, University of Michigan, Ann Arbor
1992  Esthetics and the Treatment of Craniofacial Form. Craniofacial Growth Symposium, University of Michigan, Ann Arbor
1993  Biological and Psychological Aspects of Orofacial Pain. Craniofacial Growth Symposium, University of Michigan, Ann Arbor
1998  Planning Committee, Symposium on Dentistry in the New Millennium, Alumni Weekend, Baylor College of Dentistry, September
CURRICULUM VITAE

1. PERSONAL DATA

NAME: Gerald Neal Glickman
HOME ADDRESS: 8600 Thackery Street Apt. 5204
   Dallas TX 75225
HOME TELEPHONE: 214-346-5944
CELL: 469-964-6994
BUSINESS ADDRESS: Department of Endodontics
   Texas A & M University Baylor College of Dentistry
   3302 Gaston Avenue
   Dallas TX 75246
BUSINESS TELEPHONE: 214-828-8361
BUSINESS FAX: 214-874-4507
E-MAIL: gglickman@bcd.tamhsc.edu
PRESENT POSITION: Professor (with Tenure) and Chairman, Department of Endodontics
   Director, Graduate Program in Endodontics
   Texas A&M University Baylor College of Dentistry

2. EDUCATION

Texas Wesleyan School of Law (now Texas A&M University)
Irving, TX
September 1989 - April 1994
J.D.

Edwin L. Cox School of Business
Southern Methodist University, Dallas, TX
January 1986 - December 1988
M.B.A.

Northwestern University Dental School, Chicago, IL
June 1982 - June 1984
Certificate in Endodontics
M.S.

University of Michigan School of Dentistry, Ann Arbor, MI
September 1980 - May 1981
Post-Graduate Certificate in Restorative Dentistry

University of Florida College of Dentistry and Shands Teaching Hospital
Gainesville, FL
July 1978 - July 1979
Certificate - General Practice Residency

Ohio State University College of Dentistry, Columbus, OH
July 1975 - June 1978
D.D.S.
University of Kentucky, Lexington, KY
August 1972 - June 1975
M.S. in Microbiology

Ohio State University, Columbus, OH
September 1969 - June 1972
B.S. in Microbiology

Rensselaer Polytechnic Institute, Troy, NY
September 1968 - June 1969
Engineering Major

3. PROFESSIONAL APPOINTMENTS

Professor and Chairman (Tenured), Department of Endodontics
Director, Graduate Program in Endodontics
Texas A & M University Baylor College of Dentistry
Dallas TX
Jan. 1, 2003 - present

Professor and Chairman (Tenured), Department of Endodontics
Director, Graduate Program in Endodontics
University of Washington
Seattle, WA
July 1 2001 – Dec. 31, 2002

Associate Professor and Chair, Department of Stomatology
Director, Advanced Education Program in Endodontics
University of Texas – Houston Dental Branch
Houston, TX
October 1 1998 – June 30 2001

Visiting Professor
Universidade do Grande Rio
School of Dentistry
Rio De Janeiro, Brazil
1995-present
Responsibilities include development of clinical research protocols

Clinical Professor and Director of Endodontics
Department of Cariology, Restorative Sciences, and Endodontics
School of Dentistry
University of Michigan, Ann Arbor, MI
June 1993 – September 1998

Visiting Professor in Endodontics
University of Stellenbosch Faculty of Dentistry
Capetown, South Africa
January 20 - February 2, 1995

Associate Professor in Endodontics (Tenured)
Department of Restorative Dentistry
Baylor College of Dentistry, Dallas, TX
July 1990 - June 1993
Acting Chairman
Department of Endodontics
Baylor College of Dentistry
June 1, 1991 - December 31, 1991

Consultant in Endodontics
Veterans Administration Medical Center
Dallas, Texas
October 1988 - January 1993

Assistant Professor
Department of Endodontics
Baylor College of Dentistry, Dallas, TX
July 1984 - June 1990

Assistant Professor
Department of Community and Oral Health
University of Mississippi School of Dentistry, Jackson, MS
July 1979 - August 1980

General Practice Resident in Dentistry
University of Florida College of Dentistry and
Shands Teaching Hospital, Gainesville, FL
July 1978 - June 1979

4. TEACHING/ADMINISTRATIVE EXPERIENCES

Department of Endodontics
Texas A & M University Baylor College of Dentistry
Major responsibilities as Chairman
Administration and restructuring of newly reconstituted department; supervision of
5 full-time staff plus 6 FTE faculty and 8 part-time faculty; responsible for curricular development at the predoctoral level,
research, budgeting, CE programs, strategic planning, fundraising, faculty development
Major Responsibilities as Director of the Graduate Program in Endodontics:
Administration, teaching, and curriculum development of the Graduate Program in Endodontics; research mentor for
graduate students, coordinator of both a 27 month Certificate program and 3-year MS in Oral Biology
January 1, 2003 - present

Department of Endodontics
University of Washington
Major Responsibilities as Chair:
Administration/organization of department consisting of 2 administrative secretaries, 4 support staff, 4 full-time faculty and
23 part-time faculty; curriculum development, faculty and staff development, scholarly activity, budget control, fund-raising,
alumni relations, CE programs, strategic planning
Major Responsibilities as Director of the Graduate Program in Endodontics:
Administration, teaching, and curriculum development of the Graduate Program in Endodontics; research mentor for
graduate students July 1 2001 – Dec. 31, 2002

Department of Stomatology
University of Texas – Houston Dental Branch
Major Responsibilities as Chair:
Administration of large mega department (radiology, oral pathology, periodontics, endodontics, and urgent care); curriculum
development, faculty and staff development, scholarly activity, budget control, alumni relations, strategic planning,
continuing education programs, faculty development
Major Responsibilities as Director of the Advanced Education Program in Endodontics:
Administration, teaching, and curriculum development of the Graduate Program in Endodontics  

Department of Cariology, Restorative Sciences, and Endodontics  
University of Michigan School of Dentistry  
Director of Division of Endodontics  
Major Responsibilities: Administration of the Endodontic Program  
  Director and Coordinator of Undergraduate Endodontics  
   Course Director for Principles of Endodontics I (Endo 612)  
   Course Director for Principles of Preclinical Endodontics (Endo 637)  
   Course Director for Principles of Endodontics II (Endo 714)  
   Course Director for Advanced Endodontics (Endo 814)  
   Course Director for Clinical Endodontics 720  

Director of Graduate Endodontics  
   Course Director for Endodontic Surgery (Endo 657)  
   Course Director for Case Presentation (Endo 660)  
   Course Director for Clinical Endodontics 652  
   Course Director for Current Literature Review (Endo 659)  
   Course Director for Pharmacology and Medicine in Endodontics (Endo 661)  
   Course Director for Seminar in Endodontics (Endo 653)  

Department of Restorative Sciences (Department of Endodontics prior to 7/1/92)  
Baylor College of Dentistry  
Director of Undergraduate Endodontics  
Director of Sophomore Preclinical Endodontics  
Co-author of Sophomore Endodontic Manual, Glickman, G.N. and Gutmann, J.L.  
Principles of Preclinical Endodontics.  Baylor College of Dentistry, 1992  
Senior Course Director: Principles of Advanced Clinical Endodontics (1986-1992)  
Graduate Teaching: topical seminars, literature reviews, treatment planning, clinical instruction, research advisor  
Consultant/lecturer in AEGD program  
Revision of grading system and clinic forms  
Lecturer in Sophomore, Junior, and Senior Undergraduate Endodontic Courses  
Lecturer in Dental Hygiene Program  
Author of Junior and Senior Endodontic Manuals  
Glickman, G.N. Principles of Advanced Clinical Endodontics.  
July 1984 - June 1993

Department of Endodontics  
Northwestern University School of Dentistry, Chicago, IL  
Student Teaching - Clinic and Lecture  
June 1982 - June 1984

Department of Community and Oral Health  
University of Mississippi School of Dentistry, Jackson, MS  
Clinical Instruction in Oral Diagnosis, Treatment Planning and Dental Emergencies; Lecturer in Oral Microbiology; Instruction in Student-Patient Interviewing Techniques  
July 1979 - August 1980
Department of Microbiology  
University of Kentucky, Lexington, KY  
Teaching Assistantship: Taught Laboratory Courses in General and Pathogenic Microbiology  
August 1972 - June 1975

5. RESEARCH

Research advisor
1) Bob Gatti, Robert Hale. Comparative Assessment of Carrier-based Obturation and Lateral Compaction: a Retrospective Clinical Study (2011)
2) David Bowers, Evidence-based Assessment of Microscopy (2010)
4) Jordan Bolles, Comparison of EndoActivator, Vibringe, and irrigation needle on sealer penetration in human Teeth (2012)
5) John Haycock, Comparison of EndoActivator, Vibringe, and needle irrigation on E. faecalis biofilm removal (2012)

Chairman, Thesis Committee, Baylor College of Dentistry
1) Kavita Patil, Evaluation of Root Strength Comparing Resilon and Gutta-Percha 2004-2005

Member, Thesis Committee, Baylor College of Dentistry
1) Rusty Dunavant, Comparative Evaluation of Contemporary Endodontic Irrigants Against E. faecalis Biofilm 2004-2005

Chairman, Thesis Committee, Univ. of Texas
1) Chris Campbell: Retreatment Efficacy of Resin and Ceramic Post Systems, 2001
2) Todd Bruchmiller: Comparative Assessment of Iodoform Gutta-Percha Using A Bacterial Leakage Model, 2000

Member, Thesis Committee, Univ. of Texas
3) Robert Chavez, Identification and Role of Cytomegalovirus in Periapical Lesions of HIV+ Patients, 2000

Chairman, Thesis Committee, Univ. of Michigan
1) Jarshen Lin: Comparative Evaluation of Various Canal Shaping Techniques Using the Safety Hedstrom, 1994
Member, Thesis Committee, Univ. of Michigan


Recent/Current Research Projects (as mentor for residents)

1) Comparative evaluation of Bingo-1020, Root ZX, Element, and Endopex V (completed)
2) Survey of general dentists in the US regarding endodontics. (completed)
3) Evaluation of the effect of ozonated-water on E. faecalis biofilm (beginning)
4) Clinical characteristics of sinus tracts: developing a classification. (in progress)
5) Osteogenic protein-1 induction of apical reparative dentin. (completed)
6) Evaluation of canal shaping using the Sequence system.
7) SEM analysis of solvent-treated Thermafil plastic carriers (completed)
8) Digital radiographic assessment of pulp chamber size (completed)
9) Quantitative analysis of debris extrusion with niti rotary instrumentation. (co-investigator) (completed)
10) Obturation using nickel titanium compaction. (beginning)
11) Problem-based learning and critical thinking in a predoctoral endodontic curriculum (completed)
12) Sealing ability of a resin-based root end filling material: a bacterial leakage study (completed)
13) Effects of various additives on setting properties of MTA (completed)
14) Evaluation of endodontic pathfinders (completed)

Northwestern University Dental School, Chicago, IL
Graduate Research (1982 - 1984)
Development of a new root canal sealer utilizing O-ethoxybenzoic acid, N -hexyl vanillate, and a zinc oxide powder; the physical properties, bacteriological status, sealing ability, and biocompatibility of the experimental cement were evaluated.

University of Kentucky, Lexington, KY
Graduate Research (1972 - 1975)
Evaluation of the ribosomes (configuration and protein: RNA ratios) of a facultatively parasitic bacterium: Bdellovibrio bacteriovorus.

6. RESEARCH GRANTS

Foundation of the American Association of Endodontists
Project: A Retrospective Analysis of Mineral Trioxide Aggregate vs. BC Root Repair Material when used as Root-End Filling Materials in Endodontic Microsurgery
Principal Investigator: N. Shinbori; Co-Investigators: J. He, G.N. Glickman
Submitted Aug. 2013 for $8000
Dentsply International
Project: A Longitudinal Clinical Study to Evaluate Carrier-Based Obturation and Lateral Compaction
Principal Investigator: G.N. Glickman; Co-Investigators: Robert Hale, Robert Gatti
Submitted Aug. 2009 for $20000; Funded November 2009; Research completed (Sept. 2011)

RFP: American Association of Endodontists Foundation
Proposal: Survival Rates and Patient Satisfaction with Nonsurgical Root Canal Retreatment or Single Tooth Implant: A Prospective Multi-Center Randomized Controlled Clinical Trial.
Principal Investigator: M. Torabinejad; Co-Investigators: G.H. Hartwell, G.N. Glickman, C.S. Wenckus, S. White, J. Lozada, R. Woody, R. J. Flinton, K. Knoernschild, D. Berry
Submitted: Feb. 2007 for $4390200; Not funded (May be resubmitted)

Foundation of the American Association of Endodontists
Principal Investigator: J. He; Co-Investigators: K. Sevobada, G.N. Glickman
Submitted: Feb. 2004 for $24764; Funded for $20000; Research completed.

Foundation of the American Association of Endodontists
Project: Evaluation of Dehiscence Repair Using Enamel Matrix Proteins and Resorbable Membranes on Endodontically-Treated Teeth
Principal Investigator: J. Naghshband; Co-Investigator: G.N. Glickman and Pedro Trejo
Submitted: January 2000 for $41495; Not Funded

Foundation of the American Association of Endodontists
Project: Endodontic Microscopy: Value, Clinical Efficacy, and Curricular Development
Principal Investigator: T. Ester; Co-Investigator: G.N. Glickman
Submitted, March 1 1998, for $11140.
Approved and Funded ($10000), July 1998 – June 2000

Foundation of the American Association of Endodontists
Project: Reparative Processes in the Dental Pulp
Principal Investigator: R.B. Rutherford; Co-Investigator: G.N. Glickman
Submitted, March 1, 1998 for $36344.
Approved and Funded ($13000), July 1998 – July 1999

Center for Research on Learning and Teaching, University of Michigan
Project: Computer-Aided Instruction in Endodontics
Principal Investigator: R. Pileggi; Co-Investigator: G.N. Glickman
Submitted, February 1997, for $4128
Approved and Funded ($3000), Sept. 1997- Aug. 1998

Foundation of the American Association of Endodontists
Project: Efficacy of Root-End Fillings Assessed In Vivo Using Radio-Labelled Bacteria
Principal Investigator: R. Pileggi; Co-Investigators: G.R. Holland and G. N. Glickman
Submitted, March 1997, for $10000
Approved and Funded ($10000), July 1997 - June 1998

Foundation of the American Association of Endodontists
Project: Engineering the Regeneration of Pulp, Dentin, and Bone
Principal Investigator: R.B. Rutherford; Co-Investigator: G.N. Glickman
Submitted, March 1997, for $30325.
Not approved.

Foundation of the American Association of Endodontists.
Project: Osteogenic Protein-1 Induction of Apical Reparative Dentin (Phase 2).
Principal Investigator: **G.N. Glickman**; Co-Investigator: B. Rutherford.

Kerr Manufacturing Corporation.
Evaluation of Cutting Efficiency of Nickel Titanium Files with Ionguard.
Principal Investigator: **G.N. Glickman**
Approved and Funded ($900), June 1995.

Foundation of the American Association of Endodontists.
Project: Osteogenic Protein-1 Induction of Apical Reparative Dentin. (Phase I)
Principal Investigator: **G.N. Glickman**; Co-Investigator: B. Rutherford.
Approved and Funded ($16525), July 1995-June 1996.
Research and Education Foundation of the American Association of Endodontists.
Principal Investigator: **G.N. Glickman**; Co-Investigator: T.A. Svec.


7. **PROFESSIONAL ORGANIZATIONS AND MEMBERSHIPS**

Academy of Dental Materials
   Fellow of the Academy (1984)

Academy of General Dentistry
   Fellow of the Academy (1989)

Academy of Operative Dentistry

Alpha Omega International Dental Fraternity
   Vice President of Student Chapter at Ohio State University (1976 - 1977)
   Faculty Advisor to Students at Baylor (1985-1990)
   Member of Alumni Chapter
   Faculty Co-Advisor to Students at Michigan (1993-1998)


American Association for Dental Research
   Pulp Biology Section (present)
   Dental Materials Section
   Constitution Committee (1997-2000)
   Chairman (1999-2000)
   Membership Committee
   Chairman (1992-1994)
   Dallas Section of AADR/IADR
   Councilor of Dallas Section (1985 - 1988)
   Editor: AADR"Newsletter"
   Secretary-Treasurer (1988 - 1989)
   Vice-President (1989 - 1990)
   President (1990 - 1991)
   Houston Section of AADR/IADR (1998-2001)
   Dallas Section of AADR/IADR (present)
American Association of Endodontists
Judge, Graduate Student Research, AAE Meeting, 1992
Judge, Poster Presentations, AAE Meeting, 1993
Chairman, 2001-2003
Consultant, present
Chairman, Ad Hoc Committee for Development of Continuing Education Courses in Endodontics, 1990-92
Liaison from ADEA, 1994-2000
Chair, Program Directors’ Workshop, Aug. 2001
Chair, Predoctoral Directors’ Workshop, Aug. 2002
Research and Scientific Affairs Committee, 1992-1997
Chairman, 1995-97
Chairman, Table Clinics, 1994 Annual AAE Meeting
Chairman, Research/Poster Presentations, 1995 Annual Meeting
Chairman, Research/Poster Presentations, 1996 Annual Meeting
Chairman, Research/Poster Presentations, 1997 Annual Meeting
Diplomate, American Board of Endodontics, 1987
Director, American Board of Endodontics, May 1997 – 2003
President, American Board of Endodontics, 2002-2003
Task Force, Strategic Planning for the AAE, 1995-1997
Ad Hoc Committee, Revision of Standards for Advanced Education in Endodontics, 1997 - 1999
Ad Hoc Committee, Oral Disease and Systemic Health, 1998- 2003
Task Force, Evidence-Based Endodontics, 2000-2002
Member, Applied Strategic Planning Committee, present
Ad Hoc Committee to Revise AAE Glossary, Chairman, 2002-2004
Ad Hoc Committee to Address Crisis in Education, Chairman, 2004-2005
Ad Hoc Committee for Revising Quality Assurance Guidelines, 2003-2005
Member, Continuing Education Committee, 2002-2005
Chair, Endodontic Educator Fellowship Award, 2010-2011
Treasurer, AAE, 2005-2007
Vice-President, AAE, 2007-2008
Co-Chair: Emerging Science in Pulp Therapy Symposium (with American Academy of Pediatric Dentistry), Chicago, 2007
President-elect, AAE, 2008-2009
President, AAE, 2009-2010
Chair, Symposium on Diagnosis, 2008-2009
Guest editor of Proceedings published Dec.09
Chair, Constitution and Bylaws Committee, 2010-2011
Member, Glossary Committee, present
Chair, Nominating Committee, 2012

American Dental Education Association (formerly AADS)
Council of Faculties (Baylor College of Dentistry), 1985 - 1993
Ad Hoc Committee to Study Privatization of Dental Patients, 1989
Committee on National Curriculum for Dental Educators, 1990
Council of Sections:
Secretary, Section on Endodontics, 1988 – 1989
Program chairman, Section of Endodontics, 1989 – 1990
Ad Hoc Review Committee on Endodontic Curriculum
Chairman, Section on Endodontics, 1990-1991
Councilor, Section on Endodontics, 1994-2000
Chair, Section on Graduate and Postgraduate Education, 2004
Member-At-Large, Administrative Board, Council of Sections, 1998-99
Secretary, Administrative Board, Council of Sections, 1999 – 2000
Chair-elect, Administrative Board, Council of Sections, 2000-2001
Chair, Administrative Board, Council of Sections, 2001-2002
Vice-President, Council of Sections, 2002 - 2005
Member of Board of Directors of ADEA as VP, 2005
Member, Annual Session Program Planning Committee, 2000 – 2005
Chair, COS Task Force for Competencies for the New General Dentist and Foundation Knowledge, 2004-2010
Member, Commission for Change and Innovation in Dental Education, present
Chair, CCI Task Force on Biomedical Sciences Competencies, present
Member, Special Task Force on Public Policy on Curriculum Reform, 2007-2009
Councilor, Section on Graduate and Postgraduate Education, 2005-2011
Secretary, Administrative Board, Council of Hospitals and Advanced Education Programs, 2008-2009
Chair-elect, Administrative Board, Council of Hospitals and Advanced Education Programs, 2009-2010
Chair, Administrative Board, Council of Hospitals and Advanced Education Programs, 2010-2011
Chair, 4th ADEA Summit on Advanced Dental Education, present
Member, Future of Advanced Dental Education Admissions (FADEA) project, 2009-2011
President-elect, ADEA, 2010-2011
Member, Legislative Advisory Committee, present
Annual Session Planning Committee, 2012-2013
Chair, Task Force, Biomedical sciences competencies, present
President, ADEA, 2012-2013
Ex-officio member, Task Force on Cost of Higher Education and Student Borrowing, present
Chair, Nominating Committee, present
Chair, Finance Committee, present

American Association of University Professors

American Bar Association
Associate Member

American College of Dentists
Fellow (1994)

American College of Legal Medicine
Fellow (1996)

American Dental Association
Reviewer

American Society for Microbiology

Dallas/Ft.Worth Metroplex Endodontic Society
Secretary/Treasurer (1989 - 1991)
Vice President (1991 - 1992)
President (1992 - 1993)
Member, present

Houston Academy of Endodontists (1998-2001)
International College of Dentists
Fellow (1995)

Michigan Association of Endodontists
Board of Directors, 1994-1998
Program Chairman, 1996-1998


Southwest Society of Endodontists

Texas Dental Association

8. HONORS, AWARDS, AND PROFESSIONAL APPOINTMENTS

Nomination, member of ADA Council on Dental Education and Licensure, present

Consultant in Endodontics, CODA, present

Invited as Scientific Reviewer, International Journal of Dentistry, June 2012

Invited as Scientific Reviewer, Saudi Dental Journal, June 2012

Installed as President, American Dental Education Association, March 2012

Elected President-elect, American Dental Education Association, 2011-2012

Nomination, President-elect 2011-2012, American Dental Education Association

Appointment, ADA Task Force on Developing an Advanced Dental Admission Test (ADAT), 2010

Certificate of Appreciation from ADEA Council of Sections for “leadership and outstanding work as Chair of both ADEA Competencies and Foundation Knowledge Task Forces”, 2010

Elected President, American Association of Endodontists, 2009

Presidential Citation, American Dental Education Association, 2009

Elected Chair-elect, Administrative Board, Council of Hospitals and Advanced Education Programs, ADEA, 2009

Named Consultant in Endodontics, Naval Postgraduate Dental School, present

Elected Secretary, Administrative Board, Council of Hospitals and Advanced Education Programs, ADEA, 2008

Elected President-elect, American Association of Endodontists, 2008

Elected Vice-President, American Association of Endodontists, 2007

Elected Treasurer, American Association of Endodontists, 2005-2007

Consultant in Endodontics, 3M Corporation, 2007-2009

Member, Commission for Change and Innovation in Dental Education (CCI), 2005-present

Named to “Guide to America’s Top Dentists”, 2004
ADEA Leadership Institute Fellowship, 2000 – 2001


Member, Component B (case-based), Test Construction Committee, Joint Commission on National Dental Examinations, 1996 - 2003

Endodontic Review Committee, Commission on Dental Accreditation, 1997 – 2003 Site Visitor Training Manual for Endodontic Site Visits (co-developer)

Consultant in Endodontics, Commission on Dental Accreditation, 1995 – 2003, re-appointed for 2006 - present

Endodontic Consultant, ESPE Corporation, 1998 - 2000

Clinical Advisory Board, Dentsply, 1999 - present

Director, American Board of Endodontics, 1997 – 2003

President, 2003

Member, Advisory Council on Endodontics, Sybron/Endo, 2003-2007

Member, ADA ISO Standards Subcommittee, Endodontic filling materials, 1997 - present

Member, ADA SO Standards Subcommittee, Root canal instruments, 1997 - present

Section Editor, Endodontics, *Quintessence International*, 1998 - 2004

Section Editor for Endodontics, *Practical Procedures and Aesthetic Dentistry*, present

Editorial Board (Endodontics Section) *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontics*, 1997 – 2011

Associate Editor, *Journal of Endodontics*, present

Guest editor, Dec. 2009

Reviewer, *Journal of the American Dental Association*, present

Reviewer, *Journal of Dental Education*, present

Member, Board of Directors, Michigan Association of Endodontists, 1994-1998

Chairman, Research and Scientific Affairs Committee, American Association of Endodontists, 1994 - 1997

Councilor, Section on Endodontics, American Association of Dental Schools, 1994 - 2000

Member-At-Large, Council of Sections Administrative Board, AADS, 1998-1999.

Secretary, Council of Sections Administrative Board, ADEA, 1999 – 2000

Chair, Council of Sections Administrative Board, ADEA, 2001 - 2002
Fellow of the International College of Dentists (1995)
Fellow of the American College of Dentists (1994)
Member, Component A (Endodontics) Test Construction Committee, Joint Commission on National Dental Examinations (1991-1996)
Scientific Advisory Panel, Dentsply/Tulsa Dental Products, 1994 - present
Who's Who in the Southwest
Fellow of the Academy of General Dentistry (1989)
Omicron Kappa Upsilon (1988)
Diplomate, American Board of Endodontics (1987)
Fellow of the Academy of Dental Materials (1984)
American Fund for Dental Health Teacher Training Fellowship (1983)
Selected to represent Ohio State University at the ADA Conference on Dental Research at Bethesda, MD (May 1977)
Teaching Assistantship - University of Kentucky (August 1972 - June 1975)
Scholarship - Rensselaer Polytechnic Institute (1968 - 1969)
Licensed to Practice Dentistry in:
  Michigan #12423
  New York #34203
  Florida #8170
  Illinois #019-018350
  Texas #14857
  Washington #00009277

9. PROFESSIONAL CONTRIBUTIONS AND SERVICE

A. Professional Contributions/Invited Presentations

Invited speaker: Ethical and Legal Issues in Dentistry, University of Florida, Sept. 2013
Invited speaker: The Future of Endodontic Education, AAE, Honolulu, April 2013
Invited speaker: Endodontics and risk management, Nebraska Dental Association, April 2013
Invited speaker: Endodontic topics, Naval Postgraduate Dental School, Bethesda, February 2013
Invited speaker: Edward C. Penick Endodontic Study Club, Contemporary Strategies in Endodontic Retreatment, Bethesda, February 2013


Invited speaker, Dallas-section AADR, The American Dental Education Association: Present and Future Perspectives, May 2012

Invited speaker: AAE Meeting, Medicolegal Aspects of Cone-Beam-Computed Tomography; Holistic Methodology for Selection of Applicants to Advanced Programs, Boston, April 2012

Invited speaker, ADEA meeting, Signature Series: Breaking Down the Silos – Engaging Across Disciplines and Professions, Orlando, March 2012

Invited speaker: King Saud University 14th International Dental Conference for the Saud Dental Society, various topics in endodontics, Riyadh, Saudi Arabia, Feb. 2012

CE Course: Contemporary Endodontics for the General Dentist, Creighton University, Nov. 2011.

Invited speaker: AAE program directors’ workshop. Excellence in Graduate Endodontic Education – Do I Dare Broach the Subject?, August 2011.

Invited speaker: Oregon Dental Association: Diagnosis and Emergencies in Endodontics; Legal/Ethical Issues in Clinical Endodontics, April 2011.

Invited speaker: Dallas County Dental Society: Challenges in Clinical Endodontics, April 2011.


Legal/Ethical issues in Clinical Dentistry, Loma Linda University School of Dentistry, Aug. 2009
4th Symposium of Turkish and Kosova Endodontic Societies, Invited speaker on endodontics, Antalya, April 2009.

CE: Pathways to Modern Endodontics for the General Practitioner, Dallas, Dec. 2008

Organizer/Moderator, AAE Conference on Diagnostic Terminology, Chicago, Oct. 2008

International Congress on Dental Specialties in Chile, Key Speaker on Endodontics, Santiago, June 2008.

North Texas Periodontics and Implantology Study Group, Strategic-Decision Making in Endodontics, May 2008

Jordanian Dental Association, Invited Speaker on Endodontics, Amman, March 2008

Edward Penick Endodontic Study Club, Dilemmas in Endodontics, Bethesda, March 2008

Southwest Dental Conference, Truths and Consequences of NiTi Rotary Instrumentation, Dallas, Jan. 2008

Florida Association of Endodontists, full day course on Challenges in Clinical Endodontics and Legal/Ethical Issues in Dentistry, Orlando, Nov. 2007

Gunderson Lutheran Medical Center, Contemporary Concepts in Endodontics; Legal and Ethical Issues in Clinical Practice, La Crosse WI, May 2007

Deans Conference, Competencies and Foundation Knowledge Update, San Diego, November 2006

AAE Fall Conference, Ethics: Treatment Decisions and Legal Issues, primary presenter, San Diego, November 2006


Iranian Association of Endodontists, Invited speaker, Isfahan, August 2006.

AAE Educator Workshop for Chairmen, Invited speaker on faculty recruitment, competencies, and assessment, Chicago, August 2006


ADEA, Principal Coordinator, Core Curricula in Advanced Education Programs in Dentistry: What is the Best Model? Orlando, March 2006

University of Minnesota, Strategies for Success in Clinical Endodontics, February 2006

Baylor College of Dentistry, Delta Dental, Endodontics, February 2006

UCSF, Advanced Endodontic Study Club, February 2006

Myron Brown Endodontic Study Club, San Francisco, February 2006

Baylor College of Dentistry, Pathways to Modern Endodontics, December 2005
Deans Conference, Competencies for the New General Dentist, Ft. Lauderdale, Nov. 2006

University of Minnesota, Commencement speaker for the endodontic graduate program, August 2005

Texas Dental Meeting, Nuts and Bolts of Obturation, Lecture and hands-on, May 2005

AAE Annual Meeting, Education Forum: Competencies and Foundation Knowledge in Endodontics, Dallas, April 2005

Asia Speaking Trip: Thammasat University Dental School, ChungShan Dental and Medical University, Taiwan Dental Association, Gwo-Wei Dental League; Strategic Decision-Making in Endodontics; Obturation and Its Relation to Prognosis; Bangkok, Taipei, Taichung, February 2005

CE Course: Pathways to Modern Endodontics: A Hands-On Approach (with Drs. Ron Lemon, Alex Fleury, and John Regan), Dallas, February 2005

Spanish Endodontic Society, Strategic-Decision Making in Endodontic Retreatment; Obturation: From Techniques to Outcomes, Sevilla Spain, October 2004

APICES Meeting, Risk Management in Endodontics, Boston, August 2004

Southwest Society of Endodontists, Law and Ethics in Endodontics, Colorado Springs, June 2004

Edward Penick Study Club, Legal Parameters in Endodontics, Bethesda, May 2004

AAE Meeting, Standards of Care in Endodontics (with Drs. Stephen Cohen, Steven Schwartz, and Bruce Seidberg), Anaheim, April 2004

Hocking Valley Dental Association, Endodontic Potpourri, Lancaster OH, March 2004


Utah Dental Association, Contemporary Concepts and Advances in Clinical Endodontics; Legal Odysseys and Risk Management in Clinical Dentistry; Salt Lake City, Feb. 2004.


American College of Dentists (Portland Chapter), Ethical and Legal Concepts in Clinical Dentistry, Jan. 2004


Invited Speaker: XXII Reunion Regional De Endodoncia, 2 day CE Course in Endodontics, Guadalajara, Mexico, October 2003.
AAE Meeting, Risk Management in Clinical Endodontics (with Dr. Bruce Seidberg), Tampa, May 2003.


University of Connecticut Endodontic Symposium on Success/Failure, Evidenced-Based Obturation, Oct. 2002

ADEA Symposium Coordinator/Presenter: Thinking Outside the Box: How to Recruit Faculty and How to Retain Them, San Diego, March 2002

ADEA Symposium Presenter: Advanced Education Program Directors – A Dying Breed, San Diego, March 2002


Invited Guest Speaker: Iranian Association of Endodontists, Multiple Presentations, Tehran, August 2001


American Dental Education Association Meeting, Leadership Strategies for Department Chairs (facilitator), Innovative and Strategic Models for Enhancing the Faculty Pool in Dental Education (lunch and learn), Chicago, March 2001

Invited Speaker: University of Iowa, Nonsurgical Endodontic Retreatment, ABE Board Certification, March 2001.


Invited Speaker: University of Pittsburgh, Nonsurgical Endodontic Retreatment, ABE Board Certification, February 2001

Invited Speaker: Georgia Association of Endodontists, Strategic Decision-Making in Endodontic Retreatment, Issues in Dental Education, Atlanta, February 2001


Continuing Education: Mastering Contemporary Endodontics, 2 day lecture/hands-On course (1 of 4 presenters), UT-Houston, Sept. 2000

Invited Speaker: The American Board of Endodontics; Nonsurgical Endodontic Retreatment, Nova Southeastern University College of Dental Medicine, April 2000.


Continuing Education: Problem-Solving in Endodontics, Course to Spanish-Speaking Dentists, UT-Houston, March 2000

Invited Speaker: Greater Houston Dental Meeting, Endodontic Tips and Tricks: Achieving Clinical Excellence, February 2000


Invited Speaker (all day): Contemporary Endodontics, Newark Dental Study Club, Ohio, Oct. 1999.


Invited Speaker: Decision-Making in Retreatment; Southwest Society of Endodontists, Santa Fe, July 1999.


CE Course (all day): Endodontics, East Texas Dental Society, Tyler, April 1999.


CE Course (all day): Contemporary Update in Endodontics, UMDNJ-Dental School, Orange NJ, March 1999.

CE Course (all day): Advanced Endodontics, Navy Dental Center, Bethesda, Jan. 1999.


Invited Presentation: Warm Gutta-Percha Systems; Toronto Academy of Dentistry, Toronto, Nov. 1998

Invited Presentation: Diagnostic Perplexities and Strategic Thinking in Endodontic Retreatment, Tarheel Endodontic Association, Chapel Hill NC, Oct. 1998

Invited Presentation: Geriatric Endodontics, 3rd Annual Conference on Geriatrics, The University of Michigan, Sept. 1998


Oral Presentation: Leadership Strategies of Institution Educational Change (co-presented with Dr. Paula O’ Neill), Section on Endodontics, AADS Annual Meeting, Minneapolis, March 1998.

Continuing Education Course: Problem-Solving in Endodontics I, University of Michigan, Ann Arbor, Feb. 1998.

Oral Presentation: Endodontic-Periodontic Inter-relationships, Washtenaw Dental Society, Ann Arbor, Jan. 1998


Invited Presentation: Management of Calcified Canal Systems, Northwestern University Dental School, Chicago, March 1997

Invited Presentation: Mastering the Gutta Guns, Edgar Coolidge Endodontic Study Club, Chicago, March 1997


Invited Presentation, Endodontics Overview, Washtenaw District Dental Assistant Association, Ann Arbor, Oct. 1996

Continuing Education Course: Contemporary Endodontics for the General Practitioner, Isaac Knapp District Dental Society, Fort Wayne Indiana, Oct. 1996

Continuing Education Course: Nickel Titanium in Endodontics, Participant in Endodontic Continuum, SUNY at Buffalo, Sept. 1996

Invited Presentation: Nickel Titanium in Endodontics, University of Toronto Graduate Program in Endodontics, Sept. 1996

External examiner, Postgraduate Program in Endodontics, University of Florida College of Dentistry, June 1996.


3 Day Symposium on Endodontics (lectures, demonstrations), Universida do Grande Rio, Rio de Janeiro Brazil, May 1996.

Oral Presentation: The Nickel Titanium Revolution in Endodontics; moderator on scientific panel on nickel titanium instrumentation, American Association of Endodontists Annual Meeting, Dallas, April 1996.

Invited Presentation: Tips for Tiny Canals, National Conference on Special Care Issues in Dentistry, Chicago, April 1996.


Continuing Education: Endodontics for Residents, Naval Dental Center, Bethesda, January 1996.


Continuing Education Course: Contemporary Endodontics, Pais Vasco University, Bilbao, Spain, November, 1995.

Oral Presentation: Nickel Titanium in Endodontics, University of Madrid (Complutense University), Madrid, Spain, 1995.


Continuing Education Course: Advanced Endodontics for the General Practitioner (course co-director), University of Michigan, September 1995.


Visiting Professor in Endodontics: University of Stellenbosch Faculty of Dentistry, Capetown, SA, January/February, 1995.

Continuing Education Course: Decision-Making Parameters in Clinical Endodontics, Detroit District Dental Society, Nov. 1994

Continuing Education Course: Recent Investigations with Nickel Titanium, University of Iowa, October, 1994.

Continuing Education Course: Clinical Strategies in Endodontics, University of Iowa, October, 1994.

Continuing Education Course: Contemporary Obturation Techniques, Loma Linda University, September, 1994.


Continuing Education Course: Dynamics of Problem-Solving in Endodontics, presented with Dr. JL Gutmann, Univ. of Michigan, June, 1994.


Continuing Education Course: Contemporary Obturation Techniques, Northwestern University, October 1993.


Oral Presentation: Diagnostic Challenges in Endodontics, Arlington Dental Study Club, Arlington, Texas, May, 1993


Continuing Education Course: Dynamics of Endodontic Problem Solving (Course Co-Director) Dallas Midwinter Dental Meeting, January, 1993.


Oral Presentation (all day): Modern Concepts in Endodontics, Ohio Association of Endodontists Fall Meeting, Columbus, October 30, 1991.


Table Clinic: "S-Shaped Canal Systems," Faculty Mentor for Dr. Scott Johnson, First Place, American Association of Endodontists Annual Meeting, Washington, D.C. April, 1991.


Table Clinic: "S-Shaped Canal Systems", Faculty Mentor for Dr. Scott Johnson, Dallas Midwinter Dental Meeting, January, 1991.

Limited Attendance Seminar: Obturation Systems Using Warm Gutta-Percha, American Association of Endodontists Annual Meeting, Las Vegas, April, 1990

Table Clinic: "Comparison of 3 Biomechanical Instrumentation Techniques", Faculty Mentor for Jeff Lynch, Baylor Student Clinic Day, April, 1990.


Continuing Education Course: Advance Principles of Root Canal Treatment: Injectable (Thermoplasticized) Gutta-Percha Technique, Baylor College of Dentistry, December, 1989


Continuing Education Course: Innovative Obturation Techniques Using Warm Gutta-Percha: Principles and Applications, University of Texas Health Science Center at Houston, October, 1989.

Oral Presentation: Endodontic Radicular Considerations in the Restoration of Root-Filled Teeth, University of North Carolina Graduate Program in Endodontics, Chapel Hill, October, 1989.

Oral Presentation: Biological and Clinical Evaluation of Synthetic Gutta-Percha, University of Alabama School of Dentistry, Birmingham, October, 1989.

External Examiner for the University of North Carolina Graduate Program in Endodontics, Chapel Hill, May, 1989.


Table Clinic: "The Crown-Down Pressureless Instrumentation Technique", Faculty Mentor for Kirk Coury, Baylor Student Clinic Day, April, 1988.


Oral Presentation: The Specialty of Endodontics, VTI Academy of Dental and Medical Assisting, Irving, Texas, April, 1986.


Table Clinic: "Does Bleaching Really Work?" Chicago Dental Society Midwinter Meeting, February, 1984.

Oral Presentation: Success and Failure in Endodontics, presented to the endodontic faculty and graduate students at the University of Oregon School of Dentistry, January, 1984.

Oral Presentation: General Practice Residencies in Dentistry, Alpha Omega Dental Fraternity, Chicago, February, 1983.

Table Clinic: "Diagnostic Problems in Endodontics," Chicago Dental Society Midwinter Meeting, February, 1983.

B. Committee Activities and Offices

Clinical Sciences Curriculum Task Force, Texas A&M HSC/Baylor College of Dentistry, present

NBDE (National Dental Boards) Task Force, Texas A&M HSC/Baylor College of Dentistry, present

Enterprise Risk and Opportunity Management (EROM) Committee, Texas A&M HSC/Baylor College of Dentistry, present

Clinical Affairs Committee, Baylor College of Dentistry, present

Appointments, Promotion, and Tenure Review Committee, Baylor College of Dentistry, 2006-2009; alternate member, present

Administrative Council, Baylor College of Dentistry, present

Curriculum Committee, Baylor College of Dentistry, 2003-2006


2nd Year Dental Student Evaluation and Promotion Committee, UTDB, Oct 1988 – June 2001


Director, American Board of Endodontics, 1997 – 2003
   Editor, The Diplomate ABE Newsletter, 1998 - 2003
   Chair, Written Examination Committee, 1998 – 2003
   Oral Examination Examiner, 2011- present

Chairman, Constitution Committee, American Association for Dental Research, 1999 - 2000

Secretary, Council of Sections Administrative Board, AADS, 1999 - 2000

Educational Affairs Committee, AAE
   Chairman, 2001 - 2003

Ad Hoc Committee, Standards for Advanced Education in Endodontics, AAE, 1998 - 1999

Ad Hoc Committee, Oral Health and Systemic Disease, AAE, 1999-2003

Councilor, Section on Endodontics, AADS, 1994-2000


Graduate Curriculum Committee, Michigan, 1993-1998

Dental Faculty Associates Participants Advisory Committee, Michigan, 1994-1997

Board of Directors, Michigan Association of Endodontists, 1994 - 1998

Chairman, Research and Scientific Affairs Committee, AAE, 1994-1997

Task Force, Strategic Planning for the AAE, 1994-97

Chairman, Membership Committee, American Association for Dental Research, 1992-94.


Omicron Chapter of OKU Membership Committee (Baylor) 1992 - 1993


Student Awards Committee, Baylor College of Dentistry, 1988 -1993

Instrument Committee, Baylor College of Dentistry, 1986 - 1993

Curriculum Committee, Baylor College of Dentistry, 1988 - 1993


Search Committee, Associate Dean for Academic Affairs, 1990
Scholarship Committee, Baylor College of Dentistry, 1985 - 1992

Secretary, Section of Endodontics, AADS, 1988 - 1989

Program Chairman, Section of Endodontics, AADS, 1989 - 1990

Chairman, Section of Endodontics, AADS, 1990 - 1991

Infectious Disease Control Committee, Baylor College of Dentistry, 1986- 1989

Faculty representative from Baylor College of Dentistry to Council of Faculties of the American Association of Dental Schools, third 3 year term, June 1985-1993

President of MBA class at Southern Methodist University, January 1987 - December 1988

Secretary/Treasurer of the Dallas Chapter of the American Association of Dental Research, 1988 - 1989

Vice-President of the Dallas Chapter of the American Association of Dental Research, 1989 - 1990

President of the Dallas Chapter of the American Association of Dental Research 1990-1991

Councilor of the Dallas Chapter of the American Association of Dental Research, 3-year term, December 1984 - June 1988

Member of Educational Affairs Committee of the American Association of Endodontists, 1985 - 1992

Member of Admissions Committee at Northwestern University Dental School, 1983 – 1984

C. Private Practice

Half day/week private practice : “Limited to Endodontics”, Woodhill Endodontics, Dallas TX, Jan. 2011 - present

One day/week private practice “Limited to Endodontics”, Richardson TX, Jan. 2008 – Dec. 2010

One day/week private practice “Limited to Endodontics”, Highland Park Endodontics, Dallas TX, Nov. 2004-Dec. 2007


One day/week private practice "Limited to Endodontics", Garrett and Rakusin, D.D.S., Dallas, TX, October 1985 - June 1993.


One day/week intramural private practice of general dentistry at the University of Mississippi School of Dentistry, 1979-1980.
10. PUBLICATIONS

A. Peer-reviewed journals


Pileggi R, Glickman GN. A cost-effective simulation curriculum in preclinical endodontics. European J. Dent. Educ 8:12-17, 2004


Olson K, He J, Glickman GN, Priour P, Spears R. The effects of neuropeptide Y on periapical lesion progression in mice. J Endo 2010 (accepted for publication)


Rutherford B, Glickman GN. Bone morphogenetic protein and reparative dentinogenesis. JADA (in preparation)

B. Non-peer reviewed journals


C. Books / Chapters in Books


D. Abstracts


E. Teaching Manuals


Glickman GN. Preclinical Endodontics. 5th Ed. The University of Michigan Dental Publications. 1996.
HE, JIANING (Jenny), D.M.D., M.D.S, Ph.D.

6517 Bermuda Dunes Drive
Plano, TX 75093
jhe@bcd.tamhsc.edu
(214) 828-8473 (work)
(972) 747-9886 (home)
(214) 874-4507 (facsimile)

Teaching Experience

January 2013 – present
Department of Endodontic
Baylor College of Dentistry
Dallas, TX
• Clinical Associate Professor

September 2009 – December 2012
Department of Endodontics
Baylor College of Dentistry
Dallas, TX
• Tenured Associate Professor

October 2003 – August 2009
Department of Endodontics
Baylor College of Dentistry
Dallas, TX
• Assistant Professor

Practice Experience

June 2011 – present
North Dallas Endodontics

Highland Park Endodontics
Endodontic Specialists of Rockwall

Education

July 2000 – October 2003
Department of Endodontology
University of Connecticut Health Center
School of Dental Medicine
Farmington, CT
• Certificate in Endodontics

August 1997 – October 2003
Department of Biostructure and Function
Oral Biology Program
University of Connecticut Health Center
Farmington, CT
• Ph.D.

September 1989 – June 1997
School of Dental Medicine
West China University of Medical Sciences
Chengdu, China
• D.M.D., M.D.S.
Board Certification

April 2011  Board certified by American Board of Endodontics

Honors and Awards

2012  Inducted into the Fellowship of American College of Dentistry

2008  Clinical Faculty Research Award
      Baylor College of Dentistry

2005  Faculty Merit Award
      Baylor College of Dentistry

2003  First place in graduate student oral research presentation
      American Association of Endodontics annual session

Research Interests

- Endodontic treatment outcome
- Tissue response to dental procedures and materials in the pulp and periradicular region
- The mechanisms of the tissue-regenerative capacity of Emdogain
- Tissue compatibility of Mineral Trioxide Aggregate (MTA) and Portland Cement (PC)

Funded research activities

Current:
American Association of Endodontists Foundation
A comparative outcome analysis of endodontic retreatment and single implant–supported restoration
Role: Principle investigator
January 1, 2008 – December 31, 2013
Total Direct cost: $468,349

Completed:
Texas A&M University Health Science Center Office of Vice President Research Development Grant
Inflammatory cytokine expression and osteoclastogenesis in COX-2 deficient cells
Role: Principle investigator

Baylor College of Dentistry Faculty Intramural Grant FY04-5
Molecular mechanisms of tissue repair response to pulp capping
Role: Principle investigator
American Association of Endodontists Foundation Research Grant
The effect of COX-2 deficiency on inflammatory cytokine expression and osteoclast formation in response to lipopolysaccharide and root canal obturation materials
Role: Principle investigator

NIH/NIAMS
Pathogenesis and Prevention of Osteoporosis, subprojects 3 and 4
Role: Graduate student

NIH/NIDCR
Identification of Enamel Matrix Derivative (EMD) Regulated Genes
Role: Graduate Student

Professional Membership and activities

- American Association of Endodontists (active)
  - Member of the Research and Scientific Affairs committee
- American Dental Association (active)
- American Dental Education Association (active)
- DFW endodontic society (active)
  - President (2013)
  - Secretary/Treasurer (2012)
- Dallas Section of American Association of Dental Research (active)
  - Secretary/Treasurer (2005-2006)
  - Vice President (2006-2007)
  - President (2008)
- Dallas Asian Dental Association
  - Chair, Continuing Education Committee (2004-2005)
  - President (2005-2006)
- American Society of Bone and Mineral Research (inactive)
- Served as a member of the editorial board member and a scientific content reviewer for the endodontic section of the journal Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology and Endodontics (2003-2011)
- Serve as a scientific content reviewer for Journal of Endodontics
- Served as a judge for graduate student research presentation during the 2005 and 2006 American Association of Endodontics annual session
## Invited presentations:

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<tr>
<th>Year</th>
<th>Invited by</th>
<th>Presentation title</th>
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<tr>
<td>2013</td>
<td>Congreso Nacional De Odontalgia of Nicaragua</td>
<td>Principles and clinical interventions for promoting periradicular bone regeneration A comparative outcome analysis of endodontic retreatment and single implant restorations</td>
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<tr>
<td>2009</td>
<td>Southern California Academy of Endodontics</td>
<td>Principles and clinical interventions for promoting periradicular bone regeneration</td>
</tr>
<tr>
<td>2009</td>
<td>University of California at Los Angeles</td>
<td>Root resorption: Mechanism, pathogenesis and clinical implications</td>
</tr>
<tr>
<td>2009</td>
<td>University of Toronto</td>
<td>Principles and clinical interventions for promoting periradicular bone regeneration A comparative outcome analysis of endodontic retreatment and single implant restorations</td>
</tr>
<tr>
<td>2007</td>
<td>Baylor University Medical Center, Dallas, TX</td>
<td>“Oral Health Considerations during cancer treatment”</td>
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<tr>
<td>2007</td>
<td>International Symposium on Endodontic Biology, Farmington, CT</td>
<td>“Clinical interventions for promoting periradicular bone regeneration”</td>
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<td>2006</td>
<td>Baylor University Medical Center, Dallas, TX</td>
<td>“Oral Health Considerations during cancer treatment”</td>
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<td>2005</td>
<td>Dallas-AADR/IADR, Dallas, TX</td>
<td>“COX-2 in inflammatory bone resorption – does it still matter?”</td>
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<td>2005</td>
<td>University of Connecticut Health Center, Farmington, CT</td>
<td>“How to conduct research in Endodontics”</td>
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<td>2004</td>
<td>University of Connecticut Health Center, Farmington, CT</td>
<td>“Molecular biology techniques in endodontic research”</td>
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## Publications:


28. **He J., Safaian G., Zhu Q.** Analysis of gene expression in bone cells regulated by enamel matrix derivative using microarrays. AADR/IADR annual meeting, 2003 (Oral presentation)


APPENDIX D
FACULTY RECORD

A. Name: Bob Hutchins
B. Rank: Professor
C. Education:
   1978 to 1983 Tulane University, New Orleans, Louisiana, Ph.D. in Anatomy
   1976 to 1978 Eastern Illinois University, Charleston, Illinois, Science
   1973 to 1975 Parkland College, Champaign, Illinois, Science
   1968 to 1971 Eastern Illinois University, Charleston, Illinois, B.S. in Business
   1967 to 1968 Parkland College, Champaign, Illinois

D. Professional Appointments:
   Professor, Department of Biomedical Sciences, Texas A&M Health Science Center Baylor College of Dentistry, Dallas, Texas, 2011 to present.
   Visiting Professor, Department of Growth, Development, and Structure at Southern Illinois University of Dental Medicine, Alton, IL, 2010 and 2011.
   Associate Professor, Department of Biomedical Sciences, Texas A&M Health Science Center Baylor College of Dentistry, Dallas, Texas, 1997 to 2011.
   Associate Professor, Department of Biomedical Sciences, Texas A&M Health Science Center Baylor College of Dentistry, Dallas, Texas, 1996 to 1997.
   Associate Professor, Department of Biomedical Sciences, Baylor College of Dentistry, Dallas, Texas, 1991 to 1996 (tenured).
   Assistant Professor, Department of Anatomy, Baylor College of Dentistry, Dallas, Texas, 1985-1991.
   Postdoctoral Fellow, National Research Service Award, N.E.I. sponsored, F32 EYO5703, Department of Anatomy, Louisiana State University, New Orleans, Louisiana, 1983 to 1985.
   Research Associate, Department of Anatomy, Louisiana State University, New Orleans, Louisiana, 1982 to 1983.
E. Teaching Performance:

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<td>Sensory Neurobiology &amp; Pain</td>
<td>Graduate</td>
<td>Lecture/Seminar</td>
<td>1.5</td>
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Nutrition Residency Program Lecture ? 12
 Neuroanatomy/Gross Anatomy Training Program 2
 Faculty EBD Training Lecture/Seminar 12

Summary for year: 2013 Number of Hours

1. Lectures taught 22+8+4.5+
2. Laboratories taught 0
3. Clinics taught N/A
4. Seminars taught 8+19.5
*Course Director

Year: 2012

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Summary for year: 2012 Number of Hours

1. Lectures taught 8+22+15+1+27+8+2+4.5=87.5
2. Laboratories taught  93
3. Clinics taught  N/A
4. Seminars taught  6+4+6+19.5
*Course Director

<table>
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Summer Predental Enrichment Program

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Faculty EBD Training

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Summary for year: 2011  Number of Hours

1. Lectures taught  8+8+4.5
2. Laboratories taught  93
3. Clinics taught  N/A
4. Seminars taught  6+4++19.5
*Course Director
* Taught at Southern Illinois University Dental School

Year: 2010

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Summary for year: 2010  Number of Hours
1. Lectures taught 63  
2. Laboratories taught 93  
3. Clinics taught N/A  
4. Seminars taught 3  
*Course Director  
* Taught at Southern Illinois University Dental School

### Year: 2009

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Taught at Southern Illinois University Dental School

*5263  Sensory Neurobiology & Pain

Graduate Course  Lecture  1.5  10

† Tutoring  108 hours

### Summary for year: 2009  Number of Hours

1. Lectures taught 76  
2. Laboratories taught 93  
3. Clinics taught N/A  
4. Seminars taught 0  
*Course Director

### Year: 2008

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### Summary for year: 2008  Number of Hours

1. Lectures taught 47  
2. Laboratories taught 111  
3. Clinics taught N/A  
4. Seminars taught 0  
*Course Director

Additional Hours

† Tutoring  121 hours

---

4 of 36
### Year: 2007

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<th>Course #</th>
<th>Name</th>
<th>Level</th>
<th>Type</th>
<th>Credit hours</th>
<th># Students</th>
</tr>
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<tbody>
<tr>
<td>*6640</td>
<td>Gross Anatomy†</td>
<td>Dental course</td>
<td>Lecture &amp; Laboratory</td>
<td>6</td>
<td>100</td>
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<tr>
<td>*5204</td>
<td>Functional Head &amp; Neck Anatomy</td>
<td>Graduate Course</td>
<td>Lecture</td>
<td>1.5</td>
<td>18</td>
</tr>
<tr>
<td>*5263</td>
<td>Sensory Neurobiology &amp; Pain</td>
<td>Graduate Course</td>
<td>Lecture</td>
<td>1.5</td>
<td>8</td>
</tr>
<tr>
<td>*6770</td>
<td>Neuroscience</td>
<td>Dental course</td>
<td>Lecture</td>
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<tr>
<td>3250</td>
<td>Biomed, Sciences</td>
<td>Hygiene course</td>
<td>Lecture</td>
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</tbody>
</table>

**Summary for year: 2007**  
Number of Hours

1. Lectures taught  
2. Laboratories taught  
3. Clinics taught  
4. Seminars taught  
5. Course Director  
6. Tutoring hours  

### Year: 2006

<table>
<thead>
<tr>
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<th>Type</th>
<th>Credit hours</th>
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</tr>
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<tr>
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<td>*5V04</td>
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<tr>
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<td>30</td>
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<td>5V40</td>
<td>Craniofacial Growth</td>
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<td>Lecture</td>
<td>2</td>
<td>12</td>
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</table>

**Summary for year: 2006**  
Number of Hours

1. Lectures taught  
2. Laboratories taught  
3. Clinics taught  
4. Seminars taught  
5. Course Director

### Year: 2005

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Level</th>
<th>Type</th>
<th>Credit hours</th>
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</tr>
</thead>
<tbody>
<tr>
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<td>95</td>
</tr>
<tr>
<td>*5V04</td>
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<td>Graduate Course</td>
<td>Lecture</td>
<td>1.5</td>
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<td>Hygiene course</td>
<td>Lecture</td>
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<td>30</td>
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<tr>
<td>5V40</td>
<td>Craniofacial Growth</td>
<td>Graduate Course</td>
<td>Lecture</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>*5263</td>
<td>Sensory Neurobiology</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

5 of 36
& Pain Graduate Course Lecture 1.5 11

**Summary for year: 2005** Number of Hours

1. Lectures taught 82
2. Laboratories taught 111
3. Clinics taught 0
4. Seminars taught 8
*Course Director

**Year: 2004**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Level</th>
<th>Type</th>
<th>Credit hours</th>
<th># Students</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Lecture</td>
<td>1.5</td>
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<td>Hygiene course</td>
<td>Lecture</td>
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</table>

**Summary for year: 2004** Number of Hours

1. Lectures taught 72
2. Laboratories taught 111
3. Clinics taught 0
4. Seminars taught 0
*Course Director

**Year: 2003**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Level</th>
<th>Type</th>
<th>Credit hours</th>
<th># Students</th>
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<tbody>
<tr>
<td>6640</td>
<td>Gross Anatomy</td>
<td>Dental course</td>
<td>Lecture &amp; Laboratory</td>
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<td>95</td>
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<tr>
<td>*5V04</td>
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<td>Graduate Course</td>
<td>Lecture</td>
<td>1.5</td>
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<tr>
<td>*6770</td>
<td>Neuroscience</td>
<td>Dental course</td>
<td>Lecture</td>
<td>1.5</td>
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<tr>
<td>3250</td>
<td>Biomed, Sciences</td>
<td>Hygiene course</td>
<td>Lecture</td>
<td>5</td>
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</table>

**Summary for year: 2003** Number of Hours

1. Lectures taught 72
2. Laboratories taught 111
3. Clinics taught 0
4. Seminars taught 0
*Course Director

**Year: 2002**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Level</th>
<th>Type</th>
<th>Credit hours</th>
<th># Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>6640</td>
<td>Gross Anatomy</td>
<td>Dental course</td>
<td>Lecture &amp; Laboratory</td>
<td>6</td>
<td>95</td>
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</tbody>
</table>
*5V04  Functional Head & Neck Anatomy Graduate Course  Lecture  1.5  15
6770  Neuroscience Dental course  Lecture  1.5  92
3250  Biomed, Sciences Hygiene course  Lecture  5  30
*5263  Sensory Neurobiology & Pain Graduate Course  Lecture  1.5  9

Summary for year: 2002  Number of Hours

1. Lectures taught  38
2. Laboratories taught  111
3. Clinics taught  0
4. Seminars taught  8
* Course Director

Previous Teaching Experience:

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<tr>
<th>Course</th>
<th>Year</th>
<th>Lect/Labs</th>
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<tr>
<td>*Gross Anatomy 6640</td>
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<td>14/111</td>
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<td>*Functional Head and Neck Anatomy 5204</td>
<td>2001 to present</td>
<td>10/0</td>
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<tr>
<td>*Sensory Neurobiology and Pain 5263</td>
<td>1998 to present</td>
<td>Seminar Format</td>
</tr>
<tr>
<td>*Advanced Neuroscience 5360</td>
<td>1997 to present</td>
<td>Seminar Format</td>
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<tr>
<td>*Neuroscience 6770</td>
<td>2004 to present</td>
<td>21/0</td>
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<tr>
<td>BMS integrated Hygiene 3250</td>
<td>2006 to present</td>
<td>12/1</td>
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<tr>
<td>Faculty Computer Workshops</td>
<td>2006 to present</td>
<td>10 (so far in 2007)</td>
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<td>Craniofacial Growth BMS 5269</td>
<td>2005 to 2006</td>
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<tr>
<td>BMS integrated Hygiene 3250</td>
<td>2003 to 2005</td>
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<td>Neuroscience 6770</td>
<td>1989 to 2003</td>
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<tr>
<td>Gross Anatomy 6640</td>
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<td>Neuroscience 6770 summer remediation</td>
<td>2004 to 2005</td>
<td>Personal Tutoring</td>
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<td>SAEP (summer enrichment program)</td>
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<td>Graduate Histology 5411</td>
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<td>Craniofacial Biology 5304</td>
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<td>Applied Head and Neck Anatomy SV15</td>
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<tr>
<td>Dental Hygiene 324</td>
<td>1985 to 1993</td>
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<tr>
<td>Neuroanatomy 6760</td>
<td>1985 to 1988</td>
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<tr>
<td>Dental Hygiene 325</td>
<td>1987 to 1989</td>
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</table>

* Course Director

Lecturer,
Department of Anatomy, Tulane University School of Medicine, New Orleans, Louisiana

Gross Anatomy for Occupational Therapists  1980 to 1982
Histology 601 for Medical  1979 to 1981

Lab Instructor,
Department of Anatomy, Tulane University School of Medicine, New Orleans, Louisiana
Neuroscience 602 for Medical Students 1979 and 1982
Histology 601 for Medical Students 1979 to 1981
Gross Anatomy 609 for Medical Students 1980

Teaching Assistant,
Department of Anatomy, Tulane University School of Medicine, New Orleans, Louisiana
Histology 601 for Medical Students 1979 and 1981
Neuroscience 602 for Medical Students 1980

3. Course Directorships

6640 Gross Anatomy 1993-1994
6770 Neuroscience 1995-1998
5360 Advanced Neuroscience 1997-2013
6640 Gross Anatomy 2005-2011
5V04 Functional Head & Neck Anatomy 2001-2013
5263 Sensory Neurobiology & Pain 1998-2013
6770 Neuroscience 2004-2013

4. Curriculum and/or Course Development

2006 Coordinated the merger of Cell & Molecular Biology with Biochemistry into the Cell & Molecular, & Biochemistry course with fewer overall lectures and exams

2008 Developed Hybrid approach to teaching the Graduate Functional Head & Neck course

2008 Developed Peer Teaching for Gross Anatomy Laboratory Dissection

2009 Assisted in the Development of a PBL, case-based course: Integrative Sciences 6570

2011-2012 Assisted in the Development of a PBL, case-based course: Integrative Sciences 7410

5. Teaching Materials Developed


2002 Neuroscience Board Exam Pt I Review with animations


2004 Oversaw digitization of all released National Dental Board Reviews, part I after receiving copyright permission from the ADA

2004 Animated illustrations of the Human Autonomic System to the Head: posted on the American Association of Anatomists web site
http://www.anatomy.org/Education/virtual_organ_image_library/default.asp

2011  Head and neck dissections: posted on the American Association of Anatomists web site

2012  Developed digital-assisted Dissection Laboratory

Gross Anatomy Modules:

2008  Temporal Bone and Middle Ear Illustrated with animations
2008  Animated illustrations of the Human Autonomic System to the Head
2008  Animated Cranial nerves
2009  Developed with Austin Gray (dent. Stud.) 20 self-testing modules in Gross Anatomy
2009  Animated Sensory Innervation to the Head and Neck

6.  Continuing Education Courses Given (state your role in the course and the number of direct contact hours teaching)

Summer EBD Faculty Training                  Co-Director                  ?     8

7.  Student/Trainee Supervision

a.  Fellows/Postdoctoral/Residents/Visiting Scientist

    None

b.  Thesis/Dissertation Committees

1)  Chair/Mentor  2000-2002

    Robert Spears:  Project:  Mechanisms of cytokine functions in a model of rat TMJ inflammation

2)  Member  1998-2005


3)  Member  2001-2004

    Ana Marie Wintergerst:  Project:  Mastication variability
    Joshika Kanabar:  Project:  Therapeutic disocclusion and chewing kinematics.

c.  Predoctoral Dental/Medical (non-degreed) and Professional (other than listed in 7a)
Project: Accessory innervation of the mandibular teeth.
Mentor

Special Awards: 1987 First Place; Baylor's Annual Student Clinic Day
1988 First Place; Student Research Competition, IADR/AADR Dallas Chapter
1988 First Place Caulk Award; IADR/AADR Meeting, Montreal, Canada

1986-1988  Todd Svane,
Project: Fascicular characteristics of the human inferior alveolar and great auricular nerves.

Project: The central mechanisms of the jaw opening reflex in the cat.
Mentor

Special Award: NIDR Travel Fellowship, grant awarded for presentation of data at the 1989 IADR meeting in Dublin, Ireland.

Project: The central projecting pathways of the C2 dorsal root ganglion in the cat.
Mentor

Special Award: 1991 First Place; Student Research Competition, IADR/AADR Dallas Chapter.

1990-1991  Pam Kick
Project: Frequency of the C1 dorsal root ganglion in the cat.
Mentor

Special Award: 1991 Third Place; Student Research Competition, IADR/AADR Dallas Chapter.

1990-1993  K. Hunter
Project: Craniofacial morphological characteristics in patients with spinal muscular atrophy.

1991-1992  Pam Kick
Project: Central projections of the C1 primary afferents in the cat.
Mentor

Special Awards: 1991 NIDR Training Fellowship.

AADR Travel Fellowship, grant awarded for presentation of data at the 1992 IADR meeting in Glasgow, Scotland.
1992-1993 Pam Kick
Project: Central projections of the C3 primary afferents in the cat. Mentor

1992-1993 Diedra Denton
Project: Three-dimensional reconstruction of temporomandibular joint innervation. Mentor

Special Award: 1992 NIDR training Fellowship.

Project: The effects of capsaicin on the innervation of the rat temporomandibular joint. Mentor

1992-1994 Matt Quintero
Project: The effects of neurotrophic factors (BDNF and NT-3) and neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) on calbindin-D28k gene expression.

1994-1996 Jim Douthitt
Project: Management of marginal alveolar bone defects during periradicular surgery using the Guidor bioresorbable matrix barrier.

1995-1996 Jim Evans
Project: The role of the dorsomedial hypothalamic nucleus on the intake of an imbalanced amino acid diet.

1996-1997 Roger Johnson
Project: Behavioral correlates with TMJ inflammation. Mentor

1996-1997 Jeff Siebert
Project: Correlation of Substance P levels between TMJ and knee joint tissues. Mentor

Special Awards: 1992 NIDR training Fellowship.

1991 Fourth Place; Student Research Competition, IADR/AADR, Dallas Chapter.

1997-1998 Debbie Bush
Project: Inappropriate use and associated hospital charges of pediatric emergency room visits for nontraumatic preventable dental disease.

1997-1998 Kellie Ettelbrick
Project: A database retrieval model for determining hospital charges associated with pediatric nontraumatic preventable dental disease.

1998-1999 Dave Gruber
Project: The effects of evening primrose oil on NGF and CGRP in a diabetic rat model..


2001-2002  Hemandra Patel  Project: Neurogenic plasticity during chronic inflammation in the rat TMJ.

Special Awards:  2001 NIDCR training Fellowship.

2001-2002  Nick Ridder  Project: Condylar cartilage degradation in the inflamed TMJ.

Special Awards:  2001 NIDCR training Fellowship.

2002-2003  Nick Ridder  Project: Neurogenic plasticity during chronic inflammation in the rat TMJ.

Special Awards:  2001 NIDCR training Fellowship.


2003-2004  Sumita Chakraborti  Project: Gender analysis of estrogen receptor isoforms in the rat TMJ.

2004-2005  Kip Anderson  Project: Estrogen modulation of VR1 receptors in Rat TMJ.

Special Awards:  2004 NIDCR training Fellowship.

2004-2005  Chris Hawkins  Project: Co-localization of the VR1 and Estrogen Receptors in the Rat TMJ.

Special Awards:  2004 NIDCR training Fellowship.

2005-2006  Brandon Greer  Project: Gender differences in TMJ estrogen alpha levels.

2007-2008  Student Mentoring through the Great Expectations program: Derrick Baca, Wes Bransford, Rein Dickerson, Elizabeth Garza, Jessica Mauricio, Ernesto Prida, Stephen Sperry, Tyler Tate

2008-2009  Student Mentoring through the Great Expectations program:  Dylan Everett, Michael Goodwin, Jane Lee, Jennifer Mai, Megan Miller, Radina Petkova, Lindsay Smith, William Stanley, Scott Witte

2009-2010  Student Mentoring through the Great Expectations program:  Christina Bonno, Sarah Delagarza, Monica Goff, LaBreia Mosley, Sital Patel, Kevin Piazza, Rosanna Puente, Alejandra Suarez, Ryan Wilkinson

2010-2011  Student Mentoring through the Great Expectations program:  John Bonds, Aimee Chung, Nigel Kasali, Brandon Luckett, Rishad Merchant, Justin Reed, Daniel Szalay

2011-2012  Student Mentoring through the Great Expectations program:  Abrefi-Kete Asare; Brittany De Haan; Blake Hemphill; Caitlin Loyd; Scott Sheppard; Karen Shovak; Lindsay Tilger

2012013  Student Mentoring through the Great Expectations program:

d. Undergraduate
   None

e. Graduate Student Supervision (other than 7a and 7b)

2007 to 2011  Jyoti Puri  Project:  The Neuropathology of Pain, System to Cellular responses, committee member

f. Supervisor of Practicum
   None

g. Other
   None

8. Graduate Faculty Membership

1986 to 1996  Baylor University, Waco, Texas
              Baylor College of Dentistry, Dallas, Texas

1996 to 1999  Baylor College of Dentistry, a member of the Texas A&M University Systems

1999 to present  Texas A&M University System Health Science Center, Baylor College of Dentistry

9. Teaching Awards
2011 ADEA/Colgate-Palmolive Excellence in Teaching Award

2011 BCD Distinguished Teaching Award

*Nominated for Teacher of Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Program</th>
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<tbody>
<tr>
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10. Academic counseling

<table>
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<td>2004</td>
<td>Summer remediation course in Neuroscience</td>
</tr>
<tr>
<td>2005</td>
<td>Summer remediation course in Neuroscience</td>
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</tbody>
</table>

*Every year are numerous hours of counseling/tutoring for Gross Anatomy & Neuroscience (source: dental students-See Teaching Performance)

11. Teaching Consultantships

2008 Southern Illinois University, consultant for restructuring their Dental Neuroscience course

12. Other Indices of Teaching

a. Workshops (developed and implemented)

2006
Computer workshop-basic animation, presented to BCD faculty December

2007
Computer workshop-basic animation, presented to BCD faculty May
Computer workshop-integrating images, presented to BCD faculty April
Computer workshop-advanced animation, multiple image motion, presented to BCD faculty May
Computer workshop-images, presented to BCD faculty July 18
Computer workshop-custom project assistance, presented to BCD faculty July 19
Computer workshop-music, sound, video, presented to BCD faculty July 23
Computer workshop-PowerPoint graphs, presented to BCD faculty July 25
Computer workshop-blackboard, presented to BCD faculty July 25
Computer workshop-powerpoint: links and buttons, presented to BCD faculty July 30
Computer workshop-excel: setting up & maintaining grades, presented to BCD faculty Aug. 8, 29
2008
Computer workshop-navigating microsoft 2007, presented to BCD faculty June 25
Computer workshop-basic images, presented to BCD faculty July 2
Computer workshop-putting sound into powerpoint, presented to BCD faculty July 14
Computer workshop-basic animations in powerpoint, presented to BCD faculty July 22
Computer workshop-how to make a syllabus interactive, presented to BCD faculty July 23
Computer workshop-music and video in powerpoint, presented to BCD faculty August 8
Computer workshop-maintaining grades in blackboard, presented to BCD faculty August 13
Computer workshop- audience response system (clickers), presented to BCD faculty August 15

2009
Computer workshop- audience response system (clickers), presented to Dent Hyg faculty Aug 6

b. 2007 Adoption of Baylor’s Basic Gross Anatomy course structure at UMDNJ, Dr. Vasan Nagaswami, course director.

c. 2007 Adoption of Camtasia for the development of teaching modules. These modules provide on-demand information for students in the basic sciences. Camtasia software is being distributed to all our dept. faculty and methods of use are being taught at the same time.

d. 2007 Piloting of Audience Response System (also known as clickers) to deliver lectures in a less intimidating and interactive manner.

e. 2007 Adoption of audio recording for our lectures and dissemination on the intranet for on-demand use by our students. This recommendation was introduced to our faculty and has been successfully used by the majority of our basic science courses.

f. 2006-present Faculty Mentor to Diane Flint, DDS

g. 2008-Piloted peer teaching methods in the Gross Anatomy Laboratory.

h. 2008 to present Faculty Mentor to Susan McGuire, DDS

i. 2008 Participated in ADEA’s Scholarship of Teaching and Learning Coursework

j. 2009 Participated in ADEA’s Scholarship of Teaching and Learning Coursework
   • ADEA competencies including TMD in the predoctoral curriculum
   • Redefining your School’s Scholarship Expectations
   • Promoting Critical Thinking
   • Using Humor, Media, and Gaming to Enhance Clinical Learning
   • Use of Technology to Enhance Teaching
   • Assessment of Student Learning & Your Teaching Effectiveness

k. 2010 Participated in ADEA’s Scholarship of Teaching and Learning Coursework
• New Models for Biomedical Sciences Instruction: Assessing Curricula, Teaching Approaches, and Student Competencies
• ADEA SoTLfest: Using Faculty Assessment to Foster the Scholarship of Teaching and Learning
• Portraits of Learning: Creating E-Portfolios for Assessment
• Gaming: Encourage Learning During Examination

F. Research and Scholarly Activities:

1. This laboratory has been focusing on questions concerning pain and inflammation from the trigeminal system, more specifically the temporomandibular joint. These questions concern the contribution of nociceptors to pain and inflammation, i.e., neurogenic pain and inflammation. In order to look at inflammation, we have been using the irritant, complete Freund’s adjuvant within the rat TMJ, which results in acute and chronic inflammation. Within this model, I am interested in how the primary neuron responds during different inflammatory conditions. This includes three areas of the neuron, the peripheral terminals, the cell body, and the central terminals. The technique that is currently being employed to look at these primary neurons is the superfusion technique, which is an in vitro method to analyze the release of pro-inflammatory peptides when stimulated by known irritants. For example, the capsaicin-sensitive neurons, a subset of nociceptors, are being characterized for the first time in a joint for their release of neurogenic peptides. The laboratory has also been looking at questions concerning the potential pain and inflammatory mechanisms that are affected by varying levels of estrogen. We have been analyzing estrogen receptor changes during inflammation using western blot, PCR, and immunohistochemistry techniques. Therefore, it is my goal to identify and analyze the mechanisms of the primary nociceptor during varying conditions of pain and inflammation.

As the Director of Teaching Innovations, I have been asked to explore ways in which the department can engage in educational research and develop or bring to the classroom new and engaging methods for our students. I have started this with the design of one study on learning using interactive software. New methods being brought to the classroom include the use of Camtasia, Audacity, and Audience Response Systems, all of which are in varying stages of use.

Innovative learning has also resulted in the development and publication of an interactive color atlas of the human skull in 2007 (www.humanskullatlas.com). The development of this atlas is the culmination of nearly 10 years of work beginning with the collection of high resolution digital images and ending with the assimilation of the software with the student aided design. As an offshoot of this type of work, additional animated or elearning modules have been developed in conjunction with some of my colleagues as an adjunct to our student’s learning resources.

2. Invited Presentations


October 1992, "The role of the superior colliculus in the extrageniculate visual pathways." Participated and lectured in the graduate course "Perception" at the University of Texas at Dallas.

January 20, 1993, "Retinotopic organization of the Lateral Posterior Complex of Cats." presented to the vision research group, Department of Ophthalmology, Southwestern University Medical School, Dallas, Texas.

February 1994, “Subcortical visual structures and their role in vision.” University of Texas at Dallas.

November 1998, “Models of temporomandibular joint inflammation" presented at a symposium on temporomandibular joint disorders at Baylor College of Dentistry, Dallas, TX.

January 1999, "A model of chronic inflammation in the rat TMJ" presented at the Texas Pain Symposium at the University of Texas Health Science Center, San Antonio, TX.


June 2006, presented at the University of Queensland, Brisbane, Queensland, Australia.

November 2007, “Clickers, How we can enhance our teaching at Baylor College of Dentistry”. Mini-Retreat, Baylor College of Dentistry, Dallas, TX.


February 2009, “To Click or Not To Click, That is the Question”, presented to the HSC 2 day Faculty Development Workshop.


January 2010, Hutchins, B., “Camtasia, Does it really matter if we use it?”, presented at the Baylor College of Dentistry Faculty Retreat.


3. Non-invited talks without published abstracts

October 2009, “How Dental Students are Taught Anatomy and Neuroanatomy: Survey Results from North American Dental School Faculty”, presented to The Ohio State University Faculty Teaching Scholars by Gould, D.J., Lambert, H.W., Hutchins, B.

4. Grants

a. Funded

1985-1986 Baylor College of Dentistry Research Funds: The retinotopic organization of the lateral posterior complex of the cat. $5,387.00.

1986 Baylor College of Dentistry Research Funds: Equipment grant (co-investigator). $3,154.00.

1986-1986 Baylor College of Dentistry Research Funds: The Ultrastructural analysis of retinal and visual cortical integration in the pretectum. $3,800.


R29 EY06977-04, B. Hutchins, principal investigator, $73,200.


R29 EYO6977-05, B. Hutchins, principal investigator, $84,300.

R29 EYO6977-06, B. Hutchins, principal investigator.


1996-1998 Center for Craniofacial Research and Diagnosis: The effects of adjuvant induced inflammation on the rat TMJ. B. Hutchins, principal investigator, $10,000.


2003-2004 Rapid estrogen modulation of VR1 nociceptors in rat TMJ BCD/bohf 2 yr, Principal Investigator, $5814

2004-2005 Sex steroids and TMJ Pain. R01 DE016059, PI L.L. Bellinger, Collaborator B. Hutchins @ 10%, July 2004-June 2008; direct costs $1,000,000, indirect costs $544,000

2005-2006 Sex steroids and TMJ Pain. R01 DE016059, PI L.L. Bellinger, Collaborator B. Hutchins @ 10%, July 2004-June 2008; direct costs $1,000,000, indirect costs $544,000

2006-2007 Sex steroids and TMJ Pain. R01 DE016059, PI L.L. Bellinger, Collaborator B. Hutchins @ 10%, July 2004-June 2008; direct costs $1,000,000, indirect costs $544,000

2007-2008 Sex steroids and TMJ Pain. R01 DE016059, PI L.L. Bellinger, Collaborator B. Hutchins @ 10%, July 2004-June 2008; direct costs $1,000,000, indirect costs $544,000
2008-2010  Sex steroids and TMJ Pain. R01 DE016059, PI L.L. Bellinger, Collaborator B. Hutchins @ 10%, July 2004-June 2008; direct costs $1,000,000, indirect costs $544,000

2009-2010  ADEA Council of Sections Project Pool, The Basic Science Survey Series for Dentistry, Co-PI, B. Hutchins, $5,350


b. Pending

None

c. Not Funded

2002, Estrogen modulation of TMJ nociceptors, R01 PI  P. Kramer, Co-PI  B. Hutchins, Unscored

2002, Sex steroids, corticosterone and TMJ inflammation.” NIH R01, PI L.L. Bellinger, Collaborator  B. Hutchins, 5%

2004, Control of expression of neuropeptides and NP receptors in TMJ PI  J.C. Kusek Co-investigator  B. Hutchins, Oral and Maxillofacial Surgery, Not Funded

2005, Validating a Behavioral Model of Mouse TMJ Pain. PI  B. Hutchins, HSC Research Funds 100%

2005, Sex Steroids, Gender, and Pain during Perimenopause  R01 NIDCR PI  R. Spears, Collaborator  B. Hutchins, 20%

2006, R01DE016411, Non-invasive behavior assay for deep persistent pain, PI  P. Kramer, Co-PI  B. Hutchins, Unscored

2007, R01DE01881, Inflammatory TMJ Pain Brainstem Mechanisms, PI  P. Kramer, Collaborator  B. Hutchins, Unscored

2007  R01 DE018537, Role of NGF in Nociception of the TMJ region, PI  P. Kramer, Collaborator  B. Hutchins, Score 253

5. Manuscript Review

   a. Journals Refereed; Book/Chapter
Ad Hoc Reviewer for Neuroscience
Ad Hoc Reviewer for Archives of Oral Biology
Ad Hoc Reviewer for Journal of Dental Research
Ad Hoc Reviewer for Neuroendocrinology
Ad Hoc Reviewer for Oral Diseases
Ad Hoc Reviewer for Osteoarthritis and Cartilage
Reviewer for best Dental Education manuscript for “Transfer of Advances into the Sciences”, J. Dent. Ed., 2001
Ad Hoc Reviewer for Journal of Dental Education
Reviewed: Dental Neuroanatomy, J. Brueckner, Univ. of Kentucky Medical Center.
Reviewed: Trigeminal Nerve Overview with interactive lesion case studies, J. Brueckner and T. Dolan, Univ. of Kentucky Medical Center.
Reviewed: Humanity’s Mirror, 150 years of Anatomy in Melbourne by Ross L. Jones, Haddington Press, at the request of the American Anatomy Assoc. 2007
b. Editorial Boards

None
c. Editorship

None

6. Grant Reviews

1987 Ad Hoc Reviewer for the National Institute of Health
1989-1992 Ad Hoc Reviewer for the National Science Foundation

7. Professional and Scholarly Societies

American Association of Anatomists
American Association of Clinical Anatomists
International Society for Technology in Education
Society for Neuroscience
American Dental Education Association
American Pain Society
Southern Pain Society
Sigma Xi
British Brain Research Association, Honorary Member
European Brain and Behavior Society, Honorary Member
International Association for Dental Research/American Association for Dental Research
International Association for Dental Research/American Association for Dental Research, Dallas Chapter

8. Contribution to professional organizations
American Dental Education Association
2005 Secretary Anatomical Section
2006 Chair-elect Anatomical Section
2007 Chair Anatomical Section
2005, 2007-8 Anatomical Section delegate
2005-2008 Council of Sections Abstract Reviewer

9. Participation on national or regional board examinations, certification or accreditation committee

2002-2007 American Dental Association, National Board Exam, Part 1, Anatomic Sciences Test Construction Committee
2009 American Dental Association, NBE Part I Question Cloning Committee
2007 to present Commission on Dental Accreditation, Basic Science Consultant
2008 to present American Dental Association, National Board Exam, Part 1 Testlet Committee

10. Meeting where chaired session (invited only)

None

11. Programs and symposia you organized

1998 Co-organized symposium on temporomandibular joint disorders at Baylor College of Dentistry, Dallas, TX.

2008 ADEA meeting in Dallas, TX.; Primary organizer of Symposium entitled, “Academic Integrity and the Millennial Dental Student: Faculty Roles and Responsibilities”.

12. Awards

None

13. Other Indices of Scholarly Performance


2008  Consultant for Thieme on new Dental Anatomy Atlas

2008  Interactive Temporal Bone module adopted by Mount Sinai School of Medicine, Otarlyngology Dept. (Dr. J. Laitman)

2008  Designed and implemented peer teaching in Gross Anatomy 6640. (R.J. Hinton, B. Hutchins, R. Spears, and E. Schneiderman)


2008  The use of the Skull Atlas has been adopted by several schools:

  o  Baylor College of Dentistry
  o  Mercer Medical School, Savannah and Macon campuses
  o  AT Stills School of Dentistry, Mesa, Az.
  o  Indiana School of Dentistry

2009  Sensory Innervation to the Head and Neck

2009  Interactive Temporal Bone module adopted by

  o  Univ. of Kentucky Dental School, (Dr. B. MacPherson)

The use of the Skull Atlas has been adopted by:

  o  Brighton and Sussex Medical School, UK
  o  University of the Pacific Dental School
  o  American Dental Association

The use of the Autonomic Innervation to the Head: Animations and a Self-Testing Guide has been adopted or used by:

189 total downloads which includes:*

  • 143 different institutions
  • 47 different Foreign Schools
  • 74 different Medical Schools*
  • 23 different Dental Schools*

* Medical or Dental schools were only counted if the type of school was identified in the school name
**List includes data from July-Dec, 2009; Available on request
G. Institutional Service to the HSC

1. Component Committees

<table>
<thead>
<tr>
<th>Year</th>
<th>Committee</th>
</tr>
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<tbody>
<tr>
<td>2011 to present</td>
<td>Quality Enhancement Proposal: Critical Evaluation of Relevant Evidence, Educational Consultant</td>
</tr>
<tr>
<td>2007 to present</td>
<td>BCD Peer Teaching Consultant</td>
</tr>
<tr>
<td>2005 to present</td>
<td>BCD Student Promotions Committee</td>
</tr>
<tr>
<td>2011 to present</td>
<td>BCD curriculum committee</td>
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<tr>
<td>2006 to 2010</td>
<td>BCD Faculty Computer workshop Coordinator</td>
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<tr>
<td>2008 to 2009</td>
<td>Ad Hoc Faculty Forum Committee: Develop new Teaching Awards</td>
</tr>
<tr>
<td>2009</td>
<td>Ad Hoc Faculty Development Committee: Teaching Awards</td>
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<td>2008</td>
<td>BCD Task Force to update the Academic Due Process Document</td>
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<td>2005 to 2008</td>
<td>BCD Ad Hoc Electronic Curriculum Committee</td>
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<tr>
<td>2003 to 2006</td>
<td>BCD Planning and Assessment Committee</td>
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<td>2006 to 2007</td>
<td>BCD Task Force on Electronic Patient Record Forms</td>
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<td>2005</td>
<td>BCD Strategic Plan Task Force - Vision Statement subcom. Chair</td>
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<td>2005</td>
<td>*BCD Strategic Plan Task Force – Research Goals &amp; Objectives subcommittee</td>
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<td>2004 to 2009</td>
<td>BCD Dental Hygiene Admissions Committee</td>
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<tr>
<td>2004</td>
<td>BCD Faculty Forum Ad Hoc Committee on Classroom Design</td>
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<td>2002 to 2004</td>
<td>Commission on Dental Accreditation – Educational programs, Biomedical Sciences</td>
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<tr>
<td>2001 to 2003</td>
<td>Ad Hoc Instructional Technology Classroom Design Advisory</td>
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<td>2000 to 2002</td>
<td>Planning and Assessment Committee</td>
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<td>2000 to 2002</td>
<td>Southern Association of Colleges and Schools-</td>
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<td>2000 to 2001</td>
<td>Faculty Senator</td>
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<td>2000 to 2001</td>
<td>Faculty Senate, ad hoc Bylaws committee</td>
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<td>1998 to 2002</td>
<td>Curriculum Committee</td>
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<tr>
<td>1986 to 1989</td>
<td>Library Committee</td>
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<tr>
<td>1987 to 1989</td>
<td>Biohazards Committee</td>
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<tr>
<td>1988</td>
<td>Ad Hoc Committee for the Strategic Planning of the combined Hospital and Dental School Library</td>
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<tr>
<td>1989 to 1990</td>
<td>Baylor University Research Committee</td>
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<td>1989 to 1992</td>
<td>Research Committee</td>
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<td>1990 to 1992</td>
<td>Library Committee</td>
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<td>1992</td>
<td>Ad Hoc Budgetary Advisory Committee</td>
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<td>1992</td>
<td>Ad Hoc Research Grant Incentive Committee</td>
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<td>1992 to 1994</td>
<td>Student Promotions Committee</td>
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<td>1992</td>
<td>Teaching Committee</td>
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<td>1993 to 1994</td>
<td>Faculty Development</td>
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<tr>
<td>1994 to 1997</td>
<td>Committee on Committees</td>
</tr>
<tr>
<td>1995 to 1996</td>
<td>*Committee on Committees</td>
</tr>
<tr>
<td>1994 to 1997</td>
<td>Intramural Communication Committee</td>
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</tbody>
</table>
1994 to 1996  Communication Task Force
1995 to 1996  Vice President, Faculty Forum
1994 to present  Teaching Consultant
1996 to 1997  President, Faculty Forum
1995 to 1997  Chairman’s Advisory Committee
1996 to 1997  Curriculum Review Team
1996 to 1997  Departmental Curriculum Committee
1997  Ad Hoc Committee to select
TAMUS Employee Benefits Advisory Members
1998 to 1999  Strategic Focus Committee
1998 to 1999  Faculty Development Task Force
1999 to 1999  *Ad Hoc Team to revise D3 curriculum
1997 to 1999  BMS Instructional Resources Task Force
1999 to 2000  Health Science Center Task Force on Faculty Governance
1996 to 2000  Assessment Team (Institutional Effectiveness)

2. Other Component Service

a. Departmental Committees

1993 to present  BMS Faculty Forum Dept. Representative
2000 to 2009  BMS Graduate Committee
2006 to 2009  BMS Chairman’s Leadership Advisory Committee
2000 to 2009  BMS Graduate Committee
2008  BMS Search Committee
2008  BMS Search Committee
2006 to 2007  *BMS Biochemistry Search Committee
2006 to 2007  *BMS Biochemistry Search Committee
2006  BMS Gross Anatomy Laboratory Assistant Search Committee
2006  BMS Educational Specialist Search Committee
2006  BMS Educational Specialist Search Committee
2006  BMS Gross Anatomy Laboratory Assistant Search Committee
2005 to 2006  BMS Faculty Search Committee (U24 NIH Grant related search)
2000 to 2005  BMS Promotion and Tenure Peer Review Committee
2012 to present  BMS Chairman’s Leadership Advisory Committee

b. Administrative Responsibilities

2012 to present  Director of Predoctoral Basic Sciences
2005 to 2013  Supervise Diener
2006 to present  Teaching Mentor to Junior Faculty
2008 to 2011  Co-Director of Predoctoral Basic Sciences & Teaching Innovation
2006 to 2008  Managed Faculty Teaching Loads for 13 courses
2006 to 2008  Oversee Project to digitize released National Board Exams
2006 to 2007  Director of Predoctoral Basic Sciences
2006-2007  Restructured Dental Hygiene BMS fall/spring courses com. member
2007  * Development of new Biochem/Cell & Molecular Biol. Course
2007  * Evaluation & restructuring of National Bd. Review Course
2006  * Development of new National Bd. Review Course

3. HSC committees

2011 to present  Instructional Technology Advisory Committee 2
2010 to present  Instructional Technology Advisory Committee
2013 to present  Committee on Academic Freedom, Ethics, Responsibility, Rights, and Responsibilities, Chair
2010 to 2013  Committee on Academic Freedom, Ethics, Responsibility, Rights, and Responsibilities, Vice Chair
2010 to present  Faculty Grievance Committee, Chair
2012  Search Committee for Assoc. Dean of Instructional Excellence
2010 to 2011  Ad Hoc Second Life Initiative Committee
2001 to 2010  HSC Committee on Academic Freedom, Ethics, Responsibility, Rights, and Responsibilities
2007-2009  E-Learning Task Force
2004 to 2007  Faculty Senator
2006  *CAFERRT Hearing Chair
2004 to 2005  HSC Task Force on Library resources
2005  HSC 2015 Strategic Planning Initiative, Faculty Recruitment, Dev., and Retention
2005 to 2006  *Baylor Senate Caucus Leader
2001 to 2003  HSC Curriculum and Academic Standards Committee

4. Other HSC Service

2010 to 2011  Quality Enhancement Proposal: Critical Evaluation of Relevant Evidence, Educational Consultant

5. Texas A&M University System Committees

None

6. Other Texas A&M University System Committees

None

7. Patient Care

Not Applicable

8. Consultant to accrediting and other educational review boards, industry health care

2006 to 2012  Commission On Dental Accreditation, Basic Science Consultant:
March 2012, Dental Site Visit Team
September 2011, International Dental School Site Visit Team
September 2010, Dental School Site Visit Team
March 2009, Dental School Site Visit Team
September 2009, Dental School Site Visit Team
March 2008, Dental School Site Visit Team
October 2008, Dental School Site Visit Team
March 2007, Dental School Site Visit Team
September 2007, Dental School Site Visit Team

9. Outreach programs for college students (career counseling, recruitment, mentoring)

   None

10. Outreach programs for high school, junior high school, and elementary students (career counseling, recruitment, mentoring)

    None

11. Awards

    None

12. Other Indices of Service

    2007 to present  BCD faculty mentor to the Great Expectations student mentoring program

    2009  External Reviewer for Promotion and Tenure at the request of Dr. D.E. McLeod, Section Head of Periodontology, and Chair, Department of Applied Dental Medicine, Southern Illinois University School of Dental Medicine

    2008  Liaison with BUMC Orthopedic Department for use of Gross Anatomy Laboratory for CE opportunities

    2008  External Reviewer for Promotion and Tenure at the request of Dr. Don M. Gash, Alumni Endowed Chair, Professor and Chair, Director MRISC, Univ. of Kentucky Dental School

    2007  External Reviewer for Promotion and Tenure at the request of Dr. K. Jones, Director of Anatomy, The Univ. of Ohio State College of Medicine

H. Patents or Commercialization of Research

1. Invention disclosures

   Assay for Temporomandibular Joint Pain 2007; Inventors LL Bellinger, P Kramer, R Spears, B Hutchins

2. Patent applications pending

   None

3. Licensing of technology

   None

4. Collaboration with other faculty, leading to product development/licensing and commercialization

   None

I. Publications

1. Refereed Papers


27 papers, 3 books, 1chpt,

2. Non-refereed Papers

None

3. Review Articles

None

4. Abstracts

Hutchins, B. and Weber, J.T. Morphologic and autoradiographic evidence for a laminated

Hutchins, B. and Weber, J.T. The pretectal complex of the squirrel monkey: a reinvestigation of the

Weber, J.T. and Hutchins, B. Visual cortical inputs to retinal versus nonretinal recipient zones of the

Hutchins, B. and Weber, J.T. Some notes on the ultrastructure of the nucleus of the optic tract of the cat

Hartwich-Young, R., Hutchins, B. and Weber, J.T. Retinal and visual cortical inputs to separate
sublaminae of the superficial gray of the superior colliculus in the cat.

Hutchins, B., Weber, J.T. and Updyke, B.V. Projections from the middle suprasylvian visual areas to the

Hartwich-Young, R., Hutchins, B. and Weber, J.T. Cells of origin of the corticocollicular projection in the

Hutchins, B. and Updyke, B.V. Retinotopic organization within the lateral posterior complex of the cat.

Hutchins, B. and Weber, J.T. Ultrastructural analysis of retinal and visual cortical projections within the

Bolding, S.L. and Hutchins, B. Accessory innervation of the mandibular dentition in the cat. J. Dent.

Bolding, S.L. and Hutchins, B. Histological evidence of the cervical plexus providing pulpal innervation

Behrends, A. and Hutchins, B. The posterior digastric muscle's representation in the cat's facial nucleus. J.

55A.

Hutchins, B. and Weber, J.T. Ultrastructural analysis of retinal and cortical terminals within the cat

Pisana, R., Pearsall, A.D., and Hutchins, B. Ultrastructural characteristics of the medial pretectal nucleus


Puri, J., Hutchins, B., and KRAME, P.R., Er-α increases following adjuvant-induced inflammation in the female rat TMJ. AADR, (2008) Dallas, TX.


http://www.fasebj.org/cgi/content/meeting_abstract/24/1_MeetingAbstracts/829.3


Gould, DJ, Lambert, HW, Hutchins, B. Engaging Our Dental Students To Learn The Basic Sciences: Results from the Basic Science Survey Series for Dentistry. ADEA 2012, Orlando, FL.

Roshan, S, and Hutchins, B. (2013) Enhancing classroom teaching to engage our multitasking students. ADEA, Seattle, WA.
5. Books Authored

www.Humanskullatlas.com

www.Humanskullatlas.com

2008.  www.Humanskullatlas.com (increased the number of interactive pages and expanded the index)

6. Book Chapters

Hutchins, B., and Updyke, B.V. The lateral posterior complex of the cat: Studies of the functional  

7. Books Edited

None

8. Manuscripts Already Submitted

None

9. Table Clinics

Not Applicable
CAROLYN ANN KERINS D.D.S, Ph.D.

EDUCATION

2003-2005  Baylor College of Dentistry, Dallas, Texas.  Pediatric Dentistry Residency Degree conferred: Certificate

1996-2004  Baylor College of Dentistry, Dallas, Texas.  Department of Biomedical Sciences.  Degree conferred: Ph.D. Biomedical Sciences

1998-2002  Baylor College of Dentistry, Dallas, Texas.  Degree conferred: D.D.S.

1989-1993  Southern Methodist University, Dallas, Texas.  Degree conferred: B.S. Biology

EXPERIENCE

2012-present  Department of Pediatric Dentistry -Graduate program director

2011-present  Baylor College of Dentistry, Dallas, Texas.  Associate professor


2005-2010  Baylor College of Dentistry, Dallas, Texas.  Assistant Professor

2002-2003  Children’s Medical Center, Dallas, Texas.  Pediatric Dentistry Fellowship

2003-2005  Community Dental Care, Dallas, Texas.  Part-time employment

1993-1994  The Surgical Group, Paducah, Kentucky.  Research Assistant

CERTIFICATIONS

2002  Western Regional Examining Board

2007  American Board of Pediatric Dentistry Diplomate

MEDICAL STAFF APPOINTMENTS

11/2005 – present  Children’s Medical Center Dallas, Dallas, TX.
09/2006 -- present  Texas Scottish Rite Hospital for Children, Dallas, TX
03/2008 -- present  Baylor Our Children’s House, Dallas, TX
11/2009 -- present  Las Palmas Del Sol Healthcare System, El Paso, TX
11/2009 -- present  Surgical Center of El Paso, El Paso, TX

NATIONAL COMMITTEES

2008- present  Council on Clinical Affairs, American Academy of Pediatric Dentistry
2010-present  American Board of Pediatric Dentistry OCE examiner
2010-present  American Academy of Pediatric Dentistry Leadership Institute
2011-present  American Board of Pediatric Dentistry test development Committee

PUBLICATIONS


A. Name: Harvey P. Kessler

B. Rank: Professor

C. Education:
   1979-1980 Armed Forces Institute of Pathology, Washington, DC
   Fellowship in Oral Pathology (Certificate)
   1977-1979 George Washington University, Washington, DC
   M.S. in Oral Biology
   1977-1979 United States Army Institute of Dental Research, Washington, DC,
   Residency in Oral Pathology (Certificate)
   1974-1975 William Beaumont Army Medical Center, El Paso, TX
   General Practice Residency (Certificate)
   1970-1974 University of Maryland School of Dentistry, D.D.S.
   1966-1970 Case Western Reserve University, Cleveland, OH, B.A.

D. Employment:
   2007-Present: Professor
   2001-2007 Associate Professor
   Division of Pathology
   Department of Diagnostic Sciences
   Baylor College of Dentistry, TAMUSHSC
   1998-2001 Associate Professor
   Division of Oral and Maxillofacial Pathology and Oncology
   Department of Oral and Maxillofacial Surgery and Diagnostic Sciences
   University of Florida College of Dentistry
   1998-2001 Affiliate Associate Professor
   Department of Pathology and Laboratory Medicine
   University of Florida College of Medicine
   1997-1998 Deputy Director
   Armed Forces Institute of Pathology
   Washington, DC
   1996-1998 Chairman
   Department of Oral and Maxillofacial Pathology
   Armed Forces Institute of Pathology
   Washington, DC
   1995-1996 Professor and Staff Pathologist
   Naval Dental School
   National Naval Dental Center
   Bethesda, Maryland
   Mentor, Advanced Education Program in Oral and Maxillofacial Pathology
1990-1995 Staff pathologist  
Armed Forces Institute of Pathology  
Washington, DC  
Chief, Forensic Dentistry  
Consultant to the Armed Forces Medical Examiner

1987-1990 Forensic Dentist (part time)  
U.S. Army Central Identification Laboratory, Hawaii  
Honolulu, Hawaii

1986-1990 Oral Pathologist  
Tripler Army Medical Center  
Honolulu, Hawaii  
Mentor, Advanced Education Program in Oral and Maxillofacial Surgery  
Mentor, General Pathology Residency Training Program

1984-1986 Oral Pathologist  
USADENTAC and Ireland Army Community Hospital  
Fort Knox, Kentucky

1980-1984 Oral Pathologist  
USADENTAC and Reynolds Army Community Hospital  
Fort Sill, Oklahoma

1979-1980 Fellow in Oral and Maxillofacial Pathology  
Armed Forces Institute of Pathology  
Washington, DC

1977-1979 Resident in Oral and Maxillofacial Pathology  
United States Army Institute of Dental Research  
Washington, DC

1975-1977 General Dentist  
U.S. Army Hospital  
United States Military Academy  
West Point, New York

1974-1975 General Practice Resident  
William Beaumont Army Medical Center  
El Paso, Texas
### E. Teaching Performance:

#### 1. Teaching Summary

<table>
<thead>
<tr>
<th>Year: 2010-2011</th>
<th>Title</th>
<th>Level</th>
<th>Lecture*</th>
<th>Laboratory*</th>
<th>Clinical*</th>
<th>Seminar*</th>
<th>Director</th>
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<tbody>
<tr>
<td></td>
<td>Oral Pathology #7160</td>
<td></td>
<td>10 Hours</td>
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<td>Lecture 10 Hours</td>
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<td></td>
<td>Clinical Principles of Patient Evaluation #8280</td>
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<td>8 Hours</td>
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<td>Lecture 8 Hours</td>
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<td></td>
<td>Advanced Oral Pathology Seminar/OMFS/AEGD</td>
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<td>10 Hours</td>
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<td>Lecture 10 Hours</td>
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<td>Oral and Maxillofacial Pathology Seminar OP5V00</td>
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<td>Seminar 195 Hours</td>
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<td>Oral and Maxillofacial Pathology Service OP5V05</td>
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<td>Health Promotions/Disease Prevention #3425</td>
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<td>Advanced Oral Pathology #OP5V21</td>
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<td>Advanced Oral Pathology Microscopy Laboratory</td>
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<td>Lecture 16 Hours</td>
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<td>Forensic Dentistry Selective #S20</td>
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<td>Lecture 12 Hours</td>
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**Summary for Year: 2010-2011**

1. Lectures taught: 88
2. Laboratories taught: 12
3. Clinics taught: 390
4. Seminars taught: 390

<table>
<thead>
<tr>
<th>Year: 2009-2010</th>
<th>Title</th>
<th>Level</th>
<th>Lecture*</th>
<th>Laboratory*</th>
<th>Clinical*</th>
<th>Seminar*</th>
<th>Director</th>
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<td>Oral Pathology #7160</td>
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**Summary for Year: 2009-2010**

1. Lectures taught: 88
2. Laboratories taught: 12
3. Clinics taught: 390
4. Seminars taught: 390
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<tr>
<th>Year: 2008-2009</th>
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<tbody>
<tr>
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<td>Clinical Principles of Patient Evaluation #8280</td>
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<td>Oral and Maxillofacial Pathology Seminar OP5V00</td>
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<td>Oral and Maxillofacial Pathology Service OP5V05</td>
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<td>Oral Pathology #4025</td>
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<td>Health Promotions/Disease Prevention #3425</td>
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<td>Advanced Oral Pathology #OP5V21</td>
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<td>Advanced Oral Pathology Microscopy Laboratory</td>
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<td>Laboratories 12 Hours</td>
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**Summary for Year: 2008-2009**
1. Lectures taught
   - 88
2. Laboratories taught
   - 12
3. Clinics taught
4. Seminars taught
   - 390

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<td>Clinical Principles of Patient Evaluation #8280</td>
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<td>Oral and Maxillofacial Pathology Seminar OP5V00</td>
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<tr>
<td>Oral and Maxillofacial Pathology Service OP5V05</td>
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<td>Oral Pathology #4025</td>
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<td>Health Promotions/Disease Prevention #3425</td>
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<td>Advanced Oral Pathology #OP5V21</td>
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<td>Advanced Oral Pathology Microscopy Laboratory</td>
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<td>Laboratories 12 Hours</td>
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**Summary for Year: 2007-2008**
1. Lectures taught
   - 88
2. Laboratories taught
   - 12
3. Clinics taught
4. Seminars taught
   - 390

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<td>Clinical Principles of Patient Evaluation #8280</td>
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<tr>
<td>Advanced Oral Pathology Seminar/OMFS/AEGD</td>
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<td>Oral and Maxillofacial Pathology Seminar OP5V00</td>
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</table>
Oral and Maxillofacial Pathology Service OP5V05 Seminar 195 Hours 3 Students
Oral Pathology #4025 Lecture 12 Hours 28 Students
Health Promotions/Disease Prevention #3425 Lecture 2 Hours 30 Students
Advanced Oral Pathology #OP5V21 Lecture 18 Hours 26 Students
Advanced Oral Pathology Microscopy Laboratory Lecture 16 Hours 3 Students
National Board Part I Review Course #7400 Lecture 1 Hour 92 Students
Forensic Dentistry Selective #S20 Lecture 12 Hours 20 Students
Laboratories 12 Hours 20 Students

Summary for Year: 2006-2007
1. Lectures taught 89
2. Laboratories taught 12
3. Clinics taught
4. Seminars taught 390

Year: 2005-2006
Title Level Lecture* Laboratory* Clinical* Seminar* Director
Oral Pathology #7160 Lecture 10 Hours 91 Students
Clinical Principles of Patient Evaluation #8280 Lecture 8 Hours 82 Students
Advanced Oral Pathology Seminar/OMFS/AEGD Lecture 10 Hours 16 Students
Oral and Maxillofacial Pathology Seminar OP5V00 Seminar 195 Hours 3 Students
Oral and Maxillofacial Pathology Service OP5V05 Seminar 195 Hours 3 Students
Oral Pathology #4025 Lecture 12 Hours 28 Students
Health Promotions/Disease Prevention #3425 Lecture 2 Hours 28 Students
Advanced Oral Pathology #OP5V21 Lecture 18 Hours 26 Students
Advanced Oral Pathology Microscopy Laboratory Lecture 16 Hours 3 Students
National Board Part I Review (optional attendance) Lecture 1 Hour 20 Students
Forensic Dentistry Selective #S20 Lecture 12 Hours 23 Students
Laboratories 12 Hours 23 Students

Summary for Year: 2005-2006
1. Lectures taught 89
2. Laboratories taught 12
3. Clinics taught
4. Seminars taught 390

Year: 2004-2005
Title Level Lecture* Laboratory* Clinical* Seminar* Director
Oral Pathology #7160 Lecture 10 Hours 82 Students
Clinical Principles of Patient Evaluation #8280 Lecture 8 Hours 80 Students
Advanced Oral Pathology Seminar/OMFS/AEGD Lecture 10 Hours 16 Students
Oral and Maxillofacial Pathology Seminar OP5V00 Seminar 195 Hours 3 Students
Oral and Maxillofacial Pathology Service OP5V05 Seminar 195 Hours 3 Students
Oral Pathology #4025 Lecture 12 Hours 28 Students
Health Promotions/Disease Prevention #3425 Lecture 2 Hours 28 Students
Advanced Oral Pathology #OP5V21 Lecture 18 Hours 24 Students
Advanced Oral Pathology Microscopy Laboratory  Lecture  16 Hours  3 Students
National Board Part I Review (optional attendance) Lecture  1 Hour  25 Students
Forensic Dentistry Selective #S20 Lecture  12 Hours  12 Students
Laboratories 12 Hours  12 Students

Summary for Year: 2004-2005
1. Lectures taught  89
2. Laboratories taught  12
3. Clinics taught
4. Seminars taught  390

Year: 2003-2004
Title  Level  Lecture*  Laboratory*  Clinical*  Seminar*  Director
Oral Pathology #7160 Lecture  10 Hours  80 Students
Clinical Principles of Patient Evaluation #8280 Lecture  8 Hours  82 Students
Advanced Oral Pathology Seminar/OMFS/AEGD Lecture  10 Hours  16 Students
Oral and Maxillofacial Pathology Seminar OP5V00 Seminar  195 Hours  3 Students
Oral and Maxillofacial Pathology Service OP5V05 Seminar  195 Hours  3 Students
Oral Pathology #4025 Lecture  12 Hours  25 Students
Health Promotions/Disease Prevention #3425 Lecture  2 Hours  25 Students
Advanced Oral Pathology #OP5V21 Lecture  18 Hours  22 Students
Advanced Oral Pathology Microscopy Laboratory Lecture  16 Hours  3 Students
National Board Part I Review (optional attendance) Lecture  1 Hour  25 Students
Forensic Dentistry Selective #S20 Laboratories 12 Hours  19 Students

Summary for Year: 2003-2004
1. Lectures taught  89
2. Laboratories taught  12
3. Clinics taught
4. Seminars taught  390

Year: 2002-2003
Title  Level  Lecture*  Laboratory*  Clinical*  Seminar*  Director
Oral Pathology #7160 Lecture  10 Hours  90 Students
Clinical Principles of Patient Evaluation #8280 Lecture  8 Hours  90 Students
Advanced Oral Pathology Seminar/OMFS/AEGD Lecture  10 Hours  16 Students
Oral and Maxillofacial Pathology Seminar OP5V00 Seminar  195 Hours  1 Student
Oral and Maxillofacial Pathology Service OP5V05 Seminar  195 Hours  1 Student
Oral Pathology #4025 Lecture  12 Hours  30 Students
Health Promotions/Disease Prevention #3425 Lecture  2 Hours  30 Students
Advanced Oral Pathology #OP5V21 Lecture  18 Hours  24 Students
National Board Part I Review (Optional attendance) Lecture  1 Hour  25 Students
### Summary for Year: 2002-2003

1. Lectures taught 61 hours
2. Laboratories taught
3. Clinics taught
4. Seminars taught 390 hours

### Year: 2001-2002

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<th>Clinical*</th>
<th>Seminar*</th>
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<td>Lecture</td>
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<td>Advanced Oral Pathology Seminar/OMFS/AEGD</td>
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<td>16 Students</td>
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<td>Seminar</td>
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<td>2 Students</td>
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<td>Oral and Maxillofacial Pathology Service OP5V05</td>
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<td>Seminar</td>
<td>195 Hours</td>
<td>2 Students</td>
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<tr>
<td>Oral Pathology #4025</td>
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<td>Lecture</td>
<td>12 Hours</td>
<td>28 Students</td>
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<td>Advanced Oral Pathology #OP5V21</td>
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<td>Lecture</td>
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<td>26 Students</td>
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### Summary for Year: 2001-2002

1. Lectures taught 48 hours
2. Laboratories taught
3. Clinics taught
4. Seminars taught 390 hours

### Quality of Teaching

Received the Baylor College of Dentistry Teaching Excellence Award in January 2006. Student evaluations have consistently been above the average and in the last several years have been in the top quartile. From student surveys, nearly every Oral Pathology course receives excellent overall ratings. In the 2002-2003 and 2007-2008 academic years, Oral Pathology was ranked as the number one academic unit in the college. The Forensic Dentistry course was created and first given in the summer 2004. Ratings for the Forensic Dentistry Course are consistently above 4.67 on a 5.0 grading scale. Individual evaluations are available on request.

### Course Coordination

Advanced Oral Pathology OP5V21 (Course Director)
Advanced Oral Pathology Microscopy Laboratory (Course Director)
Forensic Dentistry #S20 (Course Director)
Oral Pathology #7160 (Contributing Faculty)
Clinical Principles of Patient Evaluation #8280 (Contributing Faculty)
Advanced Oral Pathology Seminar/OMFS/AEGD (Contributing Faculty)
Oral and Maxillofacial Pathology Seminar OP5V00 (Contributing Faculty)
Oral and Maxillofacial Pathology Service OP5V05 (Contributing Faculty)
Oral Pathology #4025 (Contributing Faculty)
Health Promotions/Disease Prevention #3425 (Contributing Faculty)

### Curriculum and/or Course Development

In the 2003 Spring Semester, I revised the didactic portion of the graduate level Advanced Oral Pathology course to update the content and better reflect the knowledge required of the graduate students.
In the 2004 Spring Semester, I assumed responsibility for and completely revised the graduate level Advanced Oral Pathology Microscopy Laboratory to better suit the needs of the students, eliminating the standard lecture format. Instead actual cases are reviewed at the microscope in a clinical-pathologic conference format. This allows the students to appreciate the variety of histologic patterns that characterize the individual disease processes rather than be locked into the “frozen field” of photomicrographs.

In the 2004 Summer Session, I instituted a new selective course in Forensic Dentistry. The course emphasizes dental identification procedures in the context of a mass casualty situation. Lecture material covers various methods of human identification with an emphasis on the importance of dental identification, the role of dental identification in the mass casualty scenario, and the concepts of teamwork with the other sections of the medical examiner teams. A 4 hour radiographic comparison laboratory allows students to develop the skill needed for actual identification of human remains, and an 8 hour mass casualty laboratory allows them to practice all the skills of dental identification in a true-to-life mass casualty situation utilizing real human remains. I developed the mass casualty laboratory from scratch.

5. Teaching Materials Developed

1992 Pathology of the Head and Neck (Video Disk), Armed Forces Institute of Pathology and The American Registry of Pathology in association with ImageDisc Library, 1781 Prior Avenue, North Saint Paul, Minnesota

6. Continuing Education Courses Given

May 2013 Fundamentals of Forensic Odontology, Continuing Education Office, Baylor College of Dentistry, Dallas, Texas (Course Director and Lecturer)
April 2013 Forensic Dentistry, Department of Oral Pathology, Radiology and Medicine, University of Iowa College of Dentistry, Iowa City, Iowa
March 2013 Clinical Oral Pathology Update, Continuing Education Office, Baylor College of Dentistry, Dallas, Texas (Lecturer)
January 2013 Adjuncts to the Diagnosis of Oral Cancer, CE Express, Southwest Dental Conference, Dallas, Texas
March 2011 Clinical Oral Pathology Update, Continuing Education Office, Baylor College of Dentistry, Dallas, Texas (Lecturer)
March 2009 Clinical Oral Pathology Update, Continuing Education Office, Baylor College of Dentistry, Dallas, Texas (Course Director and Lecturer)
November 2008 Neoplasms of the Major Salivary Glands, General Pathology Residency Program, Department of Pathology, Baylor University Medical Center, Dallas, Texas (Lecturer)
September 2006 Clinical Oral Pathology Update, Continuing Education Office, Baylor College of Dentistry, Dallas, Texas (Lecturer)
December 2003 Benign Salivary Gland Neoplasms, General Pathology Residency Program, Department of Pathology, Baylor University Medical Center, Dallas, Texas (Lecturer)
October 2003 Benign Salivary Gland Neoplasms, General Pathology Residency Program, Department of Pathology, Baylor University Medical Center, Dallas, Texas (Lecturer)
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<td>August 2003</td>
<td>Minor Salivary Gland Neoplasms, General Pathology Residency Program, Department of Pathology, Baylor University Medical Center, Dallas, Texas</td>
<td>(Lecturer)</td>
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<td>July 2003</td>
<td>Lichen Planus: Current Concepts and Controversies, Technology Day Continuing Education Course, Baylor College of Dentistry and Dallas Section, North American Division, International Association of Dental Research, Dallas, Texas</td>
<td>(Lecturer)</td>
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<td>January 2003</td>
<td>Oral Complications of HIV, Identifying Oral Lesions and Oral Complications of Cancer Therapy and HIV, Dental Oncology Education Program, Del Mar College, Corpus Christi, Texas</td>
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<td>November 2001</td>
<td>Clinical Update on Tobacco and Oral Health, Office of Continuing Education, Baylor College of Dentistry, Dallas, TX</td>
<td>(Lecturer)</td>
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<td>November 2000</td>
<td>Odontogenic Tumors, Surgical Oral and Maxillofacial Pathology With Microscopy Workshop, Armed Forces Institute of Pathology and American Registry of Pathology, Radisson Resort Parkway Hotel, Kissimme, FL</td>
<td>(Lecturer)</td>
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<tr>
<td>August 1999</td>
<td>Oral and Maxillofacial Pathology for Dental Specialists, University of Florida Continuing Education Program, Safety Harbor Resort, Clearwater, FL</td>
<td>(Co-course director and lecturer)</td>
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<td>April 1999</td>
<td>Radiographic Pathology, 18th Annual Postgraduate Short Course in Oral Pathology, Oral Diagnosis, Oral Medicine, USADENTAC, Silver Spring, MD</td>
<td>(Lecturer)</td>
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<td>May 1998</td>
<td>Forensic Odontology, Forensic Anthropology Course, Armed Forces Institute of Pathology, The American Registry of Pathology, and The National Museum of Health and Medicine, Uniformed Services University of the Health Sciences, Bethesda, MD</td>
<td>(Lecturer)</td>
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<td>19th Annual AFIP Seminar, American Academy of Oral and Maxillofacial Pathology Annual Meeting, Dallas, Texas</td>
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<td>Radiographic Pathology, 17th Annual Postgraduate Short Course in Oral Pathology, Oral Diagnosis, Oral Medicine, USADENTAC, Silver Spring, MD</td>
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<td>34th Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Doubletree Hotel, Rockville, Maryland</td>
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<td>February 1998</td>
<td>Radiographic Pathology and Radiographic Interpretation, Short Course in Oral Pathology, National Naval Dental Center, Bethesda, Maryland</td>
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<td>October 1997</td>
<td>Forensic Odontology, Basic Forensic Pathology Course, Armed Forces Institute of Pathology and The American Registry of Pathology, Doubletree Hotel, Rockville, MD</td>
<td>(Lecturer)</td>
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<td>May 1997</td>
<td>18th Annual AFIP Seminar, American Academy of Oral and Maxillofacial Pathology Annual Meeting, Vancouver, British Columbia, Canada</td>
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<td>April 1997</td>
<td>Biopsy Principles and Technique—The Pathologist’s Perspective, 16th Annual Postgraduate Short Course in Oral Pathology, Oral Diagnosis, Oral Medicine, USADENTAC, Silver Spring, MD</td>
<td>(Lecturer)</td>
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April 1997  43rd Annual Course in Oral Pathology, Armed Forces Institute of Pathology and American Registry of Pathology, Hyatt Regency Bethesda Hotel, Bethesda, Maryland (Course Director and Lecturer)

March 1997  33rd Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Hyatt Regency Bethesda Hotel, Bethesda, Maryland (Course Director and lecturer)

January 1997  Radiographic Pathology and Radiographic Interpretation, Short Course in Oral Pathology, National Naval Dental Center, Bethesda, Maryland (Lecturer)

October 1996  Forensic Odontology, Basic Forensic Pathology Course, Armed Forces Institute of Pathology and The American Registry of Pathology, Holiday Inn Crowne Plaza Hotel, Rockville, MD (Lecturer)

June 1996  Basics of Forensic Dentistry, Forensic Master's Degree Program, George Washington University and Office of the Chief Medical Examiner, Department of Human Services, Government of the District of Columbia, Washington, DC (Lecturer)

April 1996  Biopsy Principles and Technique—The Pathologist’s Perspective, 15th Annual Postgraduate Short Course in Oral Pathology, Oral Diagnosis, Oral Medicine, USADENTAC, Silver Spring, MD (Lecturer)

March 1996  32nd Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Doubletree Hotel, Rockville, Maryland (Lecturer)

January 1996  Radiographic Pathology and Radiographic Interpretation and Clinical Pathologic Conference, Short Course in Oral Pathology, National Naval Dental Center, Bethesda, Maryland (Lecturer)

December 1995  Radiographic Interpretation and Benign Fibro-Osseous Lesions, 42nd Annual Course in Oral Pathology, Armed Forces Institute of Pathology and American Registry of Pathology, Grosvenor Resort, Walt Disney World Village, Lake Buena Vista, Florida (Lecturer)

October 1995  Forensic Dentistry, Advanced Education Program in Prosthodontics, USADENTAC, Walter Reed Army Medical Center, Washington, DC (Lecturer)

October 1995  Forensic Odontology, Basic Forensic Pathology Course, Armed Forces Institute of Pathology and The American Registry of Pathology, Holiday Inn Crowne Plaza Hotel, Rockville, MD (Lecturer)

June 1995  Basics of Forensic Dentistry, Forensic Master's Degree Program, George Washington University and Office of the Chief Medical Examiner, Department of Human Services, Government of the District of Columbia, Washington, DC (Lecturer)

May 1995  Oral Pathology, AFIP Seminar, American Academy of Oral Pathology Annual Meeting, Colorado Springs, CO (Lecturer)

April 1995  Clinical Pathologic Conference and Biopsy Principles and Technique—The Pathologist’s Perspective, 14th Annual Postgraduate Short Course in Oral Pathology, Oral Diagnosis, Oral Medicine, USADENTAC, Walter Reed Army Medical Center, Washington, DC (Lecturer)
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<tr>
<td>March 1995</td>
<td>31st Annual Course in Forensic Dentistry, Armed Forces Institute of</td>
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<td>Hotel, Rockville, Maryland (Co-Director and Lecturer)</td>
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<td>January 1995</td>
<td>Radiographic Pathology and Radiographic Interpretation, Short Course</td>
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<td>in Oral Pathology, National Naval Dental Center, Bethesda, Maryland</td>
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<td></td>
<td>(Lecturer)</td>
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<td>January 1995</td>
<td>Radiographic Interpretation, Benign Fibro-Osseous Lesions, and Biopsy</td>
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<td>Principles—The Pathologist’s Perspective, 41st Annual Course in Oral</td>
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<td>Pathology, Disney's Contemporary Resort, Lake Buena Vista, Florida</td>
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<td>Computer Assisted Postmortem Identification (CAPMI), Continuing</td>
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<td>Education Program, Office of the Armed Forces Medical Examiner System,</td>
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<td>Armed Forces Institute of Pathology, Washington, DC (Lecturer)</td>
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<td>Forensic Odontology, Basic Forensic Pathology Course, Armed Forces</td>
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<td>Institute of Pathology and The American Registry of Pathology, Holiday</td>
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<td>Surgeon Academy Course 94-2, U.S. Army Aeromedical Center, Fort Rucker,</td>
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<td>Dental Identification--Methods and Specialized Techniques, Methods and</td>
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<td>Pathology and The American Registry of Pathology, Uniformed Services University of the Health Sciences, Bethesda, MD (Lecturer)</td>
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<td>Radiographic Pitfalls in Forensic Dental Identification, Continuing</td>
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<td>Armed Forces Institute of Pathology, Washington, DC (Lecturer)</td>
</tr>
<tr>
<td>March 1994</td>
<td>Forensic Dentistry, U.S. Army School of Aviation Medicine, Flight</td>
</tr>
<tr>
<td></td>
<td>Surgeon Academy Course 94-1, U.S. Army Aeromedical Center, Fort Rucker,</td>
</tr>
<tr>
<td></td>
<td>Alabama (Lecturer)</td>
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<tr>
<td>March 1994</td>
<td>Problems in Forensic Dental Identification and CAPMI, Advanced Forensic</td>
</tr>
<tr>
<td></td>
<td>Pathology, Armed Forces Institute of Pathology and The Federal Bureau of</td>
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<tr>
<td></td>
<td>Investigation, FBI National Training Center, Quantico, Virginia (Lecturer)</td>
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<tr>
<td>March 1994</td>
<td>30th Annual Course in Forensic Dentistry, Armed Forces Institute of</td>
</tr>
<tr>
<td></td>
<td>Pathology and American Registry of Pathology, Hyatt Regency Hotel,</td>
</tr>
<tr>
<td></td>
<td>Bethesda, Maryland (Co-Director and Lecturer)</td>
</tr>
</tbody>
</table>
January 1994  Radiographic Pathology and Radiographic Interpretation, Short Course in Oral Pathology, National Naval Dental Center, Bethesda, Maryland (Lecturer)

December 1993  Radiographic Interpretation and Benign Fibro-Osseous Lesions, 40th Annual Course in Oral Pathology, Armed Forces Institute of Pathology and American Registry of Pathology, Hilton Palacio Del Rio Hotel, San Antonio, Texas (Lecturer)

November 1993  Forensic Dental Identification Workshop, USAID TAC, Fort Knox, Kentucky (Course Director, Lecturer, Laboratory Director)

November 1993  Forensic Dentistry, U.S. Army School of Aviation Medicine, Flight Surgeon Academy Course 93-3, U.S. Army Aeromedical Center, Fort Rucker, Alabama (Lecturer)

November 1993  Forensic Dental Identification Workshop, USAID TAC, Fort Bragg, North Carolina (Course Director, Lecturer, Laboratory Director)

October 1993  Forensic Dental Identification Workshop, USAID TAC, Fort Hood, Texas (Course Director, Lecturer, Laboratory Director)

October 1993  Forensic Odontology, Essentials in Forensic Pathology Course, Armed Forces Institute of Pathology and The American Registry of Pathology, Holiday Inn Crowne Plaza Hotel, Rockville, MD (Lecturer)

July 1993  Forensic Dentistry, U.S. Army School of Aviation Medicine, Flight Surgeon Academy Course 93-2, U.S. Army Aeromedical Center, Fort Rucker, Alabama (Lecturer)

May 1993  Oral Pathology, AFIP Seminar, American Academy of Oral Pathology Annual Meeting, Portland, Maine

April 1993  Oral Pathology, 12th Annual Postgraduate Short Course in Oral Pathology, Oral Diagnosis, Oral Medicine, USAID TAC, Walter Reed Army Medical Center, Washington, DC (Lecturer)

March 1993  Forensic Dentistry, U.S. Army School of Aviation Medicine, Flight Surgeon Academy Course 93-1, U.S. Army Aeromedical Center, Fort Rucker, Alabama (Lecturer)

March 1993  29th Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Sheraton Premiere Tyson's Corner Hotel, Vienna, Virginia (Co-Director and Lecturer)

February 1993  Radiographic Pathology and Radiographic Interpretation, Short Course in Oral Pathology, National Naval Dental Center, Bethesda, Maryland (Lecturer)

January 1993  Basics of Forensic Dentistry, Forensic Master's Degree Program, George Washington University and Office of the Chief Medical Examiner, Department of Human Services, Government of the District of Columbia, Washington, DC (Lecturer)

November 1992  Forensic Dentistry, U.S. Army School of Aviation Medicine, Flight Surgeon Academy Course 92-3, U.S. Army Aeromedical Center, Fort Rucker, Alabama (Lecturer)

October 1992  Radiographic Interpretation, 39th Annual Course in Oral Pathology, Armed Forces Institute of Pathology and American Registry of Pathology, Hyatt Regency Bethesda Hotel, Bethesda, Maryland (Lecturer)
October 1992  Biopsy principles and procedures, Short Course in Oral and Maxillofacial Surgery, USADENTAC, Walter Reed Army Medical Center, Washington, DC (Lecturer)

July 1992  Forensic Dentistry, U.S. Army School of Aviation Medicine, Flight Surgeon Academy Course 92-2, U.S. Army Aeromedical Center, Fort Rucker, Alabama (Lecturer)

July 1992  Forensic Dental Identification Workshop, Headquarters, 7th Medical Command: Dental Service, U.S. Army Europe, Nachrichtenkasern, Heidelberg, Germany (Course Director, Lecturer, Laboratory Director)

June 1992  Forensic Dentistry, Fifth Annual Forensic Anthropology Course, National Museum of Health and Medicine, Armed Forces Institute of Pathology and American Registry of Pathology, Uniformed Services University of the Health Sciences, Bethesda, Maryland (Lecturer)

May 1992  Metastatic Lesions to the Oral Environs, Wednesday Professional Staff Conference, Armed Forces Institute of Pathology, Washington, DC (Lecturer)

May 1992  Oral Pathology, AFIP Seminar, American Academy of Oral Pathology Annual Meeting, San Francisco, California (Lecturer)

April 1992  Genetics and Facial Dysmorphic Syndromes, Short Course in Pediatric Dentistry, National Naval Dental Center, Bethesda, Maryland (Lecturer)

April 1992  Oral Pathology, 11th Annual Postgraduate Short Course in Oral Pathology, Oral Diagnosis, Oral Medicine, USADENTAC, Walter Reed Army Medical Center, Washington, DC (Lecturer)

March 1992  Forensic Dentistry, U.S. Army School of Aviation Medicine, Flight Surgeon Academy Course 92-1, U.S. Army Aeromedical Center, Fort Rucker, Alabama (Lecturer)

March 1992  28th Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Holiday Inn of Bethesda Hotel, Bethesda, Maryland (Co-Director and Lecturer)

February 1992  Oral Pathology, Short Course in Oral Pathology, National Naval Dental Center, Bethesda, Maryland (Lecturer)


January 1992  Forensic Dental Identification Workshop, USADENTAC, Fort Hood, Texas (Course Director, Lecturer, Laboratory Director)

December 1991  Forensic Dental Identification Workshop, USADENTAC, Fort Knox, Kentucky (Course Director, Lecturer, Laboratory Director)

November 1991  Forensic Dental Identification Workshop, USADENTAC, Fort Bragg, North Carolina (Course Director, Lecturer, Laboratory Director)

November 1991  Forensic Dentistry, U.S. Army School of Aviation Medicine, Flight Surgeon Academy Course 91-3, U.S. Army Aeromedical Center, Fort Rucker, Alabama (Lecturer)

October 1991  Oral Pathology, 38th Annual Course in Oral Pathology, Armed Forces Institute of Pathology and American Registry of Pathology, Holiday Inn of Bethesda Hotel, Bethesda, Maryland (Lecturer)
July 1991  Forensic Dentistry, U.S. Army School of Aviation Medicine, Flight Surgeon Academy Course 91-2, U.S. Army Aeromedical Center, Fort Rucker, Alabama (Lecturer)

June 1991  Forensic Dentistry, Fourth Annual Forensic Anthropology Course, National Museum of Health and Medicine, Armed Forces Institute of Pathology and American Registry of Pathology, Uniformed Services University of the Health Sciences, Bethesda, Maryland (Lecturer)

May 1991  Oral Pathology, AFIP Seminar, American Academy of Oral Pathology Annual Meeting, Minneapolis, Minnesota (Lecturer)

April 1991  27th Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Holiday Inn of Bethesda Hotel, Bethesda, Maryland (Co-Director and Lecturer)

April 1991  Oral Pathology, 10th Annual Postgraduate Short Course in Oral Pathology, Oral Diagnosis, Oral Medicine, USADENTAC, Walter Reed Army Medical Center, Washington, DC (Lecturer)

March 1991  Forensic Dentistry, U.S. Army School of Aviation Medicine, Flight Surgeon Academy Course 91-1, U.S. Army Aeromedical Center, Fort Rucker, Alabama (Lecturer)

February 1991  Oral Pathology, Short Course in Oral Pathology, National Naval Dental Center, Bethesda, Maryland (Lecturer)

January 1991  Basics of Forensic Dentistry, Forensic Master's Degree Program, George Washington University and Office of the Armed Forces Medical Examiner, Armed Forces Institute of Pathology, Washington, DC (Lecturer)

December 1990  Oral Pathology, Surgical Pathology of the Head and Neck Course, Armed Forces Institute of Pathology and American Registry of Pathology, Holiday Inn of Bethesda Hotel, Bethesda, Maryland (Lecturer)

November 1990  Forensic Dentistry, Aerospace Pathology and Accident Investigation, Armed Forces Institute of Pathology and American Registry of Pathology, Armed Forces Institute of Pathology, Washington, DC (Lecturer)

November 1990  Forensic Dentistry, U.S. Army School of Aviation Medicine, Flight Surgeon Academy Course 90-3, U.S. Army Aeromedical Center, Fort Rucker, Alabama (Lecturer)

October 1990  Oral Pathology, 37th Annual Course in Oral Pathology, Armed Forces Institute of Pathology and American Registry of Pathology, Holiday Inn of Bethesda Hotel, Bethesda, Maryland (Lecturer)

April 1990  Forensic Odontology, Symposium on Advanced Death Investigation for Criminal Investigators, Department of Pathology, Tripler Army Medical Center, Honolulu, Hawaii (Lecturer)

April 1990  Oral Pathology, Advanced Education Program in General Dentistry--1 Year, St. Francis Medical Center, Honolulu, Hawaii (Lecturer)

March 1990  Oral Pathology, Advanced Education Program in General Dentistry--1 Year, St. Francis Medical Center, Honolulu, Hawaii (Lecturer)

March 1990  26th Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Holiday Inn of Bethesda Hotel, Bethesda, Maryland (Lecturer)
November 1989  Oral Pathology, Leeward Prosthodontic Study Club, Honolulu, Hawaii (Lecturer)
February 1989  Oral Pathology, Advanced Education Program in General Dentistry--1 Year, St. Francis Medical Center, Honolulu, Hawaii (Lecturer)
July 1988  AIDS, Leeward Prosthodontic Study Club, Honolulu, Hawaii (Lecturer)
March 1988  Forensic Odontology, Symposium on Advanced Death Investigation for Criminal Investigators, Department of Pathology, Tripler Army Medical Center, Honolulu, Hawaii (Lecturer)
January 1988  Forensic Odontology, USADENTAC, Hawaii, Tripler Army Medical Center, Honolulu, Hawaii (Lecturer)
June 1987  Oral Pathology, United States Air Force Dental Service, Hickam Air Force Base, Honolulu, Hawaii (Lecturer)
April 1987  Oral Pathology, Leeward Prosthodontic Study Club, Honolulu, Hawaii (Lecturer)
March 1987  Oral Pathology, USADENTAC Study Club, Schofield Barracks, Hawaii (Lecturer)
November 1986  Nitrous Oxide Inhalation-Sedation Course, USADENTAC, Fort Knox, Kentucky (Lecturer, Laboratory Instructor)
September 1986  Oral Pathology, Louisville Area Dental Assistants Society, Louisville, Kentucky (Lecturer)
August 1986  Oral Pathology, USADENTAC, Fort Benjamin Harrison, Indiana (Lecturer)
June 1986  Oral Pathology, Oral Diagnosis, and Oral Medicine, Short Course in Oral Pathology/Oral Medicine, Walter Reed Army Medical Center, Washington, DC (Lecturer)
March 1986  Oral Pathology, Louisville Area Dental Assistants Society, Louisville, Kentucky (Lecturer)
November 1985  Nitrous Oxide Inhalation-Sedation Course, USADENTAC, Fort Knox, Kentucky (Lecturer, Laboratory Instructor)
August 1985  Oral Pathology, USADENTAC, Fort Benjamin Harrison, Indiana (Lecturer)
June 1985  Oral Pathology, Oral Diagnosis, and Oral Medicine, Short Course in Oral Pathology/Oral Medicine, Walter Reed Army Medical Center, Washington, DC (Lecturer)
March 1985  Oral Pathology, North Central Dental Assistants Society, Radcliff, Kentucky (Lecturer)
November 1984  Nitrous Oxide Inhalation-Sedation Course, USADENTAC, Fort Knox, Kentucky (Lecturer, Laboratory Instructor)
August 1984  Oral Pathology, USADENTAC, Fort Benjamin Harrison, Indiana (Lecturer)
May 1984  Oral Pathology, Comanche County Dental Society, Lawton, Oklahoma (Lecturer)
April 1984  Oral Pathology, South Central Dental Assistants Society, Lawton, Oklahoma (Lecturer)
March 1984  Nitrous Oxide Inhalation-Sedation Course, USADENTAC, Fort Sill, Oklahoma (Lecturer, Laboratory Instructor)
April 1983  Oral Pathology, South Central Dental Assistants Society, Lawton, Oklahoma (Lecturer)
March 1983  Nitrous Oxide Inhalation-Sedation Course, USADENTAC, Fort Sill, Oklahoma (Lecturer, Laboratory Instructor)

May 1982  Oral Pathology, American Cancer Society, Southwest Oklahoma Division, Lawton, Oklahoma (Lecturer)

May 1982  Oral Pathology, Comanche County Dental Society, Lawton, Oklahoma (Lecturer)

April 1982  Oral Pathology, South Central Dental Assistants Society, Lawton, Oklahoma (Lecturer)

March 1982  Nitrous Oxide Inhalation-Sedation Course, USADENTAC, Fort Sill, Oklahoma (Lecturer, Laboratory Instructor)

April 1981  Oral Pathology, South Central Dental Assistants Society, Lawton, Oklahoma (Lecturer)

May 1980  Oral Diagnosis and Therapeutics, Short Course in Oral Medicine, U.S. Army Institute of Dental Research, Washington, DC (Lecturer)

April 1980  Advanced Clinical Pathology of the Oral Regions, Short Course in Oral Pathology, U.S. Army Institute of Dental Research, Washington, DC (Lecturer)

April 1979  Advanced Clinical Pathology of the Oral Regions, Short Course in Oral Pathology, U.S. Army Institute of Dental Research, Washington, DC (Lecturer)

March 1978  Oral Pathology, General Practice Residency Program, Fort Belvoir, Virginia (Lecturer)

7. **Student/Trainee Supervision**

   a. **Postdoctoral**

   b. **Graduate**

   c. **Professional**

   d. **Medical/Dental**

   e. **Undergraduate**

   f. **Residents/Fellows**

   Robert Foss (1990-91, AFIP)
   Stephen Williams (1990-91, AFIP)
   Esther Childers (1991-92, AFIP)
   Theresa Gonzales (1991-92, AFIP)
   Brion Smith (1992-93, AFIP)
   Dale Watkins (1992-93, AFIP)
   James Castle (1995-96, Naval Dental School; 1997-98 AFIP)
   Mark Gleisner (1995-96, Naval Dental School; 1997-98 AFIP)
   Christopher Fielding (1996-97, AFIP)
   Duane Schafer (1996-97, AFIP)
Paul Shick (1997-98, AFIP)
Craig Willard (1997-98, AFIP)
Ricardo Padilla (1998-2000, University of Florida)
Juliana Robledo (1999-2001, University of Florida)
Yi-Shing Lisa Cheng (2001-2002, Baylor College of Dentistry)
Ingrid Proenca (2001-2004, Baylor College of Dentistry)
Payal Bhan (2003-2005, Baylor College of Dentistry)
Aparna Naidu (2003-2006, Baylor College of Dentistry)
Julia Chang (2004-2007, Baylor College of Dentistry)
Mohammed Mansour (2005-2008, Baylor College of Dentistry)
Sammar Razaq (2006-2009, Baylor College of Dentistry)
Timothy Jump (2007-2008, Baylor College of Dentistry)
Leticia Ferreira (2008-2011, Baylor College of Dentistry)
Pavithra Pugalagiri (2009-2012, Baylor College of Dentistry)
Rouba Assi (2010-2013, Baylor College of Dentistry)
Bryan Trump (2011-present, Baylor College of Dentistry)
Aditi Bhattacharya (2012-present, Baylor College of Dentistry)
Hiba Qari (2013-present, Baylor College of Dentistry)

**Thesis/Dissertation Committees**

Naidu, Aparna. The Expression of Interleukin-6, TGF-B1, and RANK-ligand in Osteoblasts Treated with Bisphosphonates. (Oral and Maxillofacial Pathology)

Heaton, Matthew. Evaluation of a Collagen Membrane for Ridge Augmentation: An Experimental Study in the Canine. (Periodontics)

Hitti, Rita. Evaluation of a Human Pericardium Membrane (Puros Pericardium) for Ridge Augmentation: An Experimental Study in the Canine. (Periodontics)

Schellinck, Austin. Clinical Trial Comparing Topical Corticosteroid and Intrallesional Corticosteroid Therapy in the Treatment of Oral Pemphigus. (Periodontics)

Meyers-Tomlin, Elizabeth. Comparison of Ridge Preservation Using Dermis Allograft Tissue Matrix Membrane Versus Connective Tissue Graft: A Human and Histological Study (Periodontics)

**Graduate Faculty Membership**

2001-Present Graduate School of Biomedical Sciences, Texas A&M University System Health Science Center, Graduate Faculty

**Teaching Awards**

January 2006 Baylor College of Dentistry Teaching Excellence Award

**Academic Counseling**

As a course director for 3 courses as well as a participating faculty member in 7 other courses and a mentor to any current Oral and Maxillofacial Pathology residents, I spend considerable time counseling and advising students.
11. Teaching Consultantships
2001-Present University of Texas Southwestern Medical School, Department of Oral and Maxillofacial Surgery, Dallas, Texas, Visiting lecturer
2002-2006 U.S. Army Advanced Education Program in General Dentistry—2 Year, Ft. Hood, Texas, Consultant Lecturer
2006-Present The Arizona School of Dentistry and Oral Health, Mesa, Arizona, Consultant lecturer/Adjunct faculty
2007-Present Louisiana State University Health Science Center—Shreveport, Department of Oral and Maxillofacial Surgery, Shreveport, Louisiana, Visiting lecturer

12. Other Indices of Teaching
2006-present Program Director, Oral and Maxillofacial Pathology Residency Program Texas A&M Health Science Center—Baylor College of Dentistry, Dallas, Texas
1999-2001 Program Director, Oral and Maxillofacial Pathology Residency Program University of Florida College of Dentistry, Gainesville, FL
1995-1998 Mentor, Oral and Maxillofacial Pathology Residency Program, Naval Dental School, National Naval Dental Center, Bethesda, Maryland
1990-1995 Visiting lecturer in Oral Pathology, Naval Dental School, National Naval Dental Center, Bethesda, Maryland
1988-1990 Clinical Faculty, Department of Pathology, University of Hawaii at Manoa Medical School, Honolulu, Hawaii
1987-1988 Director, Treatment Planning Board, USADENTAC, Tripler Army Medical Center, Honolulu, Hawaii
1986-1990 Mentor, Oral Pathology/Oral Medicine, Oral and Maxillofacial Surgery Residency Program, USADENTAC, Tripler Army Medical Center Honolulu, Hawaii
1985-1986 Mentor, Orofacial Biology, U.S. Army Orthodontic Residency Program, Fort Knox, Kentucky
1984-1986 Mentor, Oral Pathology/Oral Medicine, Advanced Education Program in General Dentistry--2 Year, USADENTAC, Fort Knox, Kentucky
1984-1985 Coordinator, Treatment Planning Board, Advanced Education Program in General Dentistry--2 Year, USADENTAC, Fort Knox, Kentucky
1984 Faculty instructor, Lawton-Ft. Sill Dental Assistant Certification Study Group, Lawton, Oklahoma
1983 Director, 1983 Resident Symposium, Advanced Education Program in General Dentistry--1 Year, USADENTAC, Fort Sill, Oklahoma
1983-1984 Coordinator, Professional Research Papers, Advanced Education Program in General Dentistry--1 Year, USADENTAC, Fort Sill, Oklahoma
1982-1984 Visiting Lecturer in Oncology, Licensed Practical Nursing Program, Great Plains Area Vocational-Technical School, Lawton, Oklahoma
1981 Faculty instructor, Lawton-Ft. Sill Dental Assistant Certification Study Group, Lawton, Oklahoma
1980-1984  Mentor, Oral Pathology/Oral Medicine, General Practice Residency Program  
USADENTAC, Fort Sill, Oklahoma
1978-1979  Lecturer in Oral Pathology, 16th Advanced Theory and Science of Dental Practice  
U.S. Army Institute of Dental Research, Washington, DC

F. Research and Scholarly Activities

1. Areas of research and scholarship
My interests include odontogenic cysts and tumors; salivary gland diseases; skin adnexal tumors;  
the similarities and interrelationships between odontogenic, salivary gland, and skin adnexal  
tumors; oral mucosal diseases, and the genetic basis of disease, particularly oral squamous  
carcinoma. I helped define the Glandular Odontogenic Cyst, being co-author on the original  
paper. I was the senior author on the review paper published in Cancer of the largest series ever  
reported of Polymorphous Low-Grade Adenocarcinoma. In addition, I have extensive  
experience in Forensic Dentistry, having been the Chief of Forensic Dentistry during Operation  
Desert Storm. As such, I was responsible for dental identification of all casualties during the  
1991 war.

2. Invited Presentations
March 2013  Interesting Cases in Forensic Dental Identification, Oak Cliff Dental Study  
Club, Duncanville, Texas
April 2012  Overview of Forensic Dentistry, East Texas Dental Assistants Society,  
Longview, Texas
March 2012  Basics of Forensic Dentistry, Oak Cliff Dental Study Club, Dallas, Texas  
October 2011  Forensic Dentistry, Dallas County Dental Assistants Society, Dallas, Texas  
July 2011  Oral and Maxillofacial Pathology Review, East Texas Dental Assistants  
Society, Longview, Texas
June 2011  Common Pathologic Conditions Affecting the Gingiva, North Texas  
Endodontic Associates Continuing Education Seminar, Plano, Texas
March 2011  Differential Diagnosis of Common Clinical Lesions Part II, North Texas  
Endodontic Associates Continuing Education Seminar, Plano, Texas
February 2011  Common Clinical Lesions of the Oral Mucosa, Lewisville Dental Study Club,  
Lewisville, Texas (Host: Dr. Paul Ezzo)
November 2010  Common Clinical Lesions of the Oral Mucosa, Irving Dental Study Club, Las  
Colinas, Texas
September 2010  Differential Diagnosis of Common Clinical Lesions, North Texas Endodontic  
Associates Continuing Education Seminar, Plano, Texas
November 2009  Oral Cancer and Precancer, Irving Dental Study Club, Las Colinas, Texas  
November 2008  Odontogenic Cysts, North Texas Society of Oral and Maxillofacial Surgeons,  
Dallas, Texas
October 2008  Diagnosis and Treatment of Oral Ulcerative Conditions, Denton County  
Dental Society, Carrollton, Texas
for the Dental Professional, Grapevine, Texas
February 2007  Common Soft Tissue Lesions of the Oral Mucosa, North Texas Society of  
Oral and Maxillofacial Surgeons, Dallas, Texas
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
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<tbody>
<tr>
<td>January 2006</td>
<td>Learning the ABBC’S of Clinical Differential Diagnosis, Southwest Dental Conference, Dallas, Texas (sponsored in part by the Dental Oncology Education Program)</td>
</tr>
<tr>
<td>January 2006</td>
<td>Differential Diagnosis of Oral Radiographic Pathology, Southwest Dental Conference, Dallas, Texas</td>
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<tr>
<td>September 2005</td>
<td>Selected Lesions Unique to the Oral Cavity, North Texas Society of Pathologists Quarterly Meeting, Dallas, Texas</td>
</tr>
<tr>
<td>May 2005</td>
<td>Oral Cancer: What’s Old, What’s New, Is There Anything You Can Do?, Continuing Education Seminar (McQuade and Rossman Periodontology Group), Lewisville, Texas</td>
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<tr>
<td>January 2004</td>
<td>The ABBC’S of Clinical Differential Diagnosis, Southwest Dental Conference, Dallas, Texas</td>
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<tr>
<td>January 2004</td>
<td>Update on Oral Cancer: Emerging Science and its Implications, Southwest Dental Conference, Dallas, Texas (sponsored by the Dental Oncology Education Program)</td>
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<tr>
<td>March 2003</td>
<td>Oral Pathology, Advanced Education Program in General Dentistry—2 Year, USADENTAC, Fort Hood, TX</td>
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<td>March 2003</td>
<td>Calibration Techniques for Board Examiners, Forum on Examinations, American Association of Dental Examiners Semi-Annual Meeting, Chicago, IL</td>
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<tr>
<td>January 2003</td>
<td>Biopsy Principles and Techniques: The Pathologist’s Perspective, North Texas Society of Oral and Maxillofacial Surgeons, Dallas, Texas</td>
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<tr>
<td>September 2002</td>
<td>New Entities in Oral and Maxillofacial Pathology, NetDDS Study Group (Dr. David Hunter), Grapevine, Texas</td>
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<tr>
<td>September 2002</td>
<td>The ABBC’S of Clinical Differential Diagnosis, Homecoming Gala Continuing Education Program, The Baylor College of Dentistry Alumni Association, Baylor College of Dentistry, Dallas, TX</td>
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<tr>
<td>March 2002</td>
<td>Oral Pathology, Advanced Education Program in General Dentistry—2 Year, USADENTAC, Fort Hood, TX</td>
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<tr>
<td>January 2002</td>
<td>New Entities in Oral and Maxillofacial Pathology, North Texas Society of Oral and Maxillofacial Surgeons, Dallas, Texas</td>
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<tr>
<td>May 2001</td>
<td>Forensic Dentistry, Suwanee Valley Dental Study Club, Newberry, Florida</td>
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<tr>
<td>February 2001</td>
<td>Oral Pathology, Advanced Education Program in General Dentistry—1 Year, USADENTAC, Fort Jackson, SC</td>
</tr>
<tr>
<td>November 2000</td>
<td>Surgical Oral Pathology, General Pathology Residency Program, Department of Pathology, University of Florida Health Science Center/Jacksonville, Jacksonville, FL</td>
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<tr>
<td>September 2000</td>
<td>Oral Pathology, Advanced Education Program in General Dentistry—1 Year, USADENTAC, Fort Jackson, SC</td>
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<tr>
<td>September 2000</td>
<td>New Entities in Oral and Maxillofacial Pathology, Alachua County Dental Society, Gainesville, Florida</td>
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<tr>
<td>June 2000</td>
<td>Forensic Dentistry and Oral Pathology, Advanced Education Program in General Dentistry—1 Year, USADENTAC, Fort Carson, Colorado</td>
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<tr>
<td>March 2000</td>
<td>New Entities in Oral and Maxillofacial Pathology, Citrus County Dental Society, Crystal River, Florida</td>
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<tr>
<td>August 1999</td>
<td>Forensic Dentistry and Oral Pathology, Advanced Education Program in General Dentistry—1 Year, USADENTAC, Fort Carson, Colorado</td>
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<tr>
<td>May 1998</td>
<td>Forensic Odontology, District of Columbia Dental Society Annual Meeting, Washington, DC</td>
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<tr>
<td>March 1996</td>
<td>Forensic Dentistry, South Dakota Dental Association Forensics Team, Chamberlain, South Dakota</td>
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<tr>
<td>June 1995</td>
<td>Forensic Dental Identification Workshop, American Registry of Pathology and Department of Forensic Medicine, The Royal Infirmary Dundee, University of Dundee, Dundee, Scotland, UK</td>
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<tr>
<td>January 1995</td>
<td>Pediatric Oral Pathology, Advanced Education Program in Pediatric Dentistry, USADENTAC, Fort Meade, Maryland</td>
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<tr>
<td>November 1994</td>
<td>Introduction to Forensic Dentistry, Maryland Academy of General Dentistry, Best Western Maryland Inn, Laurel, Maryland</td>
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<tr>
<td>September 1993</td>
<td>Forensic Dental Identification and Bitemark Analysis, Region IV International Association of Bomb Technicians and Investigators, Bureau of Alcohol, Tobacco and Firearms, Department of the Treasury, National Laboratory Center, Rockville, MD</td>
</tr>
<tr>
<td>July 1993</td>
<td>Forensic Dentistry and Oral Pathology, Advanced Education Program in General Dentistry—1 Year, USADENTAC, Fort Jackson, SC</td>
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<td>May 1993</td>
<td>Forensic Dentistry, Moot Court for Establishment of Forensic Dentistry Qualifications, The Federal Bureau of Investigation, Washington, DC (Consultant Examiner)</td>
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<tr>
<td>February 1993</td>
<td>Forensic Dentistry, Harford County, Maryland Dental Society, Aberdeen, Maryland</td>
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<tr>
<td>February 1993</td>
<td>Oral Pathology, Advanced Education Program in Prosthodontics, USADENTAC, Walter Reed Army Medical Center, Washington, DC</td>
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<td>February 1993</td>
<td>Oral Pathology, Advanced Education Program in General Dentistry—1 year, USADENTAC, Fort Benning, Georgia</td>
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<tr>
<td>November 1992</td>
<td>Pediatric Oral Pathology, Advanced Education Program in Pediatric Dentistry, USADENTAC, Fort Meade, Maryland</td>
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<tr>
<td>October 1992</td>
<td>Forensic Odontology, Twentieth Session, Homicide School, Metropolitan Police Department, Government of the District of Columbia, Washington, DC</td>
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<tr>
<td>June 1992</td>
<td>Forensic Dentistry and Oral Pathology, Advanced Education Program in General Dentistry—1 Year, USADENTAC, Fort Jackson, SC</td>
</tr>
<tr>
<td>February 1992</td>
<td>Genetics and Oral Pathology, Advanced Education Program in Orthodontics, USADENTAC, Fort Meade, Maryland</td>
</tr>
<tr>
<td>November 1991</td>
<td>Oral Pathology, Advanced Education Program in General Dentistry—2 Year, USADENTAC, Fort Hood, Texas</td>
</tr>
<tr>
<td>October 1991</td>
<td>Pediatric Oral Pathology, Advanced Education Program in Pediatric Dentistry, USADENTAC, Fort Meade, Maryland</td>
</tr>
<tr>
<td>December 1990</td>
<td>Forensic Dental Identification Workshop, University of Maryland School of Dentistry, Baltimore, Maryland</td>
</tr>
</tbody>
</table>
September 1990  Forensic Dentistry and Oral Pathology, Advanced Education Program in General Dentistry—1 Year, USADENTAC, Fort Jackson, SC
January 1989  State of Hawaii Dental Assistants Association, Hawaii State Dental Association Meeting, Hilton Hawaiian Village Hotel, Honolulu, Hawaii (Seminarian)
January 1989  Infection Control, Association of Dental Laboratories of Hawaii, Hawaii State Dental Association Meeting, Hale Koa Hotel, Honolulu, Hawaii
December 1987  AIDS and Hepatitis, Kailua-Kona Area Dental Health Care Workers, Mauna Lani Resort Hotel, Kamuela, Hawaii
October 1987  Symposium on AIDS Education, State of Hawaii, Department of Health, Hilton Hawaiian Village Hotel, Honolulu, Hawaii (Workshop Director for Dental Instruction)
August 1986  Oral Pathology, Advanced Educational Program in General Dentistry—1 Year, USADENTAC, Fort Sill, Oklahoma
December 1985  Oral Pathology, Advanced Educational Program in General Dentistry—1 Year, USADENTAC, Fort Riley, Kansas
November 1985  Oral Pathology, Advanced Educational Program in General Dentistry—1 Year, USADENTAC/Huntsville-Madison County Dental Society, Redstone Arsenal, Alabama
September 1985  Oral Pathology, Advanced Educational Program in General Dentistry—1 Year, USADENTAC, Fort Sill, Oklahoma
May 1985  Oral Pathology, Advanced Educational Program in General Dentistry—1 Year, USADENTAC, Fort Sill, Oklahoma

3. Grants
   a. Funded
   NIH-National Cancer Institute 1 R03 CA112622-01A1, $145,500
   July 1,2005 – June 30, 2007. (Co-investigator)
   b. Pending

4. Manuscript Review
   a. Journals Refereed
      Ad hoc reviewer:
      Oral Biosciences and Medicine (2004-present)
      Journal of Oral Pathology and Medicine (2012-Present)
      Reviewer:
      Journal of Contemporary Dental Practice (2006-present)
      Journal of Dentistry for Children (2010-present)
      International Journal of Surgical Pathology (2013-present)
      Cellular Physiology and Biochemistry (2013-present)
b. **Editorial Boards**
   - 2013-Present: International Journal of Surgical Pathology
   - 2012-Present: Journal of Oral and Maxillofacial Surgery, Medicine and Pathology
   - 2001-Present: Oral Pathology Case of the Month, Texas Dental Journal
   - 2001-2006: Quintessence International

c. **Editorship**
   - 2011-Present: Associate Editor, The Texas Dental Journal
   - 2001-Present: Section Editor, Oral Pathology Case of the Month, Texas Dental Journal

5. **Grant Reviews**
   a. Study Section, Review Panel, Special Emphasis Panel
   b. Ad hoc

6. **Scholarly Societies**
   - 1970-present: American Dental Association
   - 1974-75: Omicron Kappa Upsilon Honorary, Alumni Membership, University of Maryland School of Dentistry
   - 1978-present: American Academy of Oral Pathology
   - 1985-87: Pierre Fauchard Academy
   - 1987-90: Leeward Prosthodontic Study Club
   - 1989-1990: Mid Pacific Association of Forensic Sciences (Charter Member)
   - 1990-96: Federation Dentaire Internationale
   - 1994-present: American Academy of Forensic Sciences
   - 1995-present: Fellowship, International College of Dentists
   - 1998-present: North American Society of Head and Neck Pathology
   - 1998-present: American Dental Education Association
   - 1998-2001: Omicron Kappa Upsilon Honorary, University of Florida College of Dentistry
   - 2000-01: Florida Society of Pathologists
   - 2000-01: Florida Dental Association
   - 2000-01: Central District Dental Association (Florida)
   - 2000-2001: Alachua County Dental Association
   - 2001-present: Omicron Kappa Upsilon Honorary, Baylor College of Dentistry
   - 2002-present: Texas State Dental Association
   - 2002-present: Dallas County Dental Society
   - 2004-present: Fellowship, American College of Dentists
   - 2005-present: North Texas Society of Pathologists
7. **Contribution to professional organizations**

1978-Present American Academy of Oral and Maxillofacial Pathology
- President
- President Elect
- Vice President
- Executive Council
- Constitution and By-Laws Committee
- Nominating committee
- Nominating committee
- Education committee
- Finance committee
- Long-term planning committee
- Contributing pathologist, Clinical Pathologic Conference
- Contributing pathologist, Clinical Pathologic Conference
- Contributing pathologist, Clinical Pathologic Conference
- Contributing pathologist, Clinical Pathologic Conference
- Fellowship
1990-1996 Federation Dentaire Internationale
- Working Group Leader, Standing Activity on Forensic Odontology, Commission on Defence Forces Dental Services
1998-present American Dental Education Association
- Secretary, Postgraduate Education Subsection
- Vice-Chair, Postgraduate Education Subsection
- Chair, Postgraduate Education Subsection
1978-present American Dental Association
- Test Constructor (Alternate), National Board Microbiology-Pathology Test Construction Committee
1998-2001 Omicron Kappa Upsilon, University of Florida
- President-elect
- Vice-President
2001-present Omicron Kappa Upsilon, Baylor College of Dentistry
- Secretary-Treasurer

8. **Participation on national or regional board examination, certification or accreditation committee**

1982-present American Board of Oral and Maxillofacial Pathology
- Board Certification
- Director (elected) 2000-2007
- Secretary-Treasurer (elected) 2002-2006
- President (elected) 2006-2007
2009-2013 American Board of Pathology Test Construction Committee
9. Meeting where chaired session

10. Programs and symposiums you organized
May 2009 Clinico-Pathologic Conference, 63rd Annual Meeting, American Academy of Oral and Maxillofacial Pathology, 16-20 May, 2009, Montreal, Quebec, Canada
May 1998 AFIP Seminar, American Academy of Oral and Maxillofacial Pathology, Dallas, Texas (primary organizer; approximately 150 attendees)
May 1997 AFIP Seminar, American Academy of Oral and Maxillofacial Pathology, Vancouver, British Columbia, Canada (primary organizer; approximately 150 attendees)
August 1999 Oral and Maxillofacial Pathology for Dental Specialists, University of Florida Continuing Education Program, Safety Harbor Resort, Clearwater, FL (co-organizer; approximately 20 attendees)
March 1998 34th Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Doubletree Hotel, Rockville, Maryland (primary organizer; approximately 200 attendees)
April 1997 43rd Annual Course in Oral Pathology, Armed Forces Institute of Pathology and American Registry of Pathology, Hyatt Regency Bethesda Hotel, Bethesda, Maryland (primary organizer; approximately 200 attendees)
March 1997 33rd Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Hyatt Regency Bethesda Hotel, Bethesda, Maryland (primary organizer; approximately 100 attendees)
March 1995 31st Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Holiday Inn Crowne Plaza Hotel, Rockville, Maryland (co-organizer; approximately 200 attendees)
March 1994 30th Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Hyatt Regency Hotel, Bethesda, Maryland (co-organizer; approximately 200 attendees)
November 1993 Forensic Dental Identification Workshop, USADENTAC, Fort Knox, Kentucky (primary organizer; approximately 35 attendees)
November 1993 Forensic Dental Identification Workshop, USADENTAC, Fort Bragg, North Carolina (primary organizer; approximately 40 attendees)
October 1993 Forensic Dental Identification Workshop, USADENTAC, Fort Hood, Texas (primary organizer; approximately 45 attendees)
March 1993 29th Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Sheraton Premiere Tyson's Corner Hotel, Vienna, Virginia (co-organizer; approximately 175 attendees)
July 1992  Forensic Dental Identification Workshop, Headquarters, 7th Medical Command: Dental Service, U.S. Army Europe, Nachrichtenkasern, Heidelberg, Germany (primary organizer; approximately 35 attendees)

March 1992  28th Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Holiday Inn of Bethesda Hotel, Bethesda, Maryland (co-organizer; approximately 150 attendees)

January 1992  Forensic Dental Identification Workshop, USADENTAC, Fort Hood, Texas (primary organizer; approximately 35 attendees)

December 1991  Forensic Dental Identification Workshop, USADENTAC, Fort Knox, Kentucky (primary organizer; approximately 30 attendees)

November 1991  Forensic Dental Identification Workshop, USADENTAC, Fort Bragg, North Carolina (primary organizer; approximately 30 attendees)

April 1991  27th Annual Course in Forensic Dentistry, Armed Forces Institute of Pathology and American Registry of Pathology, Holiday Inn of Bethesda Hotel, Bethesda, Maryland (co-organizer; approximately 150 attendees)

11. Awards
2011  Service Recognition Award, Texas Dental Association
2006  International College of Dentists, Texas Section Literary Award
2006  Baylor College of Dentistry Teaching Excellence Award
1998  AFIP Medallion
1996  Navy Commendation Medal
1995  Department of Defense Meritorious Service Medal
1995  AFIP Medallion
1992  Joint Services Commendation Medal
1991  National Defense Service Medal (Bronze Star Device)
1990  Overseas Service Ribbon
1990  Meritorious Service Medal (2nd Oak Leaf Cluster)
1990  Army Commendation Medal (1st Oak Leaf Cluster)
1989  "A" Proficiency Designator
1986  Meritorious Service Medal (1st Oak Leaf Cluster)
1985  Army Service Ribbon
1984  Meritorious Service Medal
1984  Order of Military Medical Merit
1977  Army Commendation Medal
1974  National Defense Service Medal
1974  Magna Cum Laude Graduate, University of Maryland School of Dentistry
1974  Omicron Kappa Upsilon Honorary Society, Alumni membership (elected)

12. Other Indices of Scholarly Performance

G. Professional Service

1. Education for public school students on health promotion and disease prevention
2003-present  Baylor summer outreach programs for high school students
2. Career counseling and encouragement of young people to enter health professions

3. Continuing education services to help professionals in the community
   See E6.

4. Advice to community organizations and agencies on health related matters
   2000-2001 Board of Directors, Alachua County Unit, American Cancer Society, Gainesville, FL

5. Advice and consultation to health professionals in the community on enhancement of quality, efficiency, and delivery of health services
   2001-Present Consultant, ProPath Services, Dallas, Texas
   2001-Present Consultant for various medical and dental health care providers who call Baylor College of Dentistry with questions about pathologic lesions of the head and neck area, diagnosis of pathologic lesions, treatment options, and therapeutic regimens.
   2001-Present Consultant for Department of Pathology, Baylor University Medical Center on diagnosis of difficult histopathologic specimens from the head and neck area
   2001-Present Consultant for UT Southwestern Medical School, Department of Oral and Maxillofacial Surgery on histopathologic diagnosis of specimens from the oral regions

6. Collaboration with local, regional, and state public health agencies
   1990-1995 Consultant in Forensic Dentistry to the Surgeon General, U.S. Army
   1990-1998 Consultant in Forensic Dentistry, Office of the Armed Forces Medical Examiner, Department of Defense, Washington, DC
   1989-1990 Consultant in Forensic Odontology, Department of the Medical Examiner, City and County of Honolulu, Honolulu, Hawaii

7. Dissemination of research information to the appropriate public sectors

8. General advice, consultation, and service to community organizations and agencies

9. Consultantship to industry related to research, health care, or product development

10. Participation in health events
    1989 Volunteer Clinician, Head and Neck Examination, Health Screening Program, American Dental Association Annual Meeting, Honolulu, Hawaii
    1976 Volunteer Clinician, Head and Neck Examination, Health Screening Program, American Cancer Society, Newburgh, New York

11. Outreach programs for college students
12. Outreach programs for high school, junior high school, and elementary school students

13. Awards
2006 International College of Dentists, Texas Section Literary Award

14. Other indices of Professional Service
2000-2001 Member, Oral Medicine Search Committee, University of Florida College of Dentistry, Gainesville, FL
1999-2000 Member, Curriculum Review and Revision Committee, University of Florida College of Dentistry, Gainesville, FL
1998 Deputy Medical Examiner for Operations, Office of the Armed Forces Medical Examiner, Armed Forces Institute of Pathology, Washington, DC
1997-1998 Chairman, Graduate Medical Education Committee, Armed Forces Institute of Pathology, Washington, DC
1997-1998 Chairman, Quality Assurance Committee, Armed Forces Institute of Pathology, Washington, DC
1988-1990 Occupational Safety and Health Manager, USADENTAC, Tripler Army Medical Center, Honolulu, Hawaii
1986-1990 Chairman, Dental Education Committee, USADENTAC, Tripler Army Medical Center, Honolulu, Hawaii
1986-1990 Infection Control Officer, USADENTAC, Tripler Army Medical Center, Honolulu, Hawaii
1986-1990 Regional Forensic Odontologist, Pacific Region, The Armed Forces Medical Examiner System, Tripler Army Medical Center, Honolulu, Hawaii
1984-1986 Certified Instructor, Cardiopulmonary Resuscitation, American Red Cross—Louisville Area Chapter, Fort Knox, Kentucky
1984-1986 Director, TMJ Clinic, USADENTAC, Fort Knox, Kentucky
1984 Certified Provider, Advanced Trauma Life Support, American College of Surgeons, Fort Knox, Kentucky
1983-1984 Certified Instructor, Cardiopulmonary Resuscitation, American Heart Association, Oklahoma Affiliate, Fort Sill, Oklahoma
1983 Certified Provider, Advanced Cardiac Life Support, American Heart Association, Oklahoma Affiliate, Fort Sill, Oklahoma

15. Contribution to professional organizations
See F7

16. Manuscript Review

17. Grant reviews
18. **Participation on national or regional board examination, certification, or accreditation committees**

2009-2013  Member, American Board of Pathology Test Construction Committee
2000-2007  Director, American Board of Oral and Maxillofacial Pathology
2002-2006  Secretary Treasurer
2006-2007  President

19. **Consultant to accrediting and other educational review boards, industry, health care**

See G6.

20. **Forensic Dental Identification Missions**

Major missions are detailed. Numerous other individual identifications have been performed in support of and at the request of the Office of the Armed Forces Medical Examiner System. In addition, periodic identifications/documentation were provided to the Chief Medical Examiner’s Office, Department of Human Services, Government of the District of Columbia as part of their cooperative agreement with the Office of the Armed Forces Medical Examiner System.

<table>
<thead>
<tr>
<th>Date</th>
<th>Mission</th>
<th>Details</th>
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<tbody>
<tr>
<td>Oct/Nov 1990</td>
<td>USS Iwo Jima</td>
<td>11 dead, 11 dental IDs</td>
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<tr>
<td>Dec 1990</td>
<td>USS Saratoga</td>
<td>21 dead, 20 dental IDs</td>
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<tr>
<td>Jan-May 1991</td>
<td>Operation Desert Storm</td>
<td>302 accessions, 244 dental IDs</td>
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<tr>
<td>Sep 1991</td>
<td>CONOCO Jet crash, Malaysia</td>
<td>12 dead, 8 dental IDs, <strong>State Dept. request</strong></td>
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<tr>
<td>Dec 1991</td>
<td>Beirut hostages</td>
<td>2 dead (Buckley, LTC Higgins), 2 dental IDs</td>
</tr>
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<td>Oct 1992</td>
<td>C130 aircrash, Berkley Springs, WV</td>
<td>6 dead, 6 dental IDs</td>
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<td>Dec 1992</td>
<td>Montana aircrash</td>
<td>13 dead, 13 dental IDs</td>
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<tr>
<td>Dec 1992</td>
<td>Liberian nuns assassination</td>
<td>5 dead, 5 dental IDs, <strong>State Dept. request</strong></td>
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<tr>
<td>Aug 1993</td>
<td>Mogadishu ambush</td>
<td>21 dental IDs</td>
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<tr>
<td>Apr 1994</td>
<td>Operation Provide Comfort, Iraq helicopter shootout</td>
<td>26 dead, 20 definitive dental IDs, 6 presumptive IDs on Kurdish personnel, <strong>Direct Order from President Clinton</strong></td>
</tr>
<tr>
<td>Aug 1994</td>
<td>AMIA bombing, Buenos Aires, Argentina</td>
<td>1 dental ID, <strong>State Dept. request</strong></td>
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</tbody>
</table>
H. Institutional Service to the HSC

1. Component Committees
   2010  Department of Biomedical Sciences Promotion Review Committee
   2010  Department of Periodontics Promotion and Tenure Review Committee
   2010  Department of Periodontics Post-Tenure Review Committee
   2010  Department of Restorative Dentistry Post-Tenure Review Committee
   2010-Present  Biosafety Committee
   2008  Department of Biomedical Sciences Promotion Review Committee
   2008-Present  Graduate Education Council
   2006-Present  Biomedical Sciences Graduate Committee
   2004-Present  Student Promotions Committee
                  Chairman, 2005-present
   2003  Departmental Promotion Review Committee
   2003  Stomatology Center Review Committee (Dean’s appointment)
   2001-Present  Curriculum Committee
   2001-2005  Credentials Committee

2. Other Component Service

3. HSC Committees

4. Other HSC Service

5. Texas A&M University System Committees

6. Other Texas A&M University System Service

7. Patient Care

8. Board Certifications and Specialty Training
   1982  American Board of Oral and Maxillofacial Pathology, Diplomate
   1979-1980  Fellowship in Oral and Maxillofacial Pathology
   1979  American Board of Oral Medicine, Diplomate
   1977-1979  Graduate Program in Oral and Maxillofacial Pathology

9. Consultant to accrediting and other educational review boards, industry, health care

10. Outreach programs for college students

11. Outreach programs for high school, junior high school, and elementary school students

12. Awards
13. Other Indices of Service

I. Publications
   a. Refereed Papers


b. Non-refereed Papers


c. Review articles


d. Abstracts


14. Hassanein A, Glanz S, Kessler H, Eskin T, Liu C. Beta-Catenin is mutated in tumors expressing shadow cells; pilomatricoma, craniopharyngioma, and calcifying odontogenic tumor. 91st Annual Meeting, United States and Canadian Academy of Pathology, 27 February 2002, Chicago, IL

e. Books Authored

g. Books Edited
h. **Manuscripts In Press**


i. **Manuscripts Submitted**

j. **Table Clinics**

1988 Forensic Odontology, Hawaii Dental Association Annual Meeting, The Hilton Hawaiian Village Hotel, Honolulu, Hawaii

1986 Forensic Odontology, Annual Residency Program Symposium, Fort Knox, Kentucky

1974 Centric Relation Records, The International Dental Society Annual Meeting, El Paso, Texas

Information current as of Sept 2013
CURRICULUM VITAE - WILLIAM W. NAGY, B.S., D.D.S.

PERSONAL

Present Title:  Professor (Tenure)
Director, Graduate Prosthodontics
Department of Restorative Sciences &
TAMHSC School of Graduate Studies

Work Address:  Texas A&M University
Baylor College of Dentistry
3302 Gaston Ave
Dallas, TX 75246
Telephone: 214.828.8298
FAX: 214.874.4544
Email: wnagy@bcd.tamhsc.edu

Home Address:  5447 Merrimac Ave
Dallas, TX 75206
Telephone: 214.824.0546
Cell: 214.284.0984
FAX: 214.824.0540
Email: wwnagy@earthlink.net

EDUCATION

Graduate:

D.D.S., The Ohio State University, Columbus, Ohio - 1970

Undergraduate:

B.S., University of Akron, Akron, Ohio - 1966

Postgraduate:

Fixed Prosthodontic Residency (2 Yr.), Brooke Army
Medical Center, Ft. Sam Houston, Texas - 1978

Pre-Specialty General Dentistry Fellowship (1 Yr.), Ft.
Hood, Texas - 1973

Military:

Dental Command and Staff Course (7M-F6), Academy of
Health Sciences, Ft. Sam Houston, Texas - 1984

AMEDD Officer Advanced Course, Ft. Sam Houston, Texas -
1973

AMEDD Officer Basic Course, Ft. Hood, Texas - 1970
TEACHING EXPERIENCE

Advanced Education Programs:

Director, Graduate Prosthodontics, Baylor College of Dentistry, Dallas, Texas 2004 - (ADA Accreditation 2004, 2011)

Director, Graduate Prosthodontics, Marquette University School of Dentistry, Milwaukee, Wisconsin 1993 - 2004  (ADA Accreditation 1993, 2000)

Director, Combined Prosthodontic Residency, Brooke Army Medical Center, Ft. Sam Houston, Texas 1990 - 1993  (ADA Accreditation 1993)

Asst. Director, Combined Prosthodontic Residency, Brooke Army Medical Center, Ft. Sam Houston, Texas 1989 - 90

Director, Fixed Prosthodontic Residency, Brooke Army Medical Center, Ft. Sam Houston, Texas 1989 - 90

Director, Fixed Prosthodontics, Advanced Education Program in General Dentistry (2 Yr. Program), Ft. Ord, California 1986 - 88

Director, Fixed Prosthodontics, Advanced Education Program in General Dentistry (1 Yr. Program), Ft. Leonard Wood, Missouri 1978 - 79

Asst. Director, Advanced Education Program in General Dentistry (1 Yr. Program), Ft. Leonard Wood, Missouri 1978 - 79

Academy of Health Sciences US Army:

Assistant Professor of Health Sciences, Baylor University, U.S. Army Academy of Health Sciences, Ft. Sam Houston, Texas 1973 - 76

Course Director:

Dental Hygiene  (8 wks, 12 Sem Hrs) 330-91E30 1973 - 75
Instructor and Laboratory Officer:

Dental Laboratory Procedures (Basic) 331-42D10
Dental Removable Prosthetic Specialist 331-42D20
Dental Fixed Prosthetic Specialist 331-42F20

Instructor:

Dental Specialist (Basic) 330-91E10
Dental Therapy Assistant (Expanded Function)
Dental Administration 330-F1
Special Forces Aidman (Airborne) 300-F1

Professional Short Courses/Meetings:

Co Director, Jesse T. Bullard Lectureship, Baylor College of Dentistry (1 Day) Dallas, Texas 2005, 06, 07, 08, 09, 10, 11, 12

Director, Annual Board Preparation Course, American College of Prosthodontists, (1 day) San Diego, California, 1998

Co-Director, Annual Board Preparation Course, American College of Prosthodontists, (1 day) Orlando, Florida, 1997


Director, U.S. Army Annual Prosthodontic Short Course, (5 Days) U.S.A. DENTAC, Fort Sam Houston, Texas 1990, 91, 92, 93

Co-Director, U.S. Army Annual Prosthodontic Short Course, (5 Days) U.S.A. DENTAC, Fort Sam Houston, Texas 1989

Co-Director, Allyn Burke Symposium, (2 Days) Monterey, California 1987, 88, 89

Course Director, Fixed Prosthodontics, Federal Services Review Course in General Dentistry, (4 Days) Ft. Ord, California 1987, 88

Co-Director, Preventive Dentistry Workshop, (3 Days) Health Services Command, Ft. Sam Houston, Texas 1975
Teaching Load Summary:  Baylor College of Dentistry

2004 -

Director, Graduate Program in Prosthodontics -
Nine half days per week
Residents - 11

Fall Semester Course Director

Pro 5019  Journal Club  36 hrs. per sem
Pro 5020  Treatment Planning Board 18 hrs. per sem
Pro 5118  Pros Literature Review 1 sem. hr.
Pro 5122  Advanced Prostho Concepts 1 sem. hr.
Pro 5259  Implant Concepts  1.5 sem. hr.
Pro 5301  Clinical Prosthodontics  3 sem. hr.
Pro 5402  Advanced Clinical Prosth I 4 sem. hr.
Pro 5503  Advanced Clinical Prosth II  5 sem. hr.

Spring Semester Course Director

Pro 5019  Journal Club  36 hrs. per sem
Pro 5020  Treatment Planning Board 18 hrs. per sem
Pro 5118  Pros Literature Review 1 sem. hr.
Pro 5122  Advanced Prostho Concepts 1 sem. hr.
Pro 5160  Advanced Implant Concepts 1.5 sem. hr.
Pro 5001  Mock Board Exam I 12 hrs. per sem
Pro 5002  Mock Board Exam II 12 hrs. per sem
Pro 5003  Mock Board Exam III 12 hrs. per sem
Pro 5301  Clinical Prosthodontics 3 sem. hr.
Pro 5402  Advanced Clinical Prosth I 4 sem. hr.
Pro 5503  Advanced Clinical Prosth II  5 sem. hr.

Summer Session Course Director

Pro 5019  Journal Club  18 hrs per sem
Pro 5020  Treatment Planning Board 12 hrs per sem
Pro 5118  Pros Literature Review 12 hrs per sem
Pro 5210  Intro to Pros Concepts  2.5 sem hr
Pro 5402  Advanced Clinical Prosth I 2.5 sem hr
Pro 5503  Advanced Clinical Prosth II  2.5 sem hr

Teaching Load Summary:  Marquette University

1993-2004

Director, Graduate Program in Prosthodontics -
Eight half days per week
Residents -  6-9
## Fall Semester Course Director

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<th>Course Code</th>
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<td>Dent 270</td>
<td>Clinical Prosthodontics 1</td>
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<td>Dent 272</td>
<td>Clinical Prosthodontics 3</td>
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<td>Dent 268</td>
<td>Clinical Prosthodontics 5</td>
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<td>Dent 276</td>
<td>Seminar in Fixed Prosthodontics</td>
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<td>Dent 274</td>
<td>Seminar in Complete Dentures</td>
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<tr>
<td>Dent 278</td>
<td>Seminar in Implant Prosthodontics</td>
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**Current Literature Seminar**: 18 hrs. per semester
**Prosthodontic Topic Seminar**: 3 hrs. per semester
**Instrumentation/Techniques Seminar**: 14 hrs. per semester
**Treatment Planning Seminar**: 12 hrs. per semester
**Case Discussion Seminar**: 4 hrs. per semester
**Implant Treatment Planning Board**: 12 hrs. per semester

## Spring Semester Course Director

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<td>Clinical Prosthodontics 2</td>
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<td>Dent 273</td>
<td>Clinical Prosthodontics 4</td>
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<td>Dent 269</td>
<td>Clinical Prosthodontics 6</td>
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<td>Dent 277</td>
<td>Discip Related to Prosthodontics</td>
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<tr>
<td>Dent 275</td>
<td>Sem in Removable Prosthodontics</td>
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<td>Dent 279</td>
<td>Seminar in Occlusion/TMD</td>
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<tr>
<td>Dent 276</td>
<td>TMD Function &amp; Disorders</td>
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</tbody>
</table>

**Current Literature Seminar**: 18 hrs. per semester
**Prosthodontic Topic Seminar**: 8 hrs. per semester
**Instrumentation/Techniques Seminar**: 12 hrs. per semester
**Treatment Planning Seminar**: 10 hrs. per semester
**Case Discussion Seminar**: 4 hrs. per semester
**Implant Treatment Planning Board**: 15 hrs. per semester

"Fixed Prosthodontic Tips" - Senior Dental Students
1 hr. per semester
"This is Prosthodontics" - Dental Hygiene
1 hr. per semester

Implant (PBL) - Senior Elective 10 hrs. per semester

## Spring 2001 Sabbatical Leave

## Summer Semester Course Director

<table>
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<th>Course Title</th>
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<td>Current Literature Seminar</td>
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<tr>
<td>Prosthodontic Topic Seminar</td>
<td>4</td>
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<tr>
<td>Instrumentation/Techniques Seminar</td>
<td>6</td>
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<tr>
<td>Case Discussion Seminar</td>
<td>3</td>
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<tr>
<td>Implant Treatment Planning Board</td>
<td>6</td>
</tr>
</tbody>
</table>
PROFESSIONAL CERTIFICATION

Professor (Tenure), Graduate School of Biomedical Sciences, Texas A&M Health Science Center - 2005

Professor (Tenure), Baylor College of Dentistry - 2004

Adjunct Professor (Clinical), Marquette University - 2004

Professor, Marquette University - 2003

Tenure Granted, Marquette University - 1996

Associate Professor, Marquette University - 1993

Surgeon Generals "A" Designator - Recognizes highest level of professional attainment in the U.S. Army Medical Department - 1989

Diplomate, American Board of Prosthodontics - 1981
Re-Certification - 1999, 2010

Certificate, Fixed Prosthodontics - Brooke Army Medical Center - 1978

5K (Instructor), Additional Skill Identifier - U.S. Army Medical Department Awarded for excellence in teaching - 1974

Dental License, State of Ohio #13724 - 1970
State of Wisconsin #4574 - 1994
State of Texas #f22125 - 2005

National Board Dental Examinations - 1970

SPECIAL SKILLS

Professional:

Forensic Dentistry, Wilford Hall, USAF Medical Center, Lackland Air Force Base, Texas (3 days) - 1992

Tissue Integrated Prosthesis, (Brånemark Restorative), UCLA College of Dentistry, Los Angeles, California (3 days) - 1988

Inhalation Sedation, U.S. Army Institute of Dental Research, Ft. Meade, Maryland (5 days) - 1976
Faculty Development Course, Academy of Health Sciences, Ft. Sam Houston, Texas (1 month) - 1974

**Computer:**

**Platforms:** IBM-PC and compatible Macintosh

**Software:** Environment - Windows, MS-DOS, MAC System 10.0
Word processing - MS Word
Presentation Graphics - Adobe Photoshop CS, MS PowerPoint
Database - Professional File, Filemaker Pro, MS Excel

**ABSTRACT OF MILITARY SERVICE**

**Present Rank:** Colonel, U.S. Army, Retired

Director, Prosthodontic Residency; Chief Fixed Prosthodontics, USA DENTAC, Ft. Sam Houston, Texas
1990 - 93

Director, Fixed Prosthodontic Residency; Asst. Director, Combined Prosthodontic Residency; Chief Fixed Prosthodontics, USA DENTAC, Ft. Sam Houston, Texas
1989 - 90

Commander, USA DENTAC, Ft. Ord, California
1989

Chief, Professional Activities/Deputy Commander, USA DENTAC, Ft. Ord, California
1988 - 89

Chief, Fixed Prosthodontics and Mentor AEGD (2 yr), USA DENTAC, Ft. Ord, California
1986 - 88

Chief, Fixed Prosthodontics, USA DENTAC, Ft. Richardson, Alaska
1982 - 86

Deputy Commander, USA DENTAC; Officer in Charge, Ft. Richardson Dental Clinic, USA DENTAC, Ft. Richardson, Alaska
1984 - 86
Chief, Fixed Prosthodontics and Mentor AEGD (1 yr), USA DENTAC, Ft. Leonard Wood, Missouri 1978 – 82

Fixed Prosthodontic Residency, Brooke Army Medical Center, Ft. Sam Houston, Texas 1976 – 78

Instructor, Academy of Health Sciences, Ft. Sam Houston, Texas 1973 – 76

Student, AMEDD Advanced Course, Academy of Health Sciences, Ft. Sam Houston, Texas 1973

Pre Specialty General Dentistry Fellowship, Ft. Hood, Texas 1972 – 73

Dental Surgeon, 15th Medical Battalion, 1st Cavalry Division, Ft. Hood, Texas 1971 – 73

Dental Officer, Ft. Hood, Texas 1970 – 71

Entered Active Duty as Dental Corps Captain 1970

Commissioned 2nd LT, Medical Service Corps, University of Akron, Akron, Ohio (ROTC) 1966

**HONORS AND AWARDS**

Garver/Staffanou Program Director’s Award for Excellence, AAFP 2013

President, The American Academy of Fixed Prosthodontics 2003


Pierre Fauchard Academy, Fellowship 1996

American College of Dentists, Fellowship 1993

Legion of Merit 1993

Army Commendation Medal (1st Oak Leaf Cluster), 1993
Meritorious Service Medal (2nd Oak Leaf Cluster) 1989
Army Achievement Medal (1st Oak Leaf Cluster) 1988
Who's Who in the West (20th, 21st ed.) 1986, 87
Men of Achievement (12th, 13th ed.) 1986, 87
Who's Who of Emerging Leaders of America 1987
Army Achievement Medal 1987
Order of Military Medical Merit 1985
Meritorious Service Medal (1st Oak Leaf Cluster) 1982
Meritorious Service Medal 1975
Who's Who in Ohio 1974
Army Commendation Medal 1973
American Society of Dentistry for Children Certificate of Merit 1970
Omicron Kappa Upsilon National Honorary Dental Society 1970

**PROFESSIONAL PRESENTATIONS**

**National/International:**

Effect of Abutment Surface Roughness on Retention after fatigue Simulation, Poster, Miami, FL, AADR, April 2012

Fracture Resistance of Endodontically Treated Teeth Restored with Bonded Post/Cores, Poster, Miami, FL, AADR, April, 2012

Diagnostic Aids for Occlusal Analysis, Poster, AAFP Chicago February 2012

Custom Shade Guide Fabrication, ACP, Poster, San Diego, CA November 2009

Equilibrating Master Casts and the Occlusal Harmony of Indirect Restorations. AADR #116436 Oral Poster Miami, April 2009

Equilibrating Master Casts and the Occlusal Harmony of Indirect Restorations. AAFP Poster, Chicago, February 2009
The Addition of Palatal Rugae to a Complete Denture Using a Thermoplastic Vacuum-formed Matrix, ACP, Poster, Nashville, TN October 2008

Evaluation of Four Centric Relation Location Techniques Using Ultrasonic Axiography, AADR, Oral Poster, Dallas, TX April 2008.

Implant Abutment Fit Measured with Micro CT versus Optical Microscopy, AADR, Poster, Dallas, TX April 2008

Removal Torque for Dental Implants Placed in Early Regenerate Bone. AADR, Oral Poster, Dallas, TX April 2008

Mechanical Behavior of Prosthetic Retaining Screws after Long Term Use in-vivo. AADR, Poster, Baltimore, MD March 2005


Wax Pattern Luting Technique and Long Span Casting Accuracy, Poster, AADR, Washington DC, 6 April 2000.

Prosthodontic Board Preparation Course, American College of Prosthodontists, Moderator and Director, San Diego, California 16 September 1998. 8 hr.

Rotational Axis Variation in Arcon Articulators, Poster, AADR, Minneapolis MN, 6 March 1998.

Occlusal Considerations for the Class II/III Patient, American College of Prosthodontists Annual Session, Orlando, Florida, 5 November 1997. 1 hr.


Effect of Thermocycling on Fracture Toughness of Core Buildup Materials, Poster, AADR, San Francisco, CA 16 March 1996.


Etched Cast Resin Bonded Retainers 12 Years Later, U.S. Army Annual Prosthodontic Short Course, San Antonio, TX 7-11 December 1992. 1.5 hr.


Fixed Prosthodontic Tips, U.S. Air Force Prosthodontic Postgraduate Course, Wilford Hall USAF Medical Center, LAFB, TX 27 April 1992. 2 hr.


Fixed Prosthodontic Tips, U.S. Army Annual Restorative Short Course, San Antonio, TX 9-12 September 1991. 2 hr.

Endodontic Restoration Principles, U.S. Army Annual Prosthodontic Short Course, San Antonio, TX 4-7 December 1989. 2 hr.

Etched Cast Resin Bonded Retainers 8 Years Later, U.S. Army Annual Restorative Short Course, San Antonio, TX 11-14 September 1989. 1.5 hr.

Federal Services General Dentistry Review Course, Fort Ord, CA 7-11 March 1988. 5 hr.
Federal Services General Dentistry Review Course, Fort Ord, CA 9-13 March 1987. 5 hr.

State/Local:

The Endo is Complete – Update 2006, North Texas Periodontics and Implantology Study Club, Dallas, TX 31 May 2006 – 2 hr.

The Endo is Completed – Update 2004, AGD Program VA Milwaukee, WI, 16 Jan 2004. 2 hr.

The Endo is Completed – Update 2003, CE, Practical Exercise, Marquette University School of Dentistry, 3, 10 April 2003. 8 hr.

Table Clinic – A comparison of the Accuracy of Indirect and Direct Facebow Record Transfer, Marquette University School of Dentistry Research Day, 12 February 2003.


Table Clinic – Phenomenon of Bone Growth in Atrophic Mandible with Implant Supported Hybrid Prosthesis, Marquette University School of Dentistry Research Day, 13 February 2002.

Table Clinic – Resistance to Compressive Loading of Gold Foil Fused to Porcelain Anterior Restorations, Marquette University School of Dentistry Research Day, 13 February 2002.

Table Clinic – Combined Technique for Tooth Repair and Denture Reline, Marquette University School of Dentistry Research Day, 13 February 2001.


The Removable Partial Denture – A New Look at Old Principles, CE, Marquette University School of Dentistry, Milwaukee, WI 11 May 2000. 3 hr.
The Endo is Completed - Now What Part II? Practical Exercise CE, Marquette University School of Dentistry, Milwaukee, WI 4, 18 June 1999. 6 hr.

10001 Fixed Prosthodontic Tips & Dental Implants Lessons Learned, Integrated Dental Studies, Ltd., Stevens Point, WI, 19 March 1999. 6 hr.

Dental Implants - Lessons Learned, Burlington Dental Society, Wilmot, WI, 5 November 1998. 1 hr.

Restoration of the Endodontically Treated Tooth - A New Look at Old Principles, Dane County Dental Society, Madison WI, 24 September 1998. 1.5 hr.

Prosthodontics 98 - The Leading Edge, Psi Omega, Marquette University School of Dentistry, Milwaukee, WI 16 April 1998. 1 hr.

10001 Fixed Prosthodontic Tips, Marquette University School of Dentistry, Milwaukee, WI 12 March 1998. 3 hr.

Table Clinic, The Effect of Repeated Torque and Salivary Contamination on Prosthetic Retaining Screw Preload, Marquette University School of Dentistry, Milwaukee, WI 26 February 1998.

Table Clinic, The Dynamic Spiral, Wisconsin Dental Association Annual Meeting Milwaukee WI 15 September 1997

The Removable Partial Denture Try-In - Keys to Success, Marquette University School of Dentistry, Milwaukee, WI 27 March 1997. 3 hr.

The Endo is Completed - Now What? Practical Exercise CE, Marquette University School of Dentistry, Milwaukee, WI 7, 14 December 1995. 6 hr.


Prosthodontics - The Future is Now! Tri County Dental Society, Beaver Dam, WI 15 November 1995. 2 hr.

Table Clinic, Computer Axiography - Mandibular Movement Challenges, Wisconsin Dental Association Annual Meeting, Milwaukee, WI 18 September 1995

Resin Bonded Bridges - 14 Years Later; Functionally Generated Path Techniques, VA Medical Center, Milwaukee, WI 15 September 1995. 2 hr.
The Endo is Completed - Now What?, Northwest District Dental Society, Eau Clair, WI 28 April 1995. 3 hr.

Prosthodontics - The Leading Edge, Burlington Dental Society, Elkhorn, WI 2 February 1995. 1 hr.

10001 Fixed Prosthodontic Tips, Marquette University School of Dentistry, Milwaukee, WI 1 December 1994. 3 hr.

Inter-Occlusal Records and Centric Relation Made Easy, Marquette University, School of Dentistry, Milwaukee, WI 10 November 1994. 1.5 hr.

The Dental Articulator Today, Marquette University, School of Dentistry, Milwaukee, WI 10 November 1994. 1.5 hr

Porcelain Veneers - They Really Work, Marquette University, School of Dentistry, Milwaukee, WI 13 October 1994. 1.5 hr.

Resin Bonded Bridges - 13 Years Later, Marquette University, School of Dentistry, Milwaukee, WI 13 October 1994. 1.5 hr.

Table Clinic, Molded Fossae Made Easy, Wisconsin Dental Association Annual Meeting. Madison, WI 17 September 1994

Prosthodontics - The Leading Edge, Kenosha Dental Society, Kenosha, WI 13 September 1994. 1 hr.

The Endo is Completed - Now What?, Marquette University, School of Dentistry, Milwaukee, WI 8 September 1994. 3 hr.

Dentistry, The Leading Edge - Prosthodontics, Wisconsin Dental Association, MUSOD, Milwaukee, WI 6 May 1994. 1 hr.

Dental Implants - Lessons Learned, Marquette University, School of Dentistry, Milwaukee, WI 24 March 1994. 1 hr.

Table Clinic, Molded Fossae Made Easy, Marquette University, School of Dentistry, Milwaukee, WI 2 March 1994

Porcelain Veneers, VA Medical Center, Milwaukee, WI 7 December 1993. 2 hr.

Etched Cast Resin Bonded Retainers 13 Years Later, Marquette University School of Dentistry, Milwaukee, WI 1 July 1993. 1 hr.


The Molded Fossa Concept, Area Dental Laboratory Short Course, FSH, TX 1 April 1993. 1 hr.
The Casting Try-In and Insertion, Area Dental Laboratory Short Course, FSH, TX 1 April 1993. 1.5 hr.

Dental Implants, Lessons Learned - Prosthodontics, San Antonio Dental Society, San Antonio, TX 23 March 1993. 1 hr.

Fixed Prosthodontic Tips, Area Dental Laboratory Short Course, FSH, TX 3 April 1992. 2 hr.


Fixed Prosthodontic Tips, Area Dental Laboratory Short Course, FSH, TX 15 August 1991. 2 hr.

Fixed Prosthodontic Consultant Visit, Advanced Education Program in General Dentistry, (1 Yr.) Ft. Benning, GA 9,10 May 1991. 8 hr.


Fixed Prosthodontic Consultant Visit, Ft. Rucker, AL 8 May 1991. 2 hr.

Fixed Prosthodontic Tips, Area Dental Laboratory Short Course, FSH, TX 3-5 April 1991. 2 hr.

Fixed Prosthodontic Tips, Area Dental Laboratory Short Course, FSH, TX 8,9 November 1990. 2 hr.

Fixed Prosthodontic Consultant Visit, Advanced Education Program in General Dentistry, (1 Yr.) Ft. Benning, Ga. 3-4 May 1990. 8 hr.

Etched Cast Resin Bonded Retainers 10 Years Later, Ft. Benning, GA 3 May 1990. 1 hr.

Fixed Prosthodontic Tips, Area Dental Laboratory Short Course, FSH, TX 2-5 April 1990. 2 hr.

Fixed Prosthodontic Tips, Area Dental Laboratory Short Course, FSH, TX 7-9 November 1989. 2 hr.

Etched Cast Metal Ceramics, Monterey Bay Dental Society, CA 11 November 1988. 1 hr.

Periodontal Prosthodontics, Ft. Ord, CA 22 April 1987. 1 hr.

Etched Cast Restorations, Ft. Greely, AK 10 July 1985. 2 hr.
Periodontal Prosthodontics, Ft. Wainwright, AK 11 July 1985. 2 hr.

Etched Cast Resin Bonded Retainers, Fort Richardson, AK 30 May 1985. 2 hr.

Interim Restorations, Fort Richardson, AK 22 January 1985. 1 hr.


Hinge Axis and Pantograph, Part II, Ft. Sam Houston, TX 1 February 1978. 2 hr.

Hinge Axis and Pantograph, Part I, Ft. Sam Houston, TX 11 January 1978. 2 hr.

Concepts of Occlusion, Ft. Sam Houston, TX 28 September 1977. 1 hr.

Concepts of Occlusion, Academy of Health Sciences, Ft. Sam Houston, TX 9 December 1975. 1 hr.

Emergency Medications, Part II, Academy of Health Sciences, Ft. Sam Houston, TX 15 April 1975. 1 hr.

Emergency Medications, Part I, Academy of Health Sciences, Ft. Sam Houston, TX 11 March 1975. 1 hr.

Medical Emergencies, Academy of Health Sciences, Ft. Sam Houston, TX 22 October 1974. 1 hr.

**PROFESSIONAL COMMITTEES**

Baylor College of Dentistry

Graduate Education Council 2004 –
Promotion and Tenure 2006 –
Chair 2010, 11, 12
Alternate Property Officer 2005 –
Electronic Records 2006 –
CODA Steering Committee, Graduate Education 2009-2011
Marquette University School of Dentistry

Graduate Education Committee 1993 - 04
Academic Board Committee 1993 - 95
Instrument and Materials Committee 1994 - 99
Search Committee - Associate Dean Academic Affairs 1994
Search Committee - Chair, Comprehensive Care 1995
Search Committee - Chair, Comprehensive Patient Care Services 1998 - Chair
Search Committee - Chair, Developmental Sciences and Diagnostic Services 1998 - Chair
Problem Based Learning Group 1995 - 04
Vision 95 - Multitask Planning Committee 1995
Faculty Research Committee 1995 - 04

Promotion and Tenure Committee 1996 - 04
Chair 1998 - 04
Organizational Development Committee 1997 - 99
Faculty Council - Vice President 1998 - 99
President 1999 - 00
Table Clinic Judge, Annual Scientific Day 1995 -04
Search Committee - Associate Dean for Research and Graduate Studies - Chair - 1999
Institutional Effectiveness Advisory Taskforce for the Accreditation Self Study - Chair - 1999 - 00
Deans Administrative Council 1999 - 00
Continuing Education Committee 2000 - 03
Outcomes Assessment Oversight Committee - 2002
Manager of Institutional Outcomes 2002 - 04

Marquette University

Institutional Review Board (IRB) 1994 - 04
Acting Chair 1998
IRB Dental Sub-Committee, Chair 1994 - 04
Delegate to the Nominating Convention, Committee on Faculty - 1997
Promotion and Tenure Committee 1998 - 04
Dental School Finance Committee - Co-Chair 1999
Faculty Governance Committee for Provost Candidate Interviews 2002
Academic Senate - 2001 - 04
Executive Committee - 2002

American Academy of Fixed Prosthodontics

Immediate Past President - 2004
President - 2003
President Elect - 2002
Vice President - 2001
Director 1998 - 01
Future Planning & Policy Committee - 1998 - 2004
  Chair 1998 - 01
Annual Program Committee 1995 - 98
  Scientific Program Chairman 1997
  Ex Officio 1997/98/99
Ad-Hoc Committee to Evaluate the Duties of the
  Program Committee - Chair 1997
Publicity and Communication Committee 1995 - 97
Table Clinic Committee - Chair 1994
Nominee, American Board of Prosthodontics -
  1999, 03, 04, 05
Ad Interim Committee 2000 - 01
Ad Hoc Committee for Information Technology
  2000 - 01, 2004 - 05
Ethic Committee, Chair - 2001 - 02
Ad Hoc Committee for Meeting Logistics - 2001 - 02
Ad Hoc Committee for Membership, Chair - 2001 - 02
Ad Hoc Committee for Site Director Search -
  2002 - 03
Ad Hoc Committee for Secretary for Guests -
  2002 - 03
Budget and Finance Committee - 2002 - 2004
  Chair 2004
Prosthodontic Forum Delegate - 2003

American Dental Education Association
  Fixed Prosthodontics Section 1990 -
  Biomaterials Section 1990 -
  Graduate and Postgraduate Education 1993 -

International Association for Dental Research
  Prosthodontics Group 1994 -
    Director - 2001 - 04
  Implantology Group 1994 -

American College of Prosthodontists, South Texas Section
  Program Co-Chairman 1989 - 93

U.S. Army Dental Activity, Ft. Sam Houston, Texas
  Education Committee 1989 - 93
  Budget Advisory Committee 1989 - 93
  Implant Committee 1989 - 93
American College of Prosthodontists

Color and Color Matching Committee 1985 - 92
Education and Advancement Committee 1997 - 00
   Educational Services Subcommittee 1997 - 99
Annual Session Board Preparation Course
   Co-Chair 1997 - Orlando, Florida
   Chair 1998 - San Diego, California
Table Clinic Judge, Annual Session, 1998
   San Diego, California
Taskforce on Occlusion Education 2012 -
   Board Preparation Mock Written Examination 2012 -

U.S. Army Dental Activity, Ft. Ord, California

   Education Committee 1986 - 89
   Quality Assurance Committee - Chairman 1986 - 89
   Credentials Committee - Chairman 1986 - 89
   Budget Advisory Committee 1986 - 89

U.S. Army Dental Activity, Ft. Richardson, Alaska

   Credentials Committee 1982 - 86
   Quality Assurance Committee 1982 - 86
   Budget Advisory Committee 1982 - 86

U.S. Army Dental Activity, Ft. Leonard Wood, Missouri

   Education Committee - Director, Continuing
   Education 1978 - 82
   Quality Assurance Committee - Chairman 1978 - 82
   Budget Advisory Committee 1978 - 82

CONSULTANT POSITIONS

Review Committee on Prosthodontics Education, American Dental
   Association, Commission on Dental Accreditation
   2000 - 04

Consultant in Prosthodontics, VA Medical Center, Milwaukee,
   Wisconsin 1994 - 04

Consultant, Prosthodontics, American Dental Association
   Commission on Dental Accreditation 1994 - 04

Editorial Review Board, Journal of Prosthodontics,
   American College of Prosthodontists 1992 - 2002
   2009 -

Associate Editor, Abstracts Section, Journal of
   Prosthodontics
   American College of Prosthodontics 1994 - 99
Clinical Consultant to The Dental Advisor, Ann Arbor, Michigan, (Editor: John W. Farah, D.D.S., Ph.D) 1990 -

Fixed Prosthodontic Consultant, Advanced Prosthodontic Residency, Brooke Army Medical Center, Fort Sam Houston, Texas 1993 - 95

Fixed Prosthodontic Consultant, Advanced Prosthodontic Residency, Wilford Hall Medical Center, Lackland Air Force Base, San Antonio, Texas 1990 - 93

Fixed Prosthodontic Consultant, USA DENTAC, Fort Rucker, Alabama 1990 - 93

Fixed Prosthodontic Consultant, Advanced Education Program in General Dentistry (1 Yr.) and USA DENTAC, Fort Benning, Georgia 1990 - 93

Fixed Prosthodontic Consultant, USA DENTAC, Alaska 1982 - 86

PROFESSIONAL MEMBERSHIPS

American Dental Association 1967 -
Wisconsin Dental Association 1995 - 04
Texas Dental Association 2004 -
Greater Milwaukee Dental Association 1995 - 04
Dallas County Dental Society 2004 -
Southwest Academy of Restorative Dentistry 2006 -
The Dental Forum of Milwaukee 1996 - 04
Pierre Fauchard Academy, Fellow 1996 -
American Dental Education Association 1990 -
American Academy of Fixed Prosthodontics 1990 -
  Director 1998 - 01
  Vice President 2001 - 02
  President Elect 2002 - 03
  President 2003 - 04
  Immediate Past President 2004 - 05
Academy of Osseointegration 1992 -
American College of Dentists - Fellow 1993 -
American College of Dentists,
    Wisconsin Section 1993 - 04
    Secretary/Treasurer 2000 - 04
    Vice President 2004
American College of Prosthodontists - Fellow 1976 -
American College of Prosthodontists,
    California Section 1986 - 89
    South Texas Section 1989 - 93
    Wisconsin Section 1994 - 04
    Delegate to ACP - 2003
American Association for Dental Research 1994 -
    Oral Session Chair, Chicago 2001
    Oral Session Chair, San Diego 2002
    Oral Session Chair, Dallas 2008
American Association for Dental Research,
    Dallas Section 2004 -
    Wisconsin Section 1993 - 04
    Secretary/Treasurer 94 - 95
    Councilor 1995 - 96
    President 1996 - 97
International Association for Dental Research 1994 -
    Director, Prosthodontic Research Group 2001 - 04
American Board of Prosthodontics - Diplomate 1981 -
Federation of Prosthodontic Organizations 1982 - 95
Inter-Society Color Council 1988 - 94
Association of Military Surgeons of the US 1986 - 93
American Society of Dentistry for Children 1969 - 72
Omicron Kappa Upsilon 1970 -
    Omicron Chapter 2004 -
    Theta Chapter 1970 - 94
    Xi Chapter 1994 - 04
    Secretary/Treasurer 1995 - 97
Vice President 1997 - 98
President Elect 1998 - 99
President 1999 - 2000

Psi Omega 1966 - 70

Buckeye Study Club, Ohio State University, (Dr. Richard Huffman) 1968 - 70

Burke Study Club, Monterey California 1986 - 89

Program Co-Chairman 1986-89
Vice President 1986
Secretary 1987
President 1988

Fort Sam Houston Dental Study Club 1993

Marquette University Prosthodontic Study Club 1995 - 04

President and Founder 1995

**RESEARCH AND CREATIVE ACTIVITY**

**Publications:**

**Books/Chapters**

Nagy, W.W. - *Dental Fixed Prosthodontic Specialist*, TM8-226-2, C 1, Chap. 7 1976

Nagy, W.W. - *Dental Specialist*, TM8-225, C 1, Chapter 12, VII 1976

**Manuals**


Nagy, W.W. - Orientation Manual, Advanced Prosthodontic Residency, Baylor College of Dentistry, Dallas, Texas, 2005, 06, 07, 08, 09, 10, 11, 12


Nagy, W.W. - Program/Clinic Syllabus, Advanced Prosthodontic Residency, Marquette University School of Dentistry, Milwaukee, Wisconsin 1994, 95, 96, 97, 98, 99, 00, 01, 02, 03, 04

Nagy, W.W. - Program/Clinic Syllabus, Advanced Prosthodontic Residency, Baylor College of Dentistry, Dallas, Texas 2005, 06, 07, 08, 09, 10, 11, 12


Nagy, W.W. - Forms and Records Manual, Advanced Prosthodontic Residency, Marquette University School of Dentistry, Milwaukee, Wisconsin 1995, 96, 97, 98, 99, 00, 01, 02, 03, 04


Audiovisual

Nagy, W.W. - Oral Hygiene Clinical Procedures, Videotape
AHS752 1975

Abstracts - Research (refereed)


Meng, J., Nagy, W.W., Wirth, C.G., Buschang, P.H. Equilibrating master casts and the occlusal harmony of indirect restorations (#116436 AADR 2009)

Kumar, J, Ng, C., Griggs, J., Duan, Y., Nagy, W. Ferrule effect on preliminary cyclic fatigue of endodontically treated teeth (#129578 AADR 2010)


Duan, Y, Kulkarni, PA, Gonzalez, JA, Nagy, WW, Griggs, JA Fatigue lifetime prediction of dental implant using finite element analysis (Academy of Dental Materials 2010)

Kontogiorgos, E, Nagy WW, Dechow, PC, Elsalanty, ME, Oppermann LA Integration of dental implants in mandibular bone regenerated by bone transport distraction osteogenesis. Southern Biomedical Engineering Conference (2011)


Chen, K, Nagy, WW, Effect of abutment surface roughness on retention after fatigue simulation (#156477 AADR 2012

Maroulakos, G, Nagy, WW, Fracture resistance of endodontically treated teeth restored with bonded post/cores (#156167 AADR 2012

Paraskevas, R, Cronopoulos, V, Nagy WW Utilization of customized pressed ceramic implant abutments for esthetically challenging restorations (#632, European Association for Osseointegration, 2012)
Structured Abstracts - Invited (of Peer-Reviewed Literature)


Journals (* are refereed)


Nagy, W.W. - The Collarless Ceramo-Metal Restoration, Methods of Fabrication, Program Thesis 1978


*Toothaker, R.W.; Nagy, W.W. - Protection of Recent Extraction Sites when Fabricating Immediate Acrylic Interim


*Heshmati, R.H.; Nagy W.W.; Wirth, C.G; Dhuru, V.B. - Delayed Linear Expansion of Improved Dental Stone, Journal of Prosthetic Dentistry 88:26:2002


Manuscripts in preparation:

Nagy, W.W., Wirth C.G. Rotational Axis Variation in Arcon Articulators

Al Gufari, A.S., Nagy, W.W., Fournelle, R.A., Dhuru, V.B. Effect of Prefabricated Post Head Design on Composite Core Retention


Phan, D.C., Nagy, W.W., Dhuru, V.B., Ziebert, G.J. Effect of Sterilization and Disinfection Procedures on Prefabricated Posts

**Thesis/Dissertation Committees:**

Baylor College of Dentistry – Master of Science

Constructing a stress-lifetime failure probability model for a veneer porcelain from cyclic fatigue measurements, Linda Gruetter, Thesis Committee, 2005 awarded

Differential bone response to early progressive loading of a sand-blasted and acid etched palatal implant: A fluorochrome marker and histomorphometric study in the maxilla of canis familiaris, Sloan Hildebrand, Thesis Committee, 2005 Awarded

Effects of mechanical removal of the surface layer and argon atmospheres on ceramic adherence to cast titanium, Kathia Steel, Thesis Committee, 2006 Awarded

Effect of smectite clay reinforcement on the fracture resistance of low fusing porcelain, Nga Ngoc Le, Thesis Committee, 2006 - Awarded

Evaluation of four centric relation location techniques using ultrasonic axiography, Charles Allen – Thesis Director 2007 - awarded

Differential bone response to early progressive loading of a sandblasted and acid etched palatal implant: Biomechanical and histomorphometric studies, Brody Hildebrand - Thesis Committee 2007 - Awarded

Fractal analysis of fractured dental ceramics, Brian Butler, Thesis Committee 2007 - Awarded

Effect of location of axial tooth structure on the fracture resistance of restored endodontically treated teeth
subject to cyclic loading and chewing function, Clarisse Ng - Thesis Co Director 2008 - awarded

Accuracy of Tooth-Shade Reproduction by Three Digital SLR Clinical Camera Setups, Artur Khurshudian - Thesis Co-Director 2006 - awarded

Thermally induced residual stress in a zirconia porcelain multilayered restorative system, Kyle McCracken - Thesis Committee 2006 - awarded

Implant-abutment fit measured with micro CT versus optical microscopy Frank Lozano - Thesis Committee 2008 - awarded

Strength comparison of the implant-abutment interface connection between external and internal connection in reduced diameter implants, Jorge Gonzalez - Thesis Committee 2005 - awarded

The effect of interocclusal recording materials on mounted casts, Todd Baumann, Thesis Director 2009 - awarded

The effect of equilibrating master casts on the occlusal contacts of cast restorations, Joe Meng - Thesis Director 2007 - awarded

Bone responses to early static loading of a sandblasted and acid etched root form implant: A histomorphometric study in the canine mandible. Michael Ryan - Thesis Committee 2007

Reproduction of articulator fossa contour with ultrasonic axiography, Phu Tran - Thesis Director 2008

Bone responses to early static loading of a sandblasted and acid etched root form implant: A histomorphometric study in the canine mandible. Michael Ryan - Thesis Committee 2007

Delayed linear expansion of commercial “o” expansion dental stone, Michael Oppedisano, Thesis Director 2006

Histological evaluation of root response to intrusion in mandibular teeth in beagle dogs, Juan Ramirez - Thesis Committee 2008 - awarded

Microstructural evaluation of bone regenerate produced by bone transport distraction osteogenesis, Michele Newby - Thesis Committee 2008 - awarded
Mechanical testing of bone regenerate produced by BTRP-01 device, Lucy Nagashima – Thesis Committee 2008 – awarded

The effect of multiple firings on the marginal integrity of pressable ceramics, Aaron Cho, Thesis Director 2008 (Tylman Grant Recipient 2008) – awarded (Tylman 1st place winner 2010)

The effect of equilibration on occlusal harmony of restorations fabricated on casts mounted in MIP, Peter Benson, Thesis Director 2009

In vitro evaluation of the accuracy of Encode Robocast Technology vs the implant level impression technique using 3 dimensional orientation analysis of implant replicas in master cast fabrication, Erick Lachner, Thesis Committee 2009 – awarded

Marginal accuracy of all ceramic crowns using D4D E4D dentist CAD/CAM technology – an in vitro study, Viviana Guzman, Thesis Director 2009

Fatigue resistance of endodontically treated teeth with compromised tooth structure, restored with three different post systems, George Maroulakos, thesis director 2010 – awarded

Dimensional accuracy and occlusal harmony of hand articulated digitally mastered definitive casts, Sven Bone, thesis director 2010

The effect of implant abutment surface roughness and cement type on the retention of cement retained crowns after fatigue simulation, Jenn-Hwan Chen, Thesis director 2011 – awarded

The effects of phosphate coated vs acid etch titanium implants on osseointegration: A histologic examination of mineral apposition rate and bone to tiimplant contact in the canine model, Richard Derksen – Thesis Committee 2012 – awarded

Marginal fit of lithium disilicate copings fabricated from definitive casts using VPS and digital impression technique, Carolina Cespedes – Thesis Director 2012 – awarded

Dimensional accuracy of hand articulated digitally mastered definitive casts mounted in maximum intercuspal
position. Part 2 Milling variation, Annie Wilson, Thesis Director 2012 - awarded

Comparing Mandibular Recordings with Tray Clutch and Paraocclusal Clutch in vivo with SAM Axioquick Recording System (AQR) Dennis Waguespack, thesis director 2012

Marquette University - Master of Science

The effect of hygiene instrumentation on pure titanium and titanium alloy implant abutments: An SEM study, Frieda Von Giese Brookshire - Thesis Director 1994 (Tylman Grant Recipient 1993 and Second Place Winner, Tylman Research Competition 1994) - awarded

Dimensional stability of different dowel pattern materials over time in various storage media, Kim Sen Tran - Thesis Committee 1994 - awarded

A comparison of polymerization shrinkage, transverse strength and water sorption of three denture base materials, Yosef A. Al-Hamed - Thesis Committee 1994 - awarded

Comparison of three impression techniques for osseointegrated implants, Samar Al-Jetaily - Thesis Committee 1994 - awarded

Effect of a gold coating on the porcelain metal bond of four high noble metal containing casting alloys, Kanellos Kanellopoulos - Thesis Committee 1994 - awarded

Fracture toughness of various core build-up materials after thermocycling, Juan Medina - Thesis Director 1995 (Tylman Grant Recipient 1995 and Second Place Winner, Tylman Research Competition 1997) - awarded

Cutting resistance of restorative dental materials and human dentin to high-speed diamond bur preparation, Marien Morata - Thesis Committee 1995

Effect of repeated torque and salivary contamination on the preload of slotted gold prosthetic screws, George Tzenakis - Thesis Director 1995 (Tylman Grant Recipient 1996 and Third Place Winner, Tylman Research Competition 1998) - awarded

Effect of repeated torque on the preload of slotted gold prosthetic screws, Charles Pechous - Thesis Director 1995
Physical properties of visible light cure denture reline materials, George Vakalopoulos - Thesis Committee 1996 - awarded

Repeated torque and ultimate tensile strength of gold prosthetic screws, Mohammed A. Al Rafee - Thesis Director 1997 - awarded

Wax pattern luting technique and long span casting accuracy, Carlos J. Parajon - Thesis Director - 1997

Delayed linear expansion of improved dental stone, Reza Heshmati - Thesis Director - 1998 (Tylman Grant Recipient 1998 and First Place Winner, Tylman Research Competition 2000) - awarded

Occurrence of defects in hexed gold prosthetic screws, Sameer Rambhia - Thesis Director - 1999 (Tylman Grant Recipient 1999 and Second Place Winner, Tylman Research Competition 2001) - awarded

Effect of prefabricated post head design on retention of composite core material, Abdul Al Gufari - Thesis Director - 1999 - awarded

The effect of sterilization and disinfection procedures on prefabricated posts, Dai C. Phan - Thesis Director - 1999 - awarded


Resistance to compressive loading of gold foil fused to porcelain anterior restorations. Nitin B. Khankari - Thesis Director 2000 - awarded

Fracture toughness and hardness of a hydrothermal ceramic. Salwa O Bajunaid - Thesis Co-Director - 2001 - awarded

The relationship of anthropological landmarks and the earpiece facebow reference plane in the skeletally mature adult. Abdulaziz Al Baker - Thesis Director - 2002 - awarded

Direct versus indirect facebow mounting - a comparison of accuracy. Khaledoun Al Ajlouni - Thesis Director - 2002 - awarded

Resistance to fracture following endodontic access of an all ceramic posterior crown. Kelly Copps - Thesis
Committee - 2004 (Tylman Grant Recipient and 1st Place Winner Tylman Research Competition 2005) - awarded

Marquette University Doctoral Dissertations


Mechanical behavior and failure analysis of implant prosthetic screws in vivo, Youssef Al Jabbari - Dissertation Committee - 2006 - awarded

Baylor College of Dentistry Doctoral Dissertations

A synthetic periodontal ligament system for dental implants and its effect on periimplant tissues. Elias Kontogiorgos - Dissertation Committee - 2005 - awarded

Brooke Army Medical Center


Grants:

SAM® Präzisionstechnik, 1995 - $15,000 Equipment/Supplies for research on Axiotron® - William W. Nagy

Academy of Fixed Prosthodontics, Tylman Research Grant 1993 - Frieda V. Brookshire, William W. Nagy - $1,500

Academy of Fixed Prosthodontics, Tylman Research Grant 1995 - Juan Medina, William W. Nagy - $1,500

Academy of Fixed Prosthodontics, Tylman Research Grant 1996 - George Tzenakis, William W. Nagy - $2,000

Academy of Fixed Prosthodontics, Tylman Research Grant 1997 - Carlos J. Parajon, William W. Nagy - $2,000 - Not Funded

Academy of Fixed Prosthodontics, Tylman Research Grant 1998 - Reza Heshmati, William W. Nagy - $1,578

Academy of Fixed Prosthodontics, Tylman Research Grant 1999 - Sameer Rambhia, William W. Nagy - $2,000

Greater New York Academy of Prosthodontics, Student Grant Program 1999 - Dai C. Phan, William W. Nagy - $2,000 - Not Funded
Academy of Fixed Prosthodontics, Tylman Research Grant 2000 - Carter Benson, William W. Nagy - $2,000

Academy of Fixed Prosthodontics, Tylman Research Grant 2001 - Nitin B. Khankari, William W. Nagy - $2,000 - not funded

Academy of Fixed Prosthodontics, Tylman Research Grant 2002 - Kuong Kov, William W. Nagy - $2,000 - not funded

American College of Prosthodontists/Proctor and Gamble Fellowship in Complete Denture Prosthodontics 2003/04, Dr. Gunjan Dhir - $6,000

Academy of Fixed Prosthodontics, Tylman Research Grant 2004 - Kelly Copps, William W. Nagy - $4,000 - Awarded $2,000

Academy of Fixed Prosthodontics, Tylman Research Grant 2006 - Clarisse Ng, William W. Nagy - $2,000 - not funded

NIH/NIDCR RO1, Fatigue of Dental Implants, Direct costs: $950,000, Indirect Costs: $398,762 Period:12/06-11/11 Role: Co-Investigator 5%. Jason Griggs (PI), William Nagy, Ronald Woody, Frank Higgenbottom

Academy of Fixed Prosthodontics, Tylman Research Grant 2008 - Aaron Cho, William W. Nagy - Awarded $3,600

Academy of Fixed Prosthodontics, Tylman Research Grant 2010 - George Maroulakos, William W. Nagy - $2,000 - not funded

Academy of Fixed Prosthodontics, Tylman Research Grant 2010 - Ken Chen, William W. Nagy - $2,000 - not funded

**Supervised Project Awards:**

**Table Clinics**

Wisconsin Dental Association - Graduate Division, 1st Place - Dr. Mohammed Al Rafee - 1996

Wisconsin Dental Association - Graduate Division, 1st Place - Dr. Carlos Parajon - 1997

Wisconsin Dental Association - Graduate Division, 1st Place - Dr. Carlos Parajon/Dr. Sameer Rambhia - 1998

Marquette University Table Clinic Day - Graduate Division, 1st Place - Dr. Abdul Al Gufari - 1999

Marquette University Table Clinic Day - Graduate Division, 1st Place - Dr. Abdul Al Gufari - 2000

Marquette University Student Research Day - Graduate Division, 1st Place - Dr. Youssef Al Jabbari - 2001
Marquette University Student Research Day - Graduate Division, 2nd Place - Dr. Nitin Khankari - 2001

Marquette University Student Research Day - Graduate Division, 2nd Place - Dr. Khaledoun Al Ajlouni - 2002

Marquette University Student Research Day - Graduate Division, 3rd Place - Dr. Gunjan Dhir, Dr. Kelly Copps 2003

Marquette University Student Research Day - Graduate Division, Basic Science, 1st Place - Dr. Abdul Al Baker 2004

Marquette University Student Research Day - Graduate Division, Poster, 1st Place - Dr. Kelly Copps 2004

Marquette University Student Research Day - Graduate Division, Poster, 2nd Place - Dr. Jesse Smith 2004

Marquette University Student Research Day - Graduate Division, Poster, 3rd Place - Dr. Victoria Ortiz 2004

American Academy of Fixed Prosthodontics, Clinical Division, 1st Place - Andy Benson and Annie Wilson 2010

American Academy of Fixed Prosthodontics, Research Division, 1st Place - Dennis Waguespack and William Nagy 2013

Research Awards

John J. Sharry Research Competition, American College of Prosthodontists, 3rd Place, Dr. Kenneth Konopka - 1994

Tylman Research Competition, American Academy of Fixed Prosthodontics, 2nd Place, Dr. Frieda Brookshire - 1994

Tylman Research Competition, American Academy of Fixed Prosthodontics, 2nd Place, Dr. Juan Medina - 1997

Tylman Research Competition, American Academy of Fixed Prosthodontics, 3rd Place, Dr. George Tzenakis - 1998

Tylman Research Competition, American Academy of Fixed Prosthodontics, 1st Place, Dr. Reza Heshmati - 2000

Tylman Research Competition, American Academy of Fixed Prosthodontics, 2nd Place, Dr. Sameer Rambhia - 2001

Tylman Research Competition, American Academy of Fixed Prosthodontics, 1st Place, Dr. Kelly Copps - 2005

Tylman Research Competition, American Academy of Fixed Prosthodontics, 1st Place, Dr. Aaron Cho - 2010

Research in Progress:
Stone expansion over time - continued studies
Reliability of a new predetermined axis of rotation point
Repeatability of ear facebow positioning
Curriculum Vitae

A. NAME: Robert Spears

B. RANK: Professor

C. EDUCATION:

Texas A&M University System Health Science Center, College Station, Texas
PhD in Biomedical Sciences. Graduated May 2002

Baylor University, Waco, Texas
MS in Anatomy. Graduated June 1994

Texas A&M University, College Station, Texas

D. PROFESSIONAL APPOINTMENTS:

9/2013 to present
Professor, tenured
Texas A&M University Baylor College of Dentistry, Dallas, Texas

10/2012 to present
Director of Curriculum
Texas A&M University Baylor College of Dentistry, Dallas, Texas

6/2008 to 8/2013
Associate Professor, tenured
Texas A&M Health Science Center Baylor College of Dentistry, Dallas, Texas

7/2007 to present
Director of Student Research
Texas A&M Health Science Center Baylor College of Dentistry, Dallas, Texas

6/2002 to 6/2008
Assistant Professor, non-tenured
Department of Biomedical Sciences
Texas A&M Health Science Center Baylor College of Dentistry, Dallas, Texas

6/94 to 6/2002
Instructor
Department of Biomedical Sciences
Baylor College of Dentistry, Dallas, Texas

10/88 to 6/94
Electron Microscopy Technician
Department of Biomedical Sciences
Baylor College of Dentistry

8/85 to 10/88
Research Technician II
Department of Biomaterial Sciences
Baylor College of Dentistry
E. TEACHING PERFORMANCE:

1. **Quality of Teaching**

   I have consistently received high marks from student evaluations over the last five years, as well as before that time. This is evidenced in part by my having received BCD Teacher of the Year for 2006 and 1997.

2. **Course Coordination**

   - **1989 to present**
     - Course Director, Graduate Scanning Electron Microscopy and Associated Techniques (Now listed as Microscopy and Associated Techniques).

     - Course Director, Dental 6640, Gross Anatomy

   - **2001-present**
     - Course Director, S92, Responsible Conduct and Ethics in Research, Selective Course supporting the Short Term Training Program for summer student research.

   - **2006 to present**
     - Course Director, Dental 6820, Oral Histology

3. **Curriculum and/or Course Development**

   Member of the BCD Curriculum Committee 1998-2002, 2006-present. Director of Curriculum 9/2012 to present

   Designed the Graduate Scanning Electron Microscopy and Associated Techniques course and what is now the Microscopy and Associated Techniques course.

   Designed the Responsible Conduct and Ethics in Research Selective Course that supports the Short Term Training Program for summer student research.

   Involved in the planning and design of the Dental Hygiene Biomedical Sciences 3250 course.

4. **Courses Taught**

   - **3340 Dental Hygiene Biomedical Sciences** (Previously taught as 2 separate courses, Gross Anatomy and General and Oral Histology). 1994 to present.

   - **5320 Microscopy and Associated Techniques** (Previously taught as Graduate Scanning Electron Microscopy and Associated Techniques). 1989-present

   - **5V40 Cell and Molecular Biology of Craniofacial Tissues I** (Graduate) 2004 to present

   - **5V42 Cell and Molecular Biology of Craniofacial Tissues II** (Graduate) 2006 to present
5. **Teaching Materials Developed**

For Gross Anatomy:

Designed Mock Practicals for use in laboratory portion of the course. Continue to be used and consistently receive high approval ratings with the students.

Designed the Comprehensive Head and Neck Retake exam for those students who do not pass the required Comprehensive Head and Neck exam. Continues to be used and is an effective tool for comparing students from year to year.

Implemented the use of a case report at the beginning of the course on “Cause of death of your cadaver”. Continues to be used as an effective tool for students to understand relevancy of certain diseases to course material.

Began Sunday sessions for exam reviews instead of typical review during the week. Met with high approval rating since students will have studied material and are actually able to participate in the review.

Increased number of case studies used during the gross anatomy course as a means of demonstrating clinical relevancy of didactic material taught in the course.

Worked with various clinical faculty to incorporate clinical correlations into Gross Anatomy.
Designed online videos modules for teaching the skull and skull articulations.

At different years of the course have used a 1 Minute paper after lectures to get immediate feedback from students, Case of the Week where students present weekly on cases relevant to topics discussed that week in lecture, and mid-course evaluations to get more immediate feedback on issues within the course.

For Oral Histology:

Developed a CD-ROM program for laboratory review of Oral Histology

Designed the laboratory manual for the Oral Histology course and responsible for all online support activities and materials.

Designed full four year curriculum for Dental Scholar Program

Designed curriculum for two year Academic Fellows Program

Development of cases and materials for Integrative Sciences course.

6. Continuing Education Courses Given

Baylor College of Dentistry Continuing Education Course on TMJ Dissection Workshop: A Hands-On Cadaver Course

Baylor College of Dentistry Continuing Education Course on Temporomandibular Joint Disease, 1998

Preparation & Analysis of Mineralized Tissue, each June beginning 2009 to present

7. Student/Trainee Supervision

a. Fellows/ Postdoctoral/Residents/Visiting Scientist
   None

b. Thesis/Dissertation Committees

   1) Chair/Mentor

      Christina Barry, Long Island University, 2012-2013
      Hageer Glessa, Biomedical Sciences, 2010-2011
      Cara Smith, Biomedical Sciences, 2008-2010
      Katie Olsen, Endodontics, 2006-2008
      Mike Ryan, Prosthodontics, 2006-2013
      Sloan Hildebrand, Prosthodontics, 2004-2009
      John Roberts, Biomedical Sciences, 2002-2005

   2) Member
Britney Bare, Orthodontics, 2013 to present
Dylan Everett, Periodontics, 2013 to present
Jonathan Blansett, Periodontics, 2012 to present
Jie Liu, MS, Periodontics, 2011 to 2013
Lauren Carney, MS, Orthodontics, 2010-2012
Collin Kraus, MS, Orthodontics, 2010-2012
Ryan Swapp, MS, Orthodontics, 2010-2012
Jyoti Puri, PhD, Biomedical Sciences, 2006-2011
Mani Chopra, PhD, Biomedical Sciences, 2006-2009
Carmen Casas, MS, Orthodontics, 2006-2007
Megan Hembree, MS, Orthodontics, 2006-2007
Julia Chang, DDS/PhD, Biomedical Sciences, 2005-2007
Wenli Yu, DDS/PhD, Biomedical Sciences, 2005-2009
Aparna Naidu, MS, Oral Pathology, 2005-2007
Mohammed Mohammed, MS, Endodontics, 2003-2005
Brody Hildebrand, MS, Ortho/Prosthodontics, 2003-2007
Christine Foley, MS, Periodontics, 2006-2009
Matt Heaton, MS, Periodontics, 2005-2007
Tony Dacy, MS, Periodontics, 2004-2006
Erik Harrington, DDS/PhD, Biomedical Sciences, 2003-2007
Ana Lucia Perez, MS, Endodontics, 2003-2005
Michael Sparks, MS, Periodontics, 2003-2005
Candace Trasatti, MS, Endodontics, 1999-2001
Karla Hamm, MS, Endodontics, 1999-2001

Pre-doctoral Dental/Medical (non-degreed) and Professional

Ben Lively 2013
Madison Mack 2013
Kelsey Stevens 2013
Collin Burns 2012
Megan Girndt 2012
Sydney Jones 2012
Kelsey Stevens 2012
Shanna Williams 2012
Cara Kessler 2011
Anne Lindley 2011
Sheala Martin 2011
Ryan Darr 2010
Ida Khobahy, 2010
Rosanna Puente 2010
Cara Smith 2010
Sara Vaughn 2010
Jennifer Lee 2009
Karen Liang 2009
Paige Priour 2009
Jonathan Blansett, 2008
Dana Doan, 2008
Paige Priour, 2008
Dakota Davis, 2007
Johnny Reed, 2007
Lindsey Loveless, 2007
Stephanie Bangs, 2006
Andrea Janik Keith, 2006
Anita Jhangiani, 2006
Johnny Reed, 2006
Liz Campos, 2005
Julie Longoria, 2005
Alejandra Rivas, 2005
Michael Robertson, 2005
Lauren Davis, 2004
Shireen Irani, 2004
Joe Parker, 2004
Kim Jackson, 2003
Courtney Keel, 2003
Mike Ryan, 2003
Andrea McPhillips, 2002
Julie Ward, 2002
Carly Moore, 2001
Raenie Oakes, 2000
Kim Hansen, 1999
Tien Nguyen, 1999
Graciela Alaniz, 1998
Matt Gibbs, 1998
Brian Stone, 1998
Lorie Dees, 1997
Masha Sapozhnikov, 1997
Angie Wardlaw, 1996
Nathan Cotton, 1995
Ericka Dyer, 1995

d. Undergraduate

Ann Lindley, Texas A&M University, 2010
Mikael Garces, Texas A&M University, 2009
Sarah Jenkins, Vanderbilt University, 2006, 2007
Paul Hoffmeyer, Austin College, 2004
Alana Macalik, University of Texas at Austin, 2003
Kristen Bruce, University of Texas at Arlington, 2002

e. Graduate Student Supervision

Jordan Bolles, Endodontics resident, 2011-present
David Bird, Endodontics resident, 2010-2011
Homa Azergoon, Endodontics resident, 2008-2010
Ben Williams, Endodontics resident, 2008-2010
Darren Hess, Endodontics resident, 2008-2010
Alejandro Rios, Endodontics resident, 2008-2010

f. Supervisor of Practicum

None
8. Graduate Faculty Membership

1994-1999 Baylor College of Dentistry
1999-present Graduate School of Biomedical Sciences, Texas A&M University System Health Science Center

9. Teaching Awards

Selected to the ADEA Leadership Institute, graduate 2012
Awarded a Teaching Fellowship from the Harvard Macy Institute’s Program for Educators in the Health Professions 2008
TAMHSC-Baylor College of Dentistry Teacher of the Year 2006
American Association of Anatomists Basmajian Award, 2004 (given to one individual a year for being an outstanding young teacher and researcher)
Baylor College of Dentistry Teacher of the Year 1997

10. Academic Counseling

In my position as Course Director for multiple courses, such as Gross Anatomy and Oral Histology, and as Director of Student Research I have counseled numerous students on multiple issues throughout the years. While I cannot put an actual number of students or number of hours spent in this activity, I think it is fair to state that this has entailed multiple interactions involving numerous hours each year. In addition, this has included writing numerous letters of recommendation for students applying for either scholarship opportunities or for specialty residency programs.

11. Teaching Consultantships

Texas A&M University System Health Science Center College of Medicine-Oral Histology in the Medical Curriculum
University of Las Vegas School of Dentistry-Research in the Dental Curriculum

12. Other Indices of Teaching

NIH Consortium on Research in the Curriculum, Bethesda, MD, May, 2005
3rd Symposium on TMD in the Curriculum, Baltimore, MD, April, 2000
International Symposium on Problem-Based Learning in Dental Education, Lake Arrowhead, CA, April, 1998

F. RESEARCH AND SCHOLARLY ACTIVITY:
1. **Areas of research and scholarship**

   My research interests have focused on the interaction between the immune, nervous, and endocrine systems in the onset and exacerbation of pain and inflammation associated with rheumatoid arthritis, with particular emphasis on disorders of the temporomandibular joint. Through my own work, and in my collaborations with Drs. Larry Bellinger and Phil Kramer, I have established a national reputation for the contributions my work in the field of pain research. I have produced a number of manuscripts in quality journals and have received encouragement from the scientific community for the direction my research is going. Obviously, the next step is to translate this into funding, which I am now actively in the process of obtaining.

   In addition, I am also involved in projects that investigate signal transduction mechanisms involved in palate development, with particular emphasis on the transforming growth factor signaling pathway, mechanisms involved in inflammatory responses within the pulp of the tooth, and the response of the immune system in the placement of dental implants.

2. **Invited Presentations**


   SMU PreDental Society, “Research in Dentistry”, March, 2012

   Texas A&M Health Science Center College of Medicine, “Oral Health in Medicine”, January, 2012.

   Keynote Speaker, University of Mississippi Health Science Center School of Dentistry Research Day “What Students Can Provide to the Research Effort”, January, 2011

   Texas A&M Health Science Center College of Medicine, “Oral Health in Medicine”, November, 2011.

   Texas A&M Health Science Center College of Medicine, “Oral Health in Medicine”, January, 2011.

   Texas A&M University PreDental Society, “Student Research at Baylor College of Dentistry”, October, 2011.

   Texas A&M Health Science Center College of Medicine, “Oral Health in Medicine”, February, 2010.


Moyer’s Symposium, Ann Arbor, Michigan, “Involvement of the sympathetic nervous system in chronic pain”, February 2008


University of Las Vegas School of Dentistry, “Incorporating Student Research Into a New Dental School Curriculum”, April, 2003.


Texas Pain Symposium, University of Texas Health Science Center at San Antonio, “Inflammatory mediators in adjuvant-induced inflammation of the TMJ”, February, 1999.

3. Non-invited talks without published abstracts
   None

4. Grants
   Funded:
7/1/12-6/30/17. Co-Investigator. Health Careers Opportunity Program (HCOP) Grant. 10% effort. $2,500,000. Bridge to Dentistry: Awareness to Practicing/Teaching/Research

9/01/2009-8/31/2012 Co-Investigator. Health Careers Opportunity Program (HCOP) Grant. 5% effort. $2,000,000. Bridge to Dentistry

2010-2011 Collaborator NIH NIDCR R43 SBIR Phase II grant 5%. Instrument System and Technique for Minimally Invasive Periodontal Surgery (MIS)

5/10/10-12/1/11 Co-Primary Investigator, American Association of Endodontists Foundation, $8,500. 10% effort. Physical and Biological Properties of a new Endodontic Material.

2009-2011 Co-Primary Investigator NIH NIDCR SBIR Phase I Grant 1R43DE019743-01 $99,858 20% effort. Novel Treatment for the Relief of Chronic Orofacial Pain

7/1/09-7/1/10. Co-Primary Investigator. NIDCR 3R43DE019743-01S1. ARRA Supplement Grant. 20% effort. $16,240.

10/1/09-9/1/10 Primary Investigator, American Association of Endodontists Foundation, $2713.29. Assessment of Osseous Wound Healing Using HemCon Dental Dressing

2007-2009 Co-Investigator (Lynne Opperman PI) NIH/NIDCR SBIR Grant R44 DE15437. $352,716 10% effort. Osseoinductive surface treatment for dental implants.

2005-2009 Co-Investigator (Larry Bellinger PI), NIH/NIDCR RO1. $1,000,000. 10% effort. Sex steroids and TMJ pain.

2005-2006 Primary Investigator, Texas A&M University System Health Science Center Research Funds, $15,000. An investigation on sex hormones and inflammation of the TMJ.


2003 Primary Investigator, Baylor Oral Health Foundation, $10,000. The Role of TGF-beta 3 in Palate Fusion.

2001 Primary Investigator, Baylor Oral Health Foundation, $6,500. An investigation on the effects of tumor necrosis factor in adjuvant-induced inflammation of the TMJ.

1999 Co-Investigator, American Association of Orthodontics, $14,000.00. The effects of growth factors upon bone healing during distraction osteogenesis.

1999 Co-Investigator, Baylor College of Dentistry Intramural Grant, $6591.00. The effects of estrogen and progesterone on adjuvant-induced TMJ inflammation.
1996 Co-Investigator, Small Grants in Craniofacial Research, Craniofacial Center for Research and Development, Baylor College of Dentistry, $10,000.


Pending:

None

Not Funded:

2006, Principal Investigator, Whitehall Foundation, $150,000, 20% effort, Sympathetic nervous system and pain.

2005 Principal Investigator, NIH R01, $1,000,000. 20% effort. Sex steroids and pain at perimenopause.

2003 Principal Investigator, March of Dimes Grant, $50,000, 25% effort, The role of TGF-beta in palate development.

2003 Principal Investigator, Cleft Palate Foundation Grant, $15,000, 25% effort, The role of TGF-beta in palate development.

5. Manuscript Review

a. Journals Refereed; Book/Chapter Review

Journal Reviewer: MedEdPortal
Anatomical Record
Archives of Oral Biology
Bone
Cells, Tissues, Organs
European Journal of Pain
Journal of Dental Research
Journal of Oral Pathology and Medicine
Physiology and Behavior


EMC/Paradigm Publishing-Applied Anatomy and Physiology-A Case Based Approach

EMC/Paradigm Publishing-Applied Anatomy and Physiology-Workbook and the accompanying Flash scripts for the companion CD

b. Editorial Boards
Editorial Review Board, MedEdPortal, 2010 to present

Website Reviewer for the American Association of Anatomists, 2011 to present

c. Editorship

None

6. Grant Reviews

a. Study Section, Review Panel, Special Emphasis Panel

None

b. Ad hoc

None

7. Professional and Scholarly Societies

American Association for Dental Research (AADR)
Neuroscience Group of the AADR
Dallas Chapter of the AADR
American Dental Education Association (ADEA)
Anatomy Section of ADEA
Commission on Change and Innovation of ADEA
American Association of Anatomists
Sigma Xi
Microscopy Society of America
Texas Society for Electron Microscopy

8. Contribution to professional organizations

AADR National Student Research Group Faculty Advisor, 2001-2010

AADR Fellowships Committee, 2010 to 2013

ADEA Council of Faculty Representative, 2003-present

ADEA Commission on Change and Innovation, 2006-present

American Association of Anatomists APS Archive Review Committee

American Association of Anatomists Educational Affairs Committee 2005-2009

Baylor College of Dentistry Student Research Group Faculty Advisor, 1998-present

Elected as President, Dallas Section of the AADR, 1998

Elected as Vice-President, Dallas Section of the AADR, 1997

9. **Participation on national or regional board examination, certification, or accreditation committee**

Commission on Dental Accreditation, Commission Consultant, Site Reviewer, 2009-present

Commission on Dental Accreditation-Standard 3.2 Research, 2004, 2011 (Co-chair)

Commission on Dental Accreditation-Standard 2 Admissions, 2004 (Chair), 2010

Commission on Dental Accreditation-Standard 4 Students Committee 1996-97

Commission on Dental Accreditation- Standard 8 Outcomes Committee 1996-97

Texas Higher Education Commission Accreditation Site Examiner, American College of Acupuncture and Herbal Medicine, Houston, Texas, November, 2006

10. **Meeting where chaired session**


American Association of Anatomists, “Teaching Histology in the Medical Curriculum”, 2009, New Orleans


Baylor College of Dentistry Faculty Retreat, “Peer Review of Teaching”, Session Chair, January, 2006.

11. **Programs and symposiums you organized**

American Association of Anatomists, “Teaching Histology to the Medical Student” April, 2009, New Orleans, La, 80 attendees, primary organizer.

American Association for Dental Research, Symposia, “How to Involve Students in a Research Experience”, March, 2009, Miami, Fl, 90 attendees, co-organizer.

American Association of Anatomists, “Anatomy for the Non-Medical Student”
April, 2006, San Diego, CA, 60 attendees, primary organizer.

Lunch and Learn Session “Getting Involved in Student Research”, March, 2005 at AADR meeting in Baltimore, MD, 20 attendees, primary organizer.

Lunch and Learn Session “How to Improve you Local Student Research Group”, March, 2003 at AADR meeting in Washington, DC, 20 attendees, primary organizer.

Baylor College of Dentistry Research Day, yearly from 1999-present, 100-150 attendees, primary organizer.

Baylor College of Dentistry Family Day, yearly from 2004 to present, 150 attendees, co-organizer.

12. Awards

2012 AADR National Student Research Group Mentor of the Year Award

Elected as an Honorary Member to Omicron Kappa Upsilon National Dental Honor Society, 2012

2012 ADEA Leadership Institute Fellow

Mentor, Cara Kessler, Finalist in Basic Sciences Division of the Caulk/Denstply Student Competition at 2012 AADR Meeting.

Mentor, Anne Lindley, Finalist in Basic Sciences Division of the Caulk/Denstply Student Competition at 2011 AADR Meeting.

Mentor, Cara Kessler, AADR Student Research Fellowship, 2011

Mentor, Ryan Darr, 3rd Place in Clinical Sciences Division of the Caulk/Denstply Student Competition at 2011 IADR/AADR Meeting.

Mentor, Cara Kessler, Finalist in Basic Sciences Division of the Caulk/Denstply Student Competition at 2011 IADR/AADR Meeting.

Mentor, Ida Khobahy, Finalist in Clinical Sciences Division of the Caulk/Denstply Student Competition at 2011 IADR/AADR Meeting.

Mentor, Ida Khobahy, AADR Student Research Fellowship, 2010

Mentor, Karen Liang, Finalist, Basic Sciences Division of the Caulk/Denstply Student Competition at 2010 AADR Meeting.

Mentor, Jonathan Blansett, Finalist in Basic Sciences Division of the Caulk/Denstply Student Competition at 2009 IADR/AADR Meeting.
Mentor, Dana Doan, Finalist in Clinical Sciences Division of the Caulk/Denstply Student Competition at 2009 IADR/AADR Meeting.

Mentor, Paige Priour, Finalist in Basic Sciences Division of the Caulk/Denstply Student Competition at 2009 IADR/AADR Meeting.

Mentor, David Hoffman, AADR/ADEA Academic Dental Careers Fellowship Program, 2007.

Mentor, Andrea Janik Keith, AADR Student Research Fellowship, 2006

Mentor, John Roberts, Finalist for Langman Grad Student Award at 2004 Experimental Biology Meeting.

Mentor, Mike Ryan, 3rd Place in Basic Sciences Division of the Caulk/Denstply Student Competition at 2004 IADR/AADR Meeting.

Mentor, Andi McPhillips, 1st Place in Basic Sciences Poster Competition at 2003 Hinman National Student Research Meeting.

Mentor, Graciela Alaniz, Secretary’s Award for Innovations in Health Promotion and Disease Prevention, Department of Health and Human Services, 2000

Mentor, Lori Dees, Finalist in Basic Sciences Division of the Caulk/Denstply Student Competition at 1999 IADR/AADR Meeting.

Mentor, Masha Sapozhnikov, Finalist in Basic Sciences Division of the Caulk/Denstply Student Competition at 1999 IADR/AADR Meeting.

Mentor, Masha Sapozhnikov, Finalist for ADA Caulk-Denstply Student Competition at 1998 ADA Meeting

13. Other Indices of Scholarly Performance

Judge for the Hinman National Student Research Meeting, yearly from 2002-present

G. Institutional Service to the HSC

1. Component Committees

HSC-Baylor College of Dentistry

Director of Student Research 2007-Present

Admissions Committee 1997-Present

Curriculum Committee 1998-2002, 2006-present

Hall of Fame Committee, 1999-present

Research Advisory Committee, 2000-present
Facilities Development Advisory Committee, 2003-present
Faculty Conduct Review Committee 2011-present (* chair)
Awards Committee, 2006-2009
Research Committee 1995-1998
Strategic Focus Committee Member, 1998-1999.
Strategic Focus Task Force-Students as Active Learners, 1997-1999 (* Chair)
Strategic Focus Task Force-Criteria for Entering Dental School, 1997-1999
Strategic Focus Task Force-Evaluating Student Competency, 1997-1999
Baylor Oral Health Foundation Grant Review Committee 1998-1999
Teacher of the Year Award Committee 1998-2000
Summer Pre-Dental Enrichment Program 1993 to Present
College and Career Day 1994 to 1996

**Departmental**

Biomedical Sciences Undergraduate Curriculum Committee 1997-Present.
BMS Chair’s Advisory Committee 2002-2006
Biomedical Sciences Seminar Committee (* Chair) 1994-1996
Biomedical Sciences Resources Committee 1994-2002

**State**

State Anatomical Board Representative 2003-present, Vice President 2011 to present.
Accreditation Site Reviewer for Texas Higher Education Coordinating Board 2007-present

**National**

ADA CODA Commission Consultant 2009-present
ADEA CCI Committee, 2006-present
ADEA Council of Faculties 2003-present
AADR National Student Research Group 2001-2010
AADR Fellowships Committee 2010-present

American Association of Anatomists Educational Affairs Committee 2005-2009

2. Other Component Service
   None

3. HSC Committees
   None

4. Other HSC Service
   None

5. Texas A&M University System Committees
   None

6. Other Texas A&M University System Service
   None

7. Patient Care
   None

8. Consultant to accrediting and other educational review boards, industry, health care
   None

9. Outreach programs for college students (career counseling, recruitment, mentoring)
   Consultant to Austin College Preceptor Program

10. Outreach programs for high school, junior high school, and elementary school students (career counseling, recruitment, mentoring)
    Regional Judge for the Dallas County Science Fair, 2002-present

11. Awards
    None

12. Other Indices of Service
    None

H. Patents or Commercialization of Research

1. Invention Disclosures

2. Patent applications pending
None

3. Licensing of technology
None

4. Collaboration with other faculty, leading to product development/licensing and commercialization
None

I. PUBLICATIONS:

1. Refereed Papers


2. **Non-refereed Papers**

None
3. **Review Articles**


4. **Abstracts**


- Kessler C, Spears R. 2012. IL-17 and IL-23 Affect Inflammation in the TMJ. J Dent Res 91A;1274.


- Spears R, Kessler C. 2011. IL-17 Mediated Effects In Adjuvant-Induced TMJ Inflammation. FASEB.


5. **Books Authored**
   None

6. **Book Chapters**
7. **Books Edited**
   None

8. **Manuscripts Already Submitted**

   Kessler C, Spears R. IL-17-Mediated Effects in Adjuvant-Induced Inflammation of the Temporomandibular Joint in Rats. Submitted to Arch Oral Biol.

   Puttaiah R, Siebert J, Spears R. Effects of Iodine in Microbial Control of Dental Treatment Water. Submitted to JCDP

9. **Table Clinics**
   None
September, 2013

CURRICULUM VITAE

NAME: Reginald Wayne Taylor

PROFESSIONAL OCCUPATION AND POSITION: Associate Professor/Department of Orthodontics

CURRENT ADDRESS AND PHONE NUMBER: 4714 Walton Heath Drive
Garland, TX 75044
(972) 675-5226

Baylor College of Dentistry
3302 Gaston Avenue
Dallas, TX 75266-0677
(214) 828-8125

DATE AND PLACE OF BIRTH, NATIONALITY: September 22, 1961 / New Orleans, Louisiana
American

MARITAL AND FAMILY STATUS: Married: Wife – Daphine Harry Taylor
Children: Daphanie Danielle
Nicholas Jamaal

EDUCATION: Xavier University of Louisiana, B.S. summa cum laude 1982
Harvard School of Dental Medicine, 5 years, D.M.D. 1987
Harvard School of Dental Medicine, 6 years, D.M.Sc. 1992
Harvard School of Dental Medicine, 6 years, Certificate in Orthodontics 1992
Forsyth Dental Center, 6 years, Certificate in Orthodontics 1992
Harvard School of Dental Medicine/Forsyth Dental Center, 6 years, Research Fellow in Orthodontics 1992
Harvard Medical School, Department of Anatomy, 6 years, Research Fellow in Orthodontics (Oral Biology) 1992

HISTORY OF ACADEMIC EMPLOYMENT:

Associate Professor (tenured), Department of Orthodontics
Baylor College of Dentistry
August 2005 –

Associate Professor, Department of Orthodontics
Baylor College of Dentistry
August 2000 – 2005

Associate Professor (tenured), Department of Orthodontics
University of Alabama School of Dentistry

Assistant Professor, Department of Orthodontics
University of Alabama School of Dentistry

Assistant Professor, Department of Cell Biology
University of Alabama School of Medicine and School of Dentistry
October 1993 - July 2000
HISTORY OF ACADEMIC EMPLOYMENT (cont.):

Instructor, Department of Cell Biology
University of Alabama School of Medicine and School of Dentistry, July 1992 – September 1993

Associate Scientist, Cell Adhesion and Matrix Research Center
January 1996 - July 2000

Investigator, Research Center in Oral Biology
University of Alabama School of Dentistry
May 1993 – July 2000

Investigator, Center for Bone Research
University of Alabama School of Dentistry
December 1994 - July 2000

Graduate School Faculty, University of Alabama at Birmingham, July 1992 – July 2000

Lecturer in Chemistry
Xavier University of Louisiana
August 1980 – May 1982

Instructor, ChemStar Summer Program for High School Students
Xavier University of Louisiana
1982, 1983

HISTORY OF NON-ACADEMIC EMPLOYMENT:

Part-time Private Practice in Orthodontics (Extramural)
Pediatric Dental Wellness, Houston, TX
August, 2006 – March, 2011

Part-time Private Practice in Orthodontics (Intramural)
Baylor College of Dentistry
September 2000 – 2012

Part-time Private Practice in Orthodontics (Intramural)
University of Alabama School of Dentistry

Dental Staff, Children's Rehabilitation Services (CRS) in Birmingham, Alabama
November 1993 – July 2000

Part-time Private Practice in General Dentistry (Intramural)
Harvard School of Dental Medicine
June 1986 – December 1987

PAST TEACHING RESPONSIBILITIES:

Undergraduate:
1. Coursemaster
   a. Orthodontics II (Seniors)
2. Lecturer – Freshman, Sophomore, Junior and Senior Orthodontic Courses
3. Lecturer – Microanatomy

Postgraduate:
1. Introduction to Orthodontics / Proffit Text Review
2. Seminars - Photography and Cephalometrics
3. Oral Surgery - Cephalometric and Surgical Prediction Tracing
PAST TEACHING RESPONSIBILITIES:

Postgraduate (cont.):

4. Seminars - Support Curriculum Series
5. Seminars - Original Articles in Cephalometry
6. Lecturer - Biochemistry of Connective Tissue and Bone
7. Clinical Supervision of Patients
8. Clinical coverage, case evaluation and treatment planning in the Pediatric Dental Clinic, The Children's Hospital of Alabama

RESEARCH ACTIVITIES

1. Molecular biology of periodontal ligament collagens
2. Expression and distribution of type XII collagen in the human periodontal ligament (PDL)
3. Expression and distribution of type XII collagen in human gingiva
4. Modulation of the expression of the long and short forms of type XII collagen in \textit{in vivo} and \textit{in vitro} systems
5. Expression and distribution of type XIV collagen in the human PDL
6. Expression and distribution of type XIV collagen in human gingiva
7. Determination of the relationship between human type XIV collagen and undulin
8. Relationship between Ehlers-Danlos type VIII and other connective tissue disorders with defects in the structure and/or expression of collagen types XII and/or XIV
9. Developing African-American norms for the Moorrees Mesh Diagram
10. Individual Dentist-Scientist Award, NIH, Grant K15 DE0028, Awarded $350,000, September 1987 – August 1992
11. UAB Minority Faculty Recruitment Award, $30,000, 1992
12. Minority Supplement to NIDR RCOB, $200,000, June 1993 – May 1997
13. Collaborator – NIDR Regional Research Center for Minority Oral Health
14. Mentor - NIH Minority High School Student Research Apprentice Program/Coca Cola Scholars ,1993 -

Research Supervision:

Mr. Derrick Pressley and Ms. Meriam Spencer, Summer Undergraduate Research Students, 1993, Relationship of human \( \alpha 1(XIV) \) collagen and undulin

Mr. Corey Johnson, Summer High School Research Student, 1995, Immunohistochemistry of type XII collagen in human gingiva

Mr. Brandon Boggan, Summer Dental Student Research, 1995 Characterization of the splice site in the NC3 domain of human type XII collagen.
Research Supervision (cont.):

Mr. Jeremy McKinney, Summer Dental Student Research, 1997
Characterization of a human BAC clone containing collagen type XIV sequence.

Mr. Glenn Glass, Summer Dental Student Research, 1998
Cross-reactivity of a human collagen XII antibody with rat tissue.

Mr. Ashley Hollowell, Summer Dental Student Research, 1998
Characterization of alternatively spliced forms of the NC1 domain of human type XII collagen.

Mr. Glenn Glass, Summer Dental Student Research, 1999
Characterization of alternatively spliced forms of the NC1 Domain of human type XIV collagen.

Ms. Lara Thurman, Summer Dental Student Research, 2001
Isolation and characterization of turkey collagen XII cDNA.

Mr. Ty Hinze, Summer Dental Student Research, 2002
mRNA for the long-form NC1 domain of collagen type XIV is expressed in cultured human periodontal ligament cells.

Mr. Megan McKenry, Summer Dental Student Research, 2002
Characterization of a clone containing collagen XXI sequence from human gingiva.

Ms. Shireen Irani, Summer Dental Student Research, 2003
Isolation and characterization of human type IX collagen cDNA from cultured human periodontal ligament cells.

Ms. Cathy Wiltshire, Summer Dental Student Research, 2003
Characterization of a clone containing collagen XXI sequence from cultured human periodontal ligament cells.

Mr. Brady Camp, Summer Dental Research, 2004, Collagen type XII expression in the fibromodulin null mouse.

Mr. Casey Warren, Summer Dental Research, 2004, Collagen Type XIV expression in the biglycan null mouse.

Mr. Jeremy Cook, Summer Dental Research, 2005, Isolation and characterization of turkey type XII collagen cDNA.

Mr. Brent Parker, Summer Dental Research, 2005, Isolation of type X collagen cDNA from turkey gastrocnemius tendon.

Mr. Jonathan Schack, Summer Dental Research, 2005, Collagen XIV down-regulation in the biglycan null mouse.

Ms. Kera Collier, Summer Dental Research, 2006, Collagen type XIV down-regulation in the decorin null mouse.

Ms. Lauren Ohlenforst, Summer Dental Research, 2006, Collagen type XIV up-regulation in the fibromodulin null mouse.

Mr. Lee Davis, Summer Dental Research, 2007, Type IX collagen Distribution in human periodontal ligament.

Ms. Kimberly Biggs, Summer Dental Research, 2008, Immunolocalization of type X collagen in the turkey
gastrocnemius tendon
Mr. Justin Farmer, Summer Dental Research, 2009,
Immunolocalization of type XIV collagen in murine skin

Reginald Wayne Taylor

Research Supervision (cont.):
Ms. Nga Nguyen, Summer Dental Research, 2010,
Type X collagen in distraction osteogenesis regenerate bone
Ms. Valeria Sanchez, Summer Dental Research, 2010,
Matrix characteristics of distraction osteogenesis regenerate bone
Ms. Alyssa Emory, Summer Dental Research, 2011,
Collagen type XII expression in the decorin/biglycan null mouse
Ms. Spencer Mack, Summer Dental Research, 2011,
Collagen type XII expression in the biglycan null mouse
Ms. Diana Do, Summer Dental Research, 2012
The role of periostin in orthodontic tooth movement and bone remodeling
Mr. DinhQuang Nguyen, Summer Dental Research, 2012
Effect of periostin gene knockout on orthodontic tooth movement

M.S. Graduate Students Thesis Activities
Supervisor/Chairman of Thesis Committee:
Dr. Kathy L. Bailey, Graduate Student (Orthodontics). M.S.
Dr. Wen-Jeng Huang, Graduate Student (Pediatric Dentistry).
M.S. Degree awarded June 1995. Thesis: Comparison of Wits Analysis to AFH/BFH.
Dr. Penny L. Taylor, Graduate Student (Orthodontics). M.S.
Dr. Shu-hwa Yuan, Graduate Student (Pediatric Dentistry).
Dr. Olga Sanchez, Graduate Student (Orthodontics)
Dr. Denise Hall, Graduate Student (Orthodontics)
Dr. Andrew N. Young, Graduate Student (Orthodontics) M.S.

Research Supervision (cont.):
Dr. Reem Stephanos, Graduate Student (Orthodontics) M.S.

Member – M.S. Thesis Committee
Dr. Andrew Martin, Graduate Student (Orthodontics) M.S. Degree awarded December, 2005. Thesis: The impact of buccal corridors on smile attractiveness.
Dr. John Roberts, Graduate Student (Biomedical Sciences) M.S. Degree awarded May, 2006. Thesis project: Effect of TGFβ on the fusion of chicken palates in culture.
Dr. Christopher Rawle. Graduate Student (Orthodontics) M.S. Degree awarded December, 2007. Thesis project: Ethnic differences in their perceptions of malocclusion and attitudes toward orthodontics.
Dr. Jared Corbridge. Graduate Student (Orthodontics) M.S.
Dr. Eric Vela. Graduate Student (Orthodontics) M.S.
Dr. Cecilia Cuairan. Graduate Student (Orthodontics) M.S.
Dr. Collin Kraus. Graduate Student (Orthodontics) M.S.
Dr. Stephen Rusó. Graduate Student (Orthodontics) M.S.

Member – Ph.D. Thesis Committee
Dr. Pei Kang, Graduate Student (Biomedical Sciences/Endodontics) Ph.D. Degree awarded May 2002. Project: Nicotine Effects on Palate Development.

Dr. Yiyu Fang, Graduate Student (Biomedical Sciences) Ph.D. Degree awarded May 2004. Project: Effect of nicotine on cell migration of human gingival fibroblasts.

Research Supervision (cont.): Dr. Erik Harrington, Graduate Student (Biomedical Sciences) Ph.D. Degree awarded May, 2007. Thesis project: Role of signal transduction in cartilage development.

PROFESSIONAL/SCIENTIFIC ORGANIZATION MEMBERSHIPS: American Dental Education Association, 1987 -
American Association of Orthodontists, 1988 -
International Association of Dental Research, 1990 -
Massachusetts Dental Society, 1990 - 1992
National Dental Association, 1991 -
American Dental Association, 1993 -
American Society of Cell Biology, 1993 -
Birmingham District Dental Society, 1993 -2000
Southern Association of Orthodontists, 1993 - 2000
Alabama Association of Orthodontists, 1993 -2000
Alabama Dental Association, 1993 -2000
Alabama Dental Society, 1993 –2000
Dallas County Dental Society, 2000 -
Southwestern Association of Orthodontists, 2000 –
Texas Dental Association, 200 -
The American Society for Matrix Biology, 2002 –
American Board of Orthodontics (ABO), 2007 -
College of Diplomates of the Amer. Board of Orthodontics, 2007 -
Omicron Kappa Upsilon, 2008-

LICENSURES/BOARD STANDING: Massachusetts Dental License 1986
Alabama Dental License 1992-2001
Louisiana Dental License 1995
Texas Dental License 2000
Board Certified, American Board of Orthodontics 2007
Recertified, 2012

HOSPITAL AFFILIATION: Medical/Dental Staff Appointment
The Children's Hospital of Alabama, Birmingham
May 1993 – 2000

HONORS: Tom Matthews Award, Baylor College of Dentistry Orthodontic Alumni Association, 2009
Baylor College of Dentistry Faculty Award, Dallas County Dental Society, 2009
Induction into Omicron Kappa Upsilon, National Dental Honor Society, 2008
Faculty Recognition Award – National Dental Association Foundation/Colgate-Palmolive, 2007
Joseph L. Henry Award, Harvard School of Dental Medicine 1992
Outstanding Achievement Award, International College of Dentists 1987
Dwight D. Eisenhower Scholarship, Harvard University 1985, 1986

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Reginald Wayne Taylor

HONORS (cont.):
American Fund for Dental Health Scholarship 1982
Alpha Kappa Mu Honor Society, Xavier University of Louisiana 1981
Beta Beta Beta Biological Honor Society, Xavier University of Louisiana 1980
Sigma Chi Chemistry Honor Society, Xavier University of Louisiana 1979
Xavier University of Louisiana Scholarship 1978

EXTRAMURAL SERVICE:
ADEA Commission on Change and Innovation in Dental Education, 2012 –
CODA Consultant, American Dental Association, 2009 -
Hamilton Park United Methodist Church, Staff Pastor Parish Relations Committee, 2006 -, Chairman, 2007- 2008
Dallas County District 3 Public Health Advisory Committee, 2003–
National Dental Association, Local Host Chairman for Minority Faculty and Administrators’ Forum at Annual Convention Dallas, TX, July, 2002
Reviewer, Journal of the American Dental Association, 2000-
Guest Editor, Seminars in Orthodontics - June 1998 Issue
Alabama Dental Society, Zone 1 Constitution Committee, 1995 –1997
Chairman, Student Liaison Committee, 1995 –2000
Vice President / President-Elect, 1996 - 1997
President, 1997 - 1999
Harvard School of Dental Medicine Licensed Practitioner Clinic Advisory Committee, 1987 –
1989
Predoctoral Admissions Committee, 1987 – 1991
Harvard Medical School
Joint Committee on the Status of Women, 1990 – 1992
Postdoctoral Advisor to Predoctoral Students, 1989 – 1990
Search Committee for Asst. Dean for Admissions, 1990 –
1991
September, 2013

INTRAMURAL SERVICE: Committees

1. Baylor College of Dentistry
   Taskforce on the National Board Dental Examination, 2012 – 2013
   Search Committee, Department of Biomedical Sciences Chairman, 2012
   Steering Committee for the COE Annual Conference on Oral Health Issues, 2012 -
   Research Advisory Committee, 2003 - 2004, 2006 -

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Reginald Wayne Taylor

INTRAMURAL SERVICE (cont.)

Dental Admissions Committee, 2008 -
Institutional Review Board, 2001 -
Welcoming Diversity Committee, 2001 – 2008
Work Group: Review and Revision of the Competencies for the New Dentist, 2001-2002
Search Committee, Department of Orthodontics Program Director, 2001-2002
Search Committee, Department of Biomedical Sciences Assistant/Associate Professor, 2001 – 2003

2. Texas A&M Health Science Center
   Committee on the Recruitment and Retention of Underrepresented Minority and Women Faculty, 2002-2003
   CAFFERT Committee, 2010 –
   Faculty Grievance Committee, 2010 –
   Institutional Review Board, 2008 -

3. School of Dentistry - University of Alabama
   Co-Chair, Committee on School Diversity, 1999-2000
   Search Committee, Department of Oral Biology Chairman, 1999-2000
   Committee for Minority Affairs, 1992 –2000
   Teaching Committee, 1992 – 1997
   Chairman, Ad Hoc Committee for the Selection of Photographic Equipment for Graduate Programs, 1993 - 1994
   Ad Hoc Hearing Committee for Determination of Ethics Violations, 1994
   Search Committee, Department of Oral and Maxillofacial Surgery Chairman, 1994
   Predoctoral Admissions Committee, 1995 -1999
   Student Honors Program Committee, 1995 - 1997
   Intramural Professional Practice Committee, 1995 -1999
   Research Advisory Committee, 1995 - 1998

3. University of Alabama at Birmingham
PUBLICATIONS:

Articles in Refereed Journals:


Oh SP, Taylor RW, Gerecke DR, Seldin MF, Olsen BR. The mouse α1(XII) and human α1(XII)-like collagen genes are localized on mouse chromosome 9 and human chromosome 6. Genomics 1992;14:225-231.


Taylor RW. Advances in cephalometric analysis. In: Jacobson A
Abstracts:


Taylor RW, Broquist A, McKoy SB, Russell SB, Russell JD and Turpin JS. Glucocorticoid misregulation of type XII collagen in


Abstracts (cont):


PROFESSIONAL PRESENTATIONS:


Lecturer, Continuing Education Course, "Orthodontics in daily practice," University of Alabama School of Dentistry, Birmingham, AL, September 28, 1996.

Continuing Education Presentation - "Orthodontics: Myths, Fallacies and Truths," Alabama Dental Society, Zone 1, April 19, 1997.

Lecturer, Continuing Education Course, "Identifying Orthodontic Problems in the General Practice," University of Alabama School of Dentistry, Birmingham, AL, September 27, 1997.

Co-Presenter, "A Longitudinal Clinical Comparison Between a Light-Cured, Resin Reinforced Glass Ionomer (Fuji Ortho ™LC) and a Dual Cure Composite (Phase II Dual ®Cure)," Scientific Poster, Southern Association of Orthodontists Annual Session, San Marco Island, FL, November 9, 1997.

PROFESSIONAL PRESENTATIONS (cont.)


Poster Presentation, "Type XII collagen expression in normal and fibrotic tissue," International Association for Dental Research Meeting, Nice, France, June 26, 1998.


Poster Presentation, “Type IX collagen protein in human periodontal ligament.” International Association for Dental Research Meeting, Miami, FL, April 2, 2009.


CURRICULUM VITAE

NAME: Reginald Wayne Taylor

PROFESSIONAL OCCUPATION AND POSITION: Associate Professor/Department of Orthodontics

CURRENT ADDRESS AND PHONE NUMBER: 4714 Walton Heath Drive
Garland, TX  75044
(972) 675-5226

Baylor College of Dentistry
3302 Gaston Avenue
Dallas, TX  75266-0677
(214) 828-8125

DATE AND PLACE OF BIRTH, NATIONALITY: September 22, 1961 / New Orleans, Louisiana
American

MARITAL AND FAMILY STATUS: Married:  Wife – Daphine Harry Taylor
Children:  Daphanie Danielle
Nicholas Jamâal

EDUCATION: Xavier University of Louisiana, B.S.  summa cum laude 1982
Harvard School of Dental Medicine, 5 years, D.M.D.  1987
Harvard School of Dental Medicine, 6 years, D.M.Sc.  1992
Harvard School of Dental Medicine, 6 years, Certificate in Orthodontics 1992
Forsyth Dental Center, 6 years, Certificate in Orthodontics 1992
Harvard School of Dental Medicine/Forsyth Dental Center, 6 years, Research Fellow in Orthodontics 1992
Harvard Medical School, Department of Anatomy, 6 years, Research Fellow in Orthodontics (Oral Biology) 1992

HISTORY OF ACADEMIC EMPLOYMENT: Associate Professor (tenured), Department of Orthodontics
Baylor College of Dentistry
August 2005 –

Associate Professor, Department of Orthodontics
Baylor College of Dentistry
August 2000 – 2005

Associate Professor (tenured), Department of Orthodontics
University of Alabama School of Dentistry

Assistant Professor, Department of Orthodontics
University of Alabama School of Dentistry

Assistant Professor, Department of Cell Biology
University of Alabama School of Medicine and School of Dentistry
October 1993 - July 2000
HISTORY OF ACADEMIC EMPLOYMENT (cont.):

Instructor, Department of Cell Biology
University of Alabama School of Medicine and School of Dentistry, July 1992 – September 1993

Associate Scientist, Cell Adhesion and Matrix Research Center
January 1996 - July 2000

Investigator, Research Center in Oral Biology
University of Alabama School of Dentistry
May 1993 – July 2000

Investigator, Center for Bone Research
University of Alabama School of Dentistry
December 1994 - July 2000

Graduate School Faculty, University of Alabama at Birmingham, July 1992 – July 2000

Lecturer in Chemistry
Xavier University of Louisiana
August 1980 – May 1982

Instructor, ChemStar Summer Program for High School Students
Xavier University of Louisiana
1982, 1983

HISTORY OF NON-ACADEMIC EMPLOYMENT:

Part-time Private Practice in Orthodontics (Extramural)
Pediatric Dental Wellness, Houston, TX
August, 2006 – March, 2011

Part-time Private Practice in Orthodontics (Intramural)
Baylor College of Dentistry
September 2000 – 2012

Part-time Private Practice in Orthodontics (Intramural)
University of Alabama School of Dentistry

Dental Staff, Children's Rehabilitation Services (CRS) in Birmingham, Alabama
November 1993 – July 2000

Part-time Private Practice in General Dentistry (Intramural)
Harvard School of Dental Medicine
June 1986 – December 1987

PAST TEACHING RESPONSIBILITIES:

Undergraduate:

1. Coursemaster
   a. Orthodontics II (Seniors)
2. Lecturer – Freshman, Sophomore, Junior and Senior Orthodontic Courses
3. Lecturer – Microanatomy

Postgraduate:

1. Introduction to Orthodontics / Proffit Text Review
2. Seminars - Photography and Cephalometrics
3. Oral Surgery - Cephalometric and Surgical Prediction Tracing
Reginald Wayne Taylor

PAST TEACHING RESPONSIBILITIES:

Postgraduate (cont.):
4. Seminars - Support Curriculum Series
5. Seminars - Original Articles in Cephalometry
6. Lecturer - Biochemistry of Connective Tissue and Bone
7. Clinical Supervision of Patients
8. Clinical coverage, case evaluation and treatment planning in the Pediatric Dental Clinic, The Children's Hospital of Alabama

RESEARCH ACTIVITIES

SUPPORT AND INTERESTS:

1. Molecular biology of periodontal ligament collagens
2. Expression and distribution of type XII collagen in the human periodontal ligament (PDL)
3. Expression and distribution of type XII collagen in human gingiva
4. Modulation of the expression of the long and short forms of type XII collagen in *in vivo* and *in vitro* systems
5. Expression and distribution of type XIV collagen in the human PDL
6. Expression and distribution of type XIV collagen in human gingiva
7. Determination of the relationship between human type XIV collagen and undulin
8. Relationship between Ehlers-Danlos type VIII and other connective tissue disorders with defects in the structure and/or expression of collagen types XII and/or XIV
9. Developing African-American norms for the Moorrees Mesh Diagram
10. Individual Dentist-Scientist Award, NIH, Grant K15 DE0028, Awarded $350,000, September 1987 – August 1992
11. UAB Minority Faculty Recruitment Award, $30,000, 1992
12. Minority Supplement to NIDR RCOB, $200,000, June 1993 – May 1997
13. Collaborator – NIDR Regional Research Center for Minority Oral Health
14. Mentor - NIH Minority High School Student Research Apprentice Program/Coca Cola Scholars, 1993 -

Research Supervision:

Mr. Derrick Pressley and Ms. Meriam Spencer, Summer Undergraduate Research Students, 1993, Relationship of human α1(XIV) collagen and undulin

Mr. Corey Johnson, Summer High School Research Student, 1995, Immunohistochemistry of type XII collagen in human gingiva

Mr. Brandon Boggan, Summer Dental Student Research, 1995 Characterization of the splice site in the NC3 domain of human type XII collagen.
Reginald Wayne Taylor

Research Supervision (cont.):

Mr. Jeremy McKinney, Summer Dental Student Research, 1997
Characterization of a human BAC clone containing collagen type XIV sequence.

Mr. Glenn Glass, Summer Dental Student Research, 1998
Cross-reactivity of a human collagen XII antibody with rat tissue.

Mr. Ashley Hollowell, Summer Dental Student Research, 1998
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Ms. Lara Thurman, Summer Dental Student Research, 2001
Isolation and characterization of turkey collagen XII cDNA.

Mr. Ty Hinze, Summer Dental Student Research, 2002
mRNA for the long-form NC1 domain of collagen type XIV is expressed in cultured human periodontal ligament cells.

Mr. Megan McKenry, Summer Dental Student Research, 2002
Characterization of a clone containing collagen XXI sequence from human gingiva.

Ms. Shireen Irani, Summer Dental Student Research, 2003
Isolation and characterization of human type IX collagen cDNA from cultured human periodontal ligament cells.

Ms. Cathy Wiltshire, Summer Dental Student Research, 2003
Characterization of a clone containing collagen XXI sequence from cultured human periodontal ligament cells.

Mr. Brady Camp, Summer Dental Research, 2004, Collagen type XII expression in the fibromodulin null mouse.

Mr. Casey Warren, Summer Dental Research, 2004, Collagen Type XIV expression in the biglycan null mouse.

Mr. Jeremy Cook, Summer Dental Research, 2005, Isolation and characterization of turkey type XII collagen cDNA.

Mr. Brent Parker, Summer Dental Research, 2005, Isolation of type X collagen cDNA from turkey gastrocnemius tendon.

Mr. Jonathan Schaack, Summer Dental Research, 2005, Collagen XIV down-regulation in the biglycan null mouse.

Ms. Kera Collier, Summer Dental Research, 2006, Collagen type XIV down-regulation in the decorin null mouse.

Ms. Lauren Ohlenforst, Summer Dental Research, 2006, Collagen type XIV up-regulation in the fibromodulin null mouse.

Mr. Lee Davis, Summer Dental Research, 2007, Type IX collagen Distribution in human periodontal ligament.

Ms. Kimberly Biggs, Summer Dental Research, 2008, Immunolocalization of type X collagen in the turkey
gastrocnemius tendon
Mr. Justin Farmer, Summer Dental Research, 2009,
Immunolocalization of type XIV collagen in murine skin

Page Five
Reginald Wayne Taylor

Research Supervision (cont.):
Ms. Nga Nguyen, Summer Dental Research, 2010,
Type X collagen in distraction osteogenesis regenerate bone
Ms. Valeria Sanchez, Summer Dental Research, 2010,
Matrix characteristics of distraction osteogenesis regenerate bone
Ms. Alyssa Emory, Summer Dental Research, 2011,
Collagen type XII expression in the decorin/biglycan null mouse
Ms. Spencer Mack, Summer Dental Research, 2011,
Collagen type XII expression in the biglycan null mouse
Ms. Diana Do, Summer Dental Research, 2012
The role of periostin in orthodontic tooth movement and bone remodeling
Mr. DinhQuang Nguyen, Summer Dental Research, 2012
Effect of periostin gene knockout on orthodontic tooth movement

M.S. Graduate Students Thesis Activities
Supervisor/Chairman of Thesis Committee:
Dr. Kathy L. Bailey, Graduate Student (Orthodontics).  M.S.
Dr. Wen-Jeng Huang, Graduate Student (Pediatric Dentistry).
M.S. Degree awarded June 1995.  Thesis:  Comparison of Wits Analysis to AFH/BFH.
Dr. Penny L. Taylor, Graduate Student (Orthodontics).  M.S.
Dr. Shu-hwa Yuan, Graduate Student (Pediatric Dentistry).
Dr. Olga Sanchez, Graduate Student (Orthodontics)
Dr. Denise Hall, Graduate Student (Orthodontics)
Dr. Andrew N. Young, Graduate Student (Orthodontics) M.S. Degree awarded December, 2004. Thesis: Evaluation of preemptive valdecoxib therapy on discomfort caused by initial archwire placement discomfort in adults.

Research Supervision (cont.):


Member – M.S. Thesis Committee
Dr. Andrew Martin, Graduate Student (Orthodontics) M.S. Degree awarded December, 2005. Thesis: The impact of buccal corridors on smile attractiveness.
Dr. John Roberts, Graduate Student (Biomedical Sciences) M.S. Degree awarded May, 2006. Thesis project: Effect of TGFβ on the fusion of chicken palates in culture.
Dr. Christopher Rawle. Graduate Student (Orthodontics) M.S. Degree awarded December, 2007. Thesis project: Ethnic differences in their perceptions of malocclusion and attitudes toward orthodontics.
Dr. Jared Corbridge. Graduate Student (Orthodontics) M.S. Degree awarded December, 2009. Thesis project: Transverse dentoalveolar changes following slow maxillary expansion. toward orthodontics.

Member – Ph.D. Thesis Committee
Dr. Pei Kang, Graduate Student (Biomedical Sciences/Endodontics) Ph.D. Degree awarded May 2002. Project: Nicotine Effects on Palate Development.

Dr. Yiyu Fang, Graduate Student (Biomedical Sciences) Ph.D. Degree awarded May 2004. Project: Effect of nicotine on cell migration of human gingival fibroblasts.

PROFESSIONAL/SCIENTIFIC ORGANIZATION MEMBERSHIPS:

- American Dental Education Association, 1987 -
- American Association of Orthodontists, 1988 -
- International Association of Dental Research, 1990 -
- Massachusetts Dental Society, 1990 - 1992
- National Dental Association, 1991 -
- American Dental Association, 1993 -
- American Society of Cell Biology, 1993 -
- Birmingham District Dental Society, 1993 -2000
- Southern Association of Orthodontists, 1993 - 2000
- Alabama Association of Orthodontists, 1993 -2000
- Alabama Dental Association, 1993 -2000
- Alabama Dental Society, 1993 –2000
- Dallas County Dental Society, 2000 -
- Southwestern Association of Orthodontists, 2000 –
- Texas Dental Association, 200 -
- The American Society for Matrix Biology, 2002 –
- American Board of Orthodontics (ABO), 2007 -
- College of Diplomates of the Amer. Board of Orthodontics, 2007 -

OMICRON KAPPA UPSILON, 2008-

LICENSURES/BOARD STANDING:

- Massachusetts Dental License 1986
- Alabama Dental License 1992-2001
- Louisiana Dental License 1995
- Texas Dental License 2000
- Board Certified, American Board of Orthodontics 2007 Recertified, 2012

HOSPITAL AFFILIATION:

- Medical/Dental Staff Appointment
- The Children's Hospital of Alabama, Birmingham
- May 1993 – 2000

HONORS:

- Tom Matthews Award, Baylor College of Dentistry Orthodontic Alumni Association, 2009
- Baylor College of Dentistry Faculty Award, Dallas County Dental Society, 2009
- Induction into OMICRON KAPPA UPSILON, National Dental Honor Society, 2008
Faculty Recognition Award – National Dental Association Foundation/Colgate-Palmolive, 2007
Joseph L. Henry Award, Harvard School of Dental Medicine 1992
Outstanding Achievement Award, International College of Dentists 1987
Dwight D. Eisenhower Scholarship, Harvard University 1985, 1986

Reginald Wayne Taylor

HONORS (cont.):
American Fund for Dental Health Scholarship 1982
Alpha Kappa Mu Honor Society, Xavier University of Louisiana 1981
Beta Beta Beta Biological Honor Society, Xavier University of Louisiana 1980
Sigma Chi Chemistry Honor Society, Xavier University of Louisiana 1979
Xavier University of Louisiana Scholarship 1978

EXTRAMURAL SERVICE:
ADEA Commission on Change and Innovation in Dental Education, 2012 –
CODA Consultant, American Dental Association, 2009 - Hamilton Park United Methodist Church, Staff Pastor Parish Relations Committee, 2006 -, Chairman, 2007-2008
Dallas County District 3 Public Health Advisory Committee, 2003–
National Dental Association, Local Host Chairman for Minority Faculty and Administrators’ Forum at Annual Convention Dallas, TX, July, 2002
Reviewer, Journal of the American Dental Association, 2000-
Guest Editor, Seminars in Orthodontics - June 1998 Issue
Alabama Dental Society, Zone 1 Constitution Committee, 1995 –1997
Chairman, Student Liaison Committee, 1995 –2000
Vice President / President-Elect, 1996 - 1997
President, 1997 - 1999
Harvard School of Dental Medicine Licensed Practitioner Clinic Advisory Committee, 1987 – 1989
Predoctoral Admissions Committee, 1987 – 1991
Harvard Medical School
Joint Committee on the Status of Women, 1990 – 1992
Postdoctoral Advisor to Predoctoral Students, 1989 – 1990
Search Committee for Asst. Dean for Admissions, 1990 – 1991
September, 2013

INTRAMURAL SERVICE:

Committees

1. Baylor College of Dentistry
   Taskforce on the National Board Dental Examination, 2012 – 2013
   Search Committee, Department of Biomedical Sciences Chairman, 2012
   Steering Committee for the COE Annual Conference on Oral Health Issues, 2012 -
   Research Advisory Committee, 2003 - 2004, 2006 -
   Research Committee, 2001 –

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Reginald Wayne Taylor

INTRAMURAL SERVICE (cont.)

   Dental Admissions Committee, 2008 -
   Institutional Review Board, 2001 -
   Welcoming Diversity Committee, 2001 – 2008
   Work Group: Review and Revision of the Competencies for the New Dentist, 2001-2002
   Search Committee, Department of Orthodontics Program Director, 2001-2002
   Search Committee, Department of Biomedical Sciences Assistant/Associate Professor, 2001 – 2003

2. Texas A&M Health Science Center
   Committee on the Recruitment and Retention of Underrepresented Minority and Women Faculty, 2002 - 2003
   CAFFERT Committee, 2010 –
   Faculty Grievance Committee, 2010 –
   Institutional Review Board, 2008 -

3. School of Dentistry - University of Alabama
   Co-Chair, Committee on School Diversity, 1999-2000
   Search Committee, Department of Oral Biology Chairman, 1999-2000
   Committee for Minority Affairs, 1992 –2000
   Teaching Committee, 1992 – 1997
   Chairman, Ad Hoc Committee for the Selection of Photographic Equipment for Graduate Programs, 1993 - 1994
   Ad Hoc Hearing Committee for Determination of Ethics Violations, 1994
   Search Committee, Department of Oral and Maxillofacial Surgery Chairman, 1994
   Predoctoral Admissions Committee, 1995 -1999
   Student Honors Program Committee, 1995 - 1997
   Intramural Professional Practice Committee, 1995 -1999
   Research Advisory Committee, 1995 - 1998

3. University of Alabama at Birmingham
PUBLICATIONS:

Articles in Refereed Journals:


Oh SP, Taylor RW, Gerecke DR, Seldin MF, Olsen BR. The mouse $\alpha_{1}(XII)$ and human $\alpha_{1}(XII)$-like collagen genes are localized on mouse chromosome 9 and human chromosome 6. Genomics 1992;14:225-231.

Gerecke DR, Olson PF, Koch M, Knoll JHM, Taylor R, Hudson DL, Champliaud MF, Olsen BR, Burgeson RE. Complete primary structure of two splice variants of collagen XII, and assignment of $\alpha_{1}(XII)$ collagen (COL12A1), $\alpha_{1}(IX)$ collagen (COL9A1), and $\alpha_{1}(XIX)$ collagen (COL19A1) to human chromosome 6q12-q13. Genomics 1997;41:236-242.


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Reginald Wayne Taylor

PUBLICATIONS (cont.):

Articles in Refereed Journals:


Book Chapters:


Taylor RW. Advances in cephalometric analysis. In: Jacobson A
Abstracts:


Abstracts (cont):


Taylor RW, Broquist A, McKoy SB, Russell SB, Russell JD and Turpin JS. Glucocorticoid misregulation of type XII collagen in


Abstracts (cont):


PROFESSIONAL PRESENTATIONS:


Lecturer, Continuing Education Course, "Orthodontics in daily practice," University of Alabama School of Dentistry, Birmingham, AL, September 28, 1996.

Continuing Education Presentation - "Orthodontics: Myths, Fallacies and Truths," Alabama Dental Society, Zone 1, April 19, 1997.

Lecturer, Continuing Education Course, "Identifying Orthodontic Problems in the General Practice," University of Alabama School of Dentistry, Birmingham, AL, September 27, 1997.

Co-Presenter, "A Longitudinal Clinical Comparison Between a Light-Cured, Resin Reinforced Glass Ionomer (Fuji Ortho ™LC) and a Dual Cure Composite (Phase II Dual ®Cure)," Scientific Poster, Southern Association of Orthodontists Annual Session, San Marco Island, FL, November 9, 1997.

PROFESSIONAL PRESENTATIONS (cont.)


Poster Presentation, "Type XII collagen expression in normal and fibrotic tissue," International Association for Dental Research Meeting, Nice, France, June 26, 1998.


Poster Presentation, “Type IX collagen protein in human periodontal ligament.” International Association for Dental Research Meeting, Miami, FL, April 2, 2009.


Curriculum Vitae

R. GILBERT TRIPLETT, D.D.S., PH.D.

January 3, 2011

A. Name R. Gilbert Triplett

B. Rank Regents Professor

C. Education

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<th>Schools</th>
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<td>Ph.D.</td>
<td>1982</td>
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D. Employment

Primary Appointments

Regents Professor and Vice Chairman, Department of Oral and Maxillofacial Surgery, Texas A&M Health Science Center Baylor College of Dentistry, Dallas, Texas, 2007-Present.

Chief of Dental Section Department of Surgery, Baylor University Medical Center, Dallas, Texas, 2007-Present.

Regents Professor and Chairman, Director of Hospital Affairs, Department of Oral and Maxillofacial Surgery and Pharmacology, The Texas A&M University System Health Science Center-Baylor College of Dentistry, Dallas, Texas, 1998-2007.

Professor and Chairman, Director of Hospital Affairs, Department of Oral and Maxillofacial Surgery and Pharmacology, Baylor College of Dentistry, Dallas, Texas, 1991-1998

Professor, Director of Graduate Education, Oral & Maxillofacial Surgery (Dental School) and Division of Oral & Maxillofacial Surgery, Department of Surgery (Medical School), University of Texas Health Science Center at San Antonio, San Antonio, Texas, 1988-1991

Adjunct Institute Scientist, Southwest Research Institute, San Antonio, Texas, 1988-1990

Associate Professor, Director of Graduate Education, Department of Oral & Maxillofacial Surgery (Tenured: September 1, 1986), University of Texas Health Science Center at San
Antonio (Dental/Medical School), San Antonio, Texas, 1984-1988

Director, Resident Training, and Head, Oral & Maxillofacial Surgery Division, Dental Department, Naval Hospital, San Diego, California, 1982-1984

Chairman, Dental Research Branch, Casualty Care Research Program, Naval Medical Research Institute, Bethesda, Maryland, 1981-1982

Director, Oral & Maxillofacial Surgery, Division Combat Casualty Care Program Center Naval Medical Research Institute, Bethesda, Maryland, 1976-1981

Staff, Oral & Maxillofacial Surgery, National Naval Medical Center, Bethesda, Maryland, 1975-1982

Head, Dental Department, USS America CVA-66, 1973-1975

Resident, 2nd & 3rd year Oral & Maxillofacial Surgery, Boston Naval Hospital, Chelsea, Massachusetts, 1971-1973

Resident, 1st year Oral & Maxillofacial Surgery, Navy Post-Graduate Dental School, Bethesda, Maryland, 1970-1971

Head, Dental Department, US Naval Advisory Group, Korea, 1968-1970

Head, Dental Department, Naval Air Station, Ellyson Field, Pensacola, Florida, 1966-1968

Division Officer, Dental Department, USS Essex CVS-9, 1964-1966

Intern, Naval Hospital, Portsmouth, Virginia, 1963-1964

Officer, U.S. Navy, 1963-1984

Secondary Appointments

Chief, Department of Dentistry, Baylor University Medical Center, Dallas, Texas, 1991-Present

E. Teaching Performance

Teaching Activity
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**Summer-Fall-Spring**

| 8244-C | OMS Undergrad Clinic                                  | D3    | 184 |     |      |     | Instructor  |
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University of Texas-San Antonio

**Year: 1990**
- Surg/Med Aspects-Geriatric Dx/Tx Plan: 10 Lecturer

**Year: 1989-1990**
- History/Physical Dx for Gen Pract: 5 Lecturer
- Physical Diagnosis: 6 Lecturer
- Physical Evaluation for Gen Dent Pract: 6 2 Lecturer
- Wound Healing: 4 Lecturer/Sec. Leader
- Adv Dent Ed Core Course: 1 Lecturer
- Anat Aspects-Oral Infect: 1 Lecturer
- Implant Prosthodontics: 3 Lecturer

**Year: 1988-1990**
- Physical Diagnosis: 4 2 Director
- Anatomy for Prosthodontics: 1 Lecturer
- Adv Oral & Maxillofac Surg: 2 Lecturer

**Year: 1989-1990**
- History/Physical Dx for Gen Pract: 5 Director
- Physical Diagnosis: 6 Director
- Physical Evaluation for Gen Dent Pract: 6 2 Director
- Wound Healing: 4 Lecturer
- Adv Dent Ed Core Course: 1 Lecturer
- Anat Aspects-Oral Infect: 1 Lecturer
- Implant Prosthodontics: 3 Lecturer

**Year: 1988-1990**
- Physical Diagnosis: 4 2 Director
- Anatomy for Prosthodontics: 1 Lecturer
- Advanced Oral&Maxillofac Surg: 2 Lecturer
- Junior Oral&Maxillofac Surg: 3 Lecturer
- Clinical Case Conferences: 2 Lecturer

**Year: 1986-1989**
- Introduction to OMS: 2 Lecturer

**Year: 1985-1990**
- Head and Neck Anatomy: 1 Lecturer
### Year: 1985-1986
- **Basic Science Lecture Series**: 3 Director
- **Orthognathic Surgery Seminar**: 1 Lecturer

### Year: 1984-1991
- **Advanced Oral & Maxillofacial Surgery**: 1 Lecturer

### Year: 1984-1990
- **Hospital Procedures Rotation-Prosthodontics**: 1 Director
- **Oral Surgical Rotation**: 2 1/2 Director

### Year: 1985-1987
- Ward, Clinic, and OR: 40-60 hrs per week

#### 2008-2009
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### Total Contact Hours - Summary

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1. Lectures taught 20
2. Laboratories taught
3. Clinics taught 160
4. Seminars taught 5

1995-1996
1. Lectures taught 4
2. Laboratories taught 2
3. Clinics taught 160
4. Seminars taught 6

1994-1995
1. Lectures taught 15
2. Laboratories taught
3. Clinics taught 160
4. Seminars taught 6

1993-1994
1. Lectures taught 6
2. Laboratories taught 160
3. Clinics taught 10
4. Seminars taught

1992-1993
1. Lectures taught 6
2. Laboratories taught
3. Clinics taught 160
4. Seminars taught 10

1991-1992
1. Lectures taught 4
2. Laboratories taught
3. Clinics taught 160
4. Seminars taught

1990-1991
1. Lectures taught 10
2. Laboratories taught
3. Clinics taught 80
4. Seminars taught

Quality of Teaching

Statement of Teaching Philosophy
Dental education is currently undergoing a necessary albeit painful change. We as educators must lead this transformation from the traditional lecture-based curriculum to one that is interactive and competency based. We must stimulate our students, make them more like colleagues, and shift the burden of learning from the instructor to the student. We must also be realistic if learning is to occur and we wish to develop the life-long learner. We must make time in the curriculum at every level for thought, creativity and development. We must turn out more than mechanics. We must be pro-active and visionary in creating the environment to make this a reality.

**Course Coordination**

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**Curriculum and/or Course Development**

- Zygomatic Implant Surgical Technique
- Novum Surgical Technique

**Continuing Education Courses Given**


- Strategies for rebuilding the deficient alveolar ridge for a better prosthetic result. 1 hr, Fort Worth District Dental Society, Fort Worth, Texas, October 14, 2003.

New technology and techniques in dental implants. Zygomatic and Novum Implants, 4 hrs, Honolulu, Hawaii, October 9, 2003


American Association of Oral and Maxillofacial Surgeons. Annual meeting, October 2-5, 2003, Chicago, IL.

Zygomatic Implants to avoid Maxillary Sinus Floor Grafting. The University of Texas Southwestern Medical Center at Dallas, Dallas, Texas, April 16, 2003.


Novum Surgical Technique. Novum Training CE Course. Baylor College of Dentistry, Dallas, Texas, November 16, 2002

Zygomaticus Implants. Zygoma Training Course. Lecture; perform live surgery, 2 hrs; supervise hands-on training, 2 hours. CE course, Baylor College of Dentistry, Dallas, Texas, November 15, 2002.

CE Program - Nebraska Society of OMS Omaha- “Tissue Engineering”- Complex Implant Management, Omaha, Nebraska, October 24-26, 2002.


Zygomaticus Implants. Zygoma Training Course. Lecture; perform live surgery, 2 hrs; supervise hands-on training, 2 hours. CE course, Baylor College of Dentistry, Dallas, Texas, May 7, 2001.


Zygoma Implant Surgical Technique. Zygomatic Fixture Training. Lecture; narrate live surgery, 2 hrs; supervise hands-on training, 2 hours. CE course, Baylor College of Dentistry, Dallas, Texas, November 5, 1999.

Zygoma Implant Surgical Technique. Zygomatic Fixture Training. Lecture; perform live surgery, 2 hrs; supervise hands-on training, 2 hours. CE course, Baylor College of Dentistry, Dallas, Texas, June 10, 1999.

Strategies to enhance implant position, esthetics and success. Boston City Hospital-Bost Medical Center Alumni Meeting, Hyannisport, Massachusetts, April 17-18, 1999


Brånemark Implant Course. University of Texas Health Science Center. San Antonio, Texas, August 2-3, 1995

Tissue Integrated Implants Brånemark Course. Surgical and Prosthetic. 3-day Training Course for the Departments of Periodontics, Prosthetics, Oral and Maxillofacial Surgery, and Advanced Education General Dentistry, Baylor College of Dentistry, December 2-4, 1994
Guided Tissue Regeneration. Lecturer. Institute for Advanced Dental Studies, Dallas, Texas, February 14, 1992


Osseointegrated Implants: Advanced Surgical Course. Course Director. University of Texas Health Science Center, San Antonio, Texas, October 24-27, 1991

Osseointegration for Periodontists. Lecturer. University of Texas Health Science Center, San Antonio, Texas, September 23, 1991

Osseointegrated Implants: A Surgical Course. Course Director. Baylor College of Dentistry, Dallas, Texas, August 24-25, 1991

Basic Course Osseointegrated Implants. Course Co-Director. Loma Linda University, Loma Linda, CA, November 18-19, 1990

Advanced Imaging For TMJ and Implants. University of Texas Health Science Center, San Antonio, May 18-19, 1990

Osseointegrated Implants For Periodontists and Surgeons. Course Director. University of Texas Health Science Center at San Antonio, April 5-7, 1990


Advanced Osseointegration Implant Surgery. University of Texas Health Science Center, December 4-6, 1989. Course Director


Advanced Osseointegrated Implant Course. University of Texas Health Science Center, San Antonio, TX, January 9-12, 1989
Advanced Osseointegration For Oral and Maxillofacial Surgeons. University of Texas Health Science Center at San Antonio, January 9-12, 1989. Course Director

Osseointegration in Clinical Dentistry. University of Texas Health Science Center at San Antonio, November 7-9, 1988. Course Director

Basic Course - Osseointegration in Clinical Dentistry. University of Texas Health Science Center, San Antonio, TX, November 7-9, 1988

Basic Course - Osseointegrated Implants in Clinical Dentistry. University of Texas Health Science Center, San Antonio, TX, November 11-13, 1987, Course Director, Mexico City, Mexico, November 16-17, 1987

Advanced Osseointegrated Implant Course. University of Texas Health Science Center, San Antonio, TX, October 19-22, 1987, Course Director

Osseointegration in Clinical Dentistry Course. Washington Hospital Center, Washington, D.C., October 15-17, 1987

Osseointegrated Implant in Periodontal Practice. University of Texas Health Science Center at San Antonio, March 5-7, 1987. Co-Director, 55 enrolled

Osseointegration in Clinical Dentistry. University of Texas Health Science Center at San Antonio, November 14-16, 1986. Course Director, 98 enrolled

Osseointegrated Implant in Periodontal Practice. University of Texas Health Science Center at San Antonio, September 12-14, 1986. Co-Director, 60 enrolled.

Advanced Osseointegration Implant Course. University of Texas Health Science Center at San Antonio, June 2-6, 1986. Course Director, 10 enrolled

Rigid Fixation, Its Use with Osteotomies and Fractures. Department of Oral & Maxillofacial Surgery, University of Texas Health Science Center, San Antonio, April 25-26, 1986. Co-Director, 103 enrolled

Rigid Fixation Continuing Education Course, Co-Director, Sponsored by The Department of Oral & Maxillofacial Surgery, University of Texas Health Science Center at San Antonio. April 24-26, 1986.

Osseointegration in Clinical Dentistry. University of Texas Health Science Center at San Antonio, January 23-26, 1986. Course Director, 96 enrolled

Osseointegrated Implant in Periodontal Practice. Co-Director. University of Texas Health Science Center at San Antonio, 3-day course, 60 enrolled, 1986

Osseointegration in Clinical Dentistry. Course Director. University of Texas Health
Science Center at San Antonio, 3-day course, 100 enrolled, 1986

Osseointegration in Clinical Dentistry. University of Texas Health Science Center at San Antonio, February 4-6, 1985. Course Director, 94 enrolled

**Student/Trainee Supervision**

Postdoctoral  Oral and Maxillofacial Surgery Residents
  2 per year for 6 year program
  1 per year for 4 year program

Thesis/Dissertation Committees

*Baylor College of Dentistry—Texas A&M Health Science Center:*

**Chair/Mentor**


1997  Sajjad A. Kahn, Ph.D. from Columbia Pacific University. Arterial blood supply to the atrophic mandible. Mentor.

**Member**


1996-1998  Marianela Gonzalez, M.S. Department of Biomedical Sciences. Lengthening and widening the mandible by intraoral distraction osteogenesis. Committee member.

*University of Texas Health Science Center at San Antonio Dental School:*

**Chair/Mentor**


Member

1987-1995  John Schmitz, Ph.D.  Department of Biochemistry. Committee member.

1990-1995  Christine Haskins, Ph.D., Department of Cellular and Structural Biology; Adaptation in the temporomandibular joint: Cellular, structural and molecular responses to mechanical forces. Committee member.


1988-1990  Nancy Mantich, M.S., Department of Dental Diagnostic Science. Committee member.

Graduate Faculty Membership

1996-  Baylor College of Dentistry
1996-  School of Graduate Studies

Teaching Awards

2010  Oral and Maxillofacial Surgery Foundation Research Recognition Award
2008  Faculty Award. Educator of the Year from the Dallas County Dental Society, Dallas, Texas. May 16, 2008.
1997  Edward Hines Award for Excellence in Continuing Education
1988  Presidential Award For Excellence in Teaching University of Texas Health Science Center- San Antonio, Texas

F. Research and Scholarly Activities

Areas of research and scholarship:

Bone Growth Factor, Dental Implants, Maxillofacial Reconstruction Procedures

Invited Presentations:

Academy of Osseointegration, Oak Brook, Il, Attending Meeting, August 5-10, 2010

2010 Combined annual meeting of Southwest Society of OMS & Texas Society of OMS, Charleston, S.C., April 21-25, 2010

BMP Symposium 2010, Special Guest, San Diego, Ca, February 10, 2010


Symposium on Reconstruction of the Mandible: Surgery Versus Biotechnology-Post: Titanium and Allogenic Bone Trays: ICS, Ribs and Bone Marrow. 91st American Association of Oral and Maxillofacial Surgeons Annual Meeting, Toronto, Canada. October 16, 2009


Department of Dentistry, Eisenhower Medical Center. Fort Gordon, Georgia. March 8-9, 2002.

Immediate Loading of Dental Implants
Esthetic Consideration in Implant Dentistry
Soft Tissue Consideration for Implant Esthetics
Management of Combat Casualties


  Zygomaticus Implant – Indications and Technique.
  Novum Implant – Same Day Teeth.
  Immediate Loading for Dental Implants.


Novum concept for tissue integrated reconstruction. Spokane Center, Spokane, Washington, September 19, 2000

Maxillary sinus floor grafting. 7th International Symposium on Periodontics and Restorative Dentistry. Boston, Massachusetts, June 1-4, 2000

Dental Implant Options to avoid autologous bone grafting in the maxilla. Ft. Worth District Dental Society. Ft. Worth, Texas, April 11, 2000

Bone grafting and augmentation of maxilla and mandible. Southwest Society of Oral and Maxillofacial Surgeons. Austin, Texas. April 8-9, 2000


Research Related to Bone Morphogenetic Protein (BMP) Bone Induction to Replace Grafting. 3i Bone 2000: A Symposium on Emerging Osseous Related Topics. Dallas, Texas, November 6, 1999.


Implant diagnostics and current concepts in osseointegration. Dallas, TX, June 10, 1999

Reconstruction of the severely resorbed maxilla. 2nd annual Peter W. Connoli Memorial Lecture. Washington Hospital Center. Washington, DC, May 1, 1999


BMP-2 Augmentation of the Maxillary Sinus. ITI World Symposium, Boston, Massachusetts, June 5, 1998

Autologous Bone Grafting—Evidence-Based Procedures. University of California at Los Angeles School of Dentistry Continuing Education Department, Los Angeles, California, May 22, 1998


Procedures the Oral and Maxillofacial Surgeon Can Perform to Help the General Dentist to Succeed with Implants. Iowa Dental Association, Des Moines, Iowa, May 3, 1998

Bone Graft Augmentation to Support Dental Implants and Enhance Function. National Naval Dental School, Bethesda, Maryland, April 25, 1998

Dental Implants—Improving Esthetics. University of Maryland School of Dentistry, Baltimore, Maryland, April 24, 1998


Autologous, Allogeneic, and Alloplastic Bone Grafts for Maxillary and Mandibular Alveolar Augmentation. 5th Portland Bone Symposium. Portland, Oregon, August 7-10, 1997


Implant Failures: Sharing the Responsibility. Symposium on Long-Term Problems of


Speaker. ITI World Symposium. Basel, Switzerland, June 6-10, 1996

ITI Implant System. Dental School, University of Texas-San Antonio, June, 1996


Mechanisms of Repair in Autologous and Allogeneic Bone Graft. The Sinus Lift Graft


Barrier Membranes to Enhance Placement of Dental Implants. Keynote Presenter. 6th International Congress on Preprosthetic Surgery. Palm Springs, CA, April 21, 1995


Bone Graft Augmentation of Maxilla (Autologous Grafts). Institute for Advanced Dental Studies, Boston, Massachusetts, December 9, 1994


Bone Graft Techniques to Enhance Implant Placement. American Association of Periodontology, 1 hour, San Francisco, California, September 23, 1994

Advanced Techniques in Dental Implantology. International Symposium on Shaped Memory Metals, 3 hours, Nagoya, Japan, July 11-12, 1994

Bone Healing in the Presence of Infection: Osteomyelitis and Osteoradionecrosis.
Washington Hospital Center, 2 hours, Washington, D.C., May 4, 1994

Management of Soft Tissue in Conjunction with Dental Implants. American Association of Oral and Maxillofacial Surgeons Technique Course
   Louisiana State University, New Orleans, Louisiana, April 16, 1994
   University of Pittsburgh, Pittsburgh, Pennsylvania, April 30-May 1, 1994
   Atlanta, Georgia, May 21, 1994
   Columbia University, New York, New York, June 4-5, 1994
   University of California-SF, San Francisco, California, June 11-12, 1994

Implants for Growing Patients. Paul P. Taylor Pedodontic Association, Children's Medical Center, 2 hours, Dallas, Texas, April 16, 1994

Use of Barrier Membranes to Enhance Implant Placement. Institute for Advanced Dental Studies, 2 hours, Bethesda, Maryland, March 19, 1994

Maxillofacial Reconstruction for Edentulous Patients. Mid-Atlantic Society of Oral and Maxillofacial Surgeons, 6 hours, Bethesda, Maryland, March 17, 1994


Soft Tissue Surgery to Enhance Implant Function and Esthetics. University of Texas Southwestern Medical School Department of Oral and Maxillofacial Surgery, 2 hours, Dallas, Texas, January 25, 1994

Ways to Improve Implant Position. Alpha Omego Dental Fraternity, Dallas, Texas, January 12, 1994

Dental Implants in Growing Jaws. University of Texas Southwestern Medical School, Dallas, Texas, October 27, 1993

Criteria for Use of Gore-Tex Augmentation Material; Use of GTAM for Osseointegrated Implants. Advanced Surgical and Restorative Techniques for Osseointegrated Implants, Ft. Lauderdale, August 16, 1993

Osseointegrated Implants. Bogota, Colombia, June 23-29, 1993

Regeneration for Osseointegrated Implants, and Restoration of Implants. The American
Foundation for Dental Studies Bone Regeneration and Implant Reconstruction Symposium. San Diego, August 7, 1993

Membranes to Enhance Bone Repair in Association with Dental Implants. National Conferences on the Status of Dental Implants.
   Chicago, July 9-11, 1993
   Dallas, May 22-23, 1993
   Boston, May 1-2, 1993

Advanced Osseointegration Implant Techniques. Naval Dental School, National Naval Dental Center, Bethesda, Maryland, April 26, 1993

Institute for Advanced Dental Studies
   New York, December 3, 1993
   Philadelphia, June 10, 1993
   Chicago, February 19, 1993
   Denver, October 10, 1992
   Tampa, September 12, 1992
   Bethesda, September 11, 1992

Oral Reconstructive Applications--Gore-Tex Regenerative Material. Continuing Dental Education Course, Dental Branch, Houston, October 30, 1992

Oral Facial Maxillary Surgery Combat Casualty Management Course. Department of Resident Instruction, Fort Sam Houston, Texas. October 25, 1992

TMJ Implant Course. Baylor College of Dentistry, October 23, 1992

Bone Grafting and Osseointegrated Implants. University of Texas Southwestern Medical Center, Dallas, Texas. October 21, 1992

Grafting Techniques. ADA. Chicago, Illinois, August 15, 1992, 3 hrs

Gore-Tex. Baylor College of Dentistry, July 31, 1992


Guided Tissue Regeneration in Clinical Practice. Indianapolis, Indiana, May 31, 1992

Guided Tissue Regeneration. Boston, Massachusetts, May 12, 1992

Lecture. Les Journées Dentairse du Québec, Montreal, May 6, 1992


Gore-Tex Course. Baylor College of Dentistry, March 29, 1992
Implant Course. Newport Beach, California, March 22, 1992


Guided Tissue Regeneration. Memphis, Tennessee, February 23, 1992


Guided Tissue Regeneration. New York City Institute for Advanced Dental Education, January 16, 1992

Soft Tissue Considerations Associated with Implants. Dallas Midwinter Dental Meeting, Dallas, Texas, January 16, 1992

Guided Tissue Regeneration. New York City Institute for Advanced Dental Education, December 6, 1991

An Update on Osseointegration. Dallas County Dental Society, Dallas, Texas, December 6, 1991

Guided Tissue Regeneration, Background, Basic Science, Clinical Cases. Parkland Hospital Oral and Maxillofacial Surgery Department, University of Texas Southwestern Medical School, Dallas, Texas, November 8, 1991

Recent Developments in Dental Implantology. American College of Dentists, Texas Chapter, Austin, TX, September 21, 1990

Advanced Osseointegrated Implant Course - Surgical Aspects. National Naval Medical Center, Bethesda, MD, September 17-19, 1990

Surgical Considerations in Osseointegration. 42nd Annual New Orleans Dental Conference, New Orleans, LA, September 27, 1990


Osseointegrated Implant Surgery Course. Louisiana State University, May 14-15, 1990

Osseointegrated Implants. Lunch & Learning, Kerrville, Texas, January 8, 1990

Management of Neurosensory Problems in the Maxillofacial Region. San Antonio District Dental Society, February 27, 1990

Advanced Combat Casualty Course. U.S. Military Medical Department, U.S. Army Health Service Command, Camp Bullis, Texas, October 1989 and April 1990

Status of Medical Degree in Oral and Maxillofacial Surgery Programs. AAOMS Clinical Congress, Palm Desert, CA, January 1989

Dental Implant Overview. Southern Arkansas Dental Society, Hot Springs, Arkansas, February 1988

Radiology and Imaging of Dental Implants. Continuing Medical Education, University of Texas Health Science Center at San Antonio, April 8, 1989

Complications in Oral and Maxillofacial Surgery. Featured Speaker, Southwest Society of Oral and Maxillofacial Surgeons, Santa Fe, New Mexico, April 15-17, 1988

Diagnosis and Treatment Planning for Osseointegrated Implants. National Naval Dental School, Bethesda, MD, September 14, 1988

Dental Implants in Clinical Practice. Southwest Arkansas Dental Society, February 1988

Introduction to Dental Implants. Mexico City Dental Society, October 2, 1987

History and Scientific Background for Osseointegrated Implants. Oschner Foundation Hospital, New Orleans, LA, June 1987


Indications and Special Application for Dental Implants. Massachusetts General Hospital, Department Oral & Maxillofacial Surgery, Boston, Massachusetts, October 23-


Management of Maxillofacial War Wounds. University of Connecticut School of Medicine, March 1982


Hyperbaric Oxygen in the Management of Osteomyelitis Copernicus. University School of Medicine, Department of Plastic and Reconstructive Surgery, Cracow, Poland, October 30-31, 1980


Grants
Funded Grants
Title: An open label, non-randomized single arm, multi-center study to assess sinus augmentation (sinus lift) utilizing INFUSE® Bone Graft concurrent with dental implant placement IRB09-52
Funding Agency: Medtronic, Inc. P09-05
Total Amount: $10,000.
Grant Period: 9/09-1/11
Principal Investigator: R. Gilbert Triplett
Time devoted to project: 5%

Title: Specialized Oral Health Care Clinic for immunocompromised and hospitalized patients.
Funding Agency: Baylor Oral Health Foundation
Total Amount: $150,000
Grant Period: 2007-
Principal Investigator: R. Gilbert Triplett
Role: Principal Investigator
Time devoted to Project: (20%) Currently on hold, awaiting recruitment of a full-time faculty

Title: A prospective, observational study of Osseotite® Certain™ IOL implants in immediate occlusal loading of short span fixed restorations. Protocol 2208/IRB 04-13
Funding Agency: Implant Innovations Inc (3i)
Total Amount: $23,250
Grant Period: 2-1-05 through 1-31-09
Principal Investigator: R. Gilbert Triplett
Role: Principal Investigator
Time devoted to Project: 10%

Title: A Pivotal, Randomized, Parallel Evaluation of Recombinant Human Bone Morphogenetic Protein-2/Absorbable Collagen Sponge and Bone Graft for Maxillary Sinus Floor Augmentation. IRB 98-16, C9730-11
Funding Agency: Genetics Institute
Total Amount: $65,000
Grant Period: 9-1-99 to 8-31-2004
Principal Investigator: R. Gilbert Triplett
Role: Principal Investigator
Time devoted to project: 1%

Title: A Histological and Biomechanical Study on the Effect of Bone Morphogenetic Protein on the Osseointegration of Dental Implants
Funding Agency: Genetics Institute
Total Amount: $18,090
Grant Period: 5-1-97 to 9-30-99
Principal Investigator: Nikitas Sykaras
Role: Co-Investigator
Title: Randomized, Parallel Evaluation of rhBMP-2/Absorbable Collagen Sponge and Standard Bone Grafting Materials for Maxillary Sinus Floor Augmentation. IRB 96-002, C9531-11
Funding Agency: Genetics Institute
Total Amount: $160,000
Grant Period: 3-28-96 to 5-27-2002
Principal Investigator: Gilbert Triplett and Sterling R. Schow
Role: Co-Principal Investigator
Time devoted to project: 1%

Title: Randomized, Double-masked, Placebo-controlled Dose Escalation Study Evaluating rhBMP-2/Absorbable Collagen Sponge for Localized Alveolar Ridge Augmentation of Buccal Wall Defects. IRB 95-020
Funding Agency: Genetics Institute
Total Amount: $55,680
Grant Period: 3-1-96 to 2-28-98
Principal Investigator: R. Gilbert Triplett
Role: Principal Investigator
Time devoted to project: 2%

Title: An Assessment of the ITI Implant System (A Multi-Center Study)
Funding Agency: Straumann, Inc.
Total Amount: $425,000
Grant Period: December 1995 to December 2002
Principal Investigator: R. Gilbert Triplett
Role: Principal Investigator
Time devoted to project: 6%

Title: A Feasibility Study Evaluating rhBMP-2/Absorbable Collagen Sponge Device for Maxillary Sinus Floor Augmentation. IRB 94-022, C9409-11, C9410-11
Funding Agency: Genetics Institute
Total Amount: $20,000
Grant Period: 3-1-95 to 2-28-97
Principal Investigator: R. Gilbert Triplett
Role: Co-Principal Investigator
Time devoted to project: 2%

Title: Craniofacial Biology Training Program
Funding Agency: NIH/NIDR (T32 DE97256-01)
Total Amount: $766,609
Grant Period: 7-1-94 to 6-30-99
Role: Program Faculty
Time devoted to project: Less than 1%
Title: Extraction Sites in Immediate Implants  
Funding Agency: Nobelpharma USA, Inc.  
Total Amount: $10,000  
Grant Period: 8-1-92 to 7-31-97  
Principal Investigator: R. Gilbert Triplett  
Time devoted to project: Less than 0.5%

Title: Characterization of Osteoprogenitor Cells from Calvarial Fibrous Union Defects.  
NIH/NIDR: $382,394  
4/1/89 to 3/31/94  
Co-Principal Investigator

Title: A Cancellous Bone Port for Novel Bone and Biocompatibility of Titanium Implants  
UTHSCSA & Southwest Research (Joint Study): $130,274  
11/1/89 - 12/31/89  
Co-Investigator for UTHSCSA Component

Title: An In-Vivo Evaluation of a Device to Access Bone Tissue Using a Non-human Primate Model  
UTHSCSA and Southwest Research Institute: $17,500  
8/1/87 - 2/28/88  
Associate Investigator

Title: Preparation and Evaluation of Encapsulated Osteoprogenitor Cells and Bone Growth Factors  
UTHSCSA and Southwest Research Institute: $98,940  
1/1/87 - 1/1/88  
Associate Investigator for UTHSCSA Component

Title: The Effect of Hyperbaric Oxygen (HBO) and Radiation on Osseointegration of Titanium Implants

Title: USAF Clinical Investigation Center, Wilford Hall Medical Center: $350,000  
11/6/87 - 12/31/90  
Principal Investigator (UTHSCSA Section)

Title: Bone Kinetics Study  
GENENTEC - Southwest Research Institute: $70,000  
10/88

Title: In Vivo Studies of Bone Resorption (Formation under 1 g and zero gravity)  
Proposal to National Aeronautics and Space Administration: $50,000  
1/87 - 1/88  
Co-Investigator
Manuscript Review

Journals Reviewed- Service as Journal Editor or Reviewer

- Quad “O”
- Journal of Oral & Maxillofacial Implants
- Texas Dental Journal
- Journal of Dental Education

1993-
- International Journal of Periodontics and Restorative Dentistry
  Editorial Consultant, 1995-

1992-
- Journal of Oral Surgery, Oral Medicine, Oral Pathology

1990-
- International Journal of Oral and Maxillofacial Implants

1990-
- Journal of Oral & Maxillofacial Surgery

1990-1993
- California Dental Journal

1988-1994
- Texas State Dental Journal

1998
- Quintessence International

Grant Reviews

- Study Section, Review Panel, Special Emphasis Panel

1995-1997
- Special Reviewer, NIDR, Oral Biology and Medicine Study Section
  (OMB-2), Bethesda, MD

1992-1994
- Reviewer, American Fund for Dental Education

1989
- Special Reviewer, NIDR, Oral Biology and Medicine Study Section,
  Bethesda, MD

1988-1992
- Research Grant Reviewer, Veterans Administration

Ad hoc Consultantships

1992-1998
- Consultant (Examiner), American Board of Oral and Maxillofacial
  Surgeons

1986-1990
- Oral & Maxillofacial Surgery, Brooke Army Medical Center, Ft. Sam
  Houston, San Antonio, Texas

1986-1990
- Dental Research - U.S. Army Institute of Dental Research, Washington,
  D.C.

1984-1991
- Consultant in Oral & Maxillofacial Surgery, Wilford Hall, USAF Medical
  Center, Lackland Air Force Base, San Antonio, Texas

1984-1985
- Consultant, Oral and Maxillofacial Surgery Department, Washington
  Hospital Center, Washington, D.C.

1982-1985
- Military Section Federation Dentaire International
**Scholarly Societies**

1992- American Academy of Osseointegration  
1992- Omicron Kappa Upsilon, Baylor College of Dentistry  
1991- North Texas Society of Oral and Maxillofacial Surgeons  
1991- Dallas County Dental Society  
1989- Fellow, American College of Dentists  
1989- Texas Society of Oral & Maxillofacial Surgeons  
1985- Southwest Society of Oral & Maxillofacial Surgery  
1985- Texas Dental Association  
1982- Fellow, International College of Dentists  
1979- International Association of Oral & Maxillofacial Surgeons  
1975- American Board of Oral & Maxillofacial Surgeons  
1970- American Association of Oral and Maxillofacial Surgeons  
1963- American Dental Association

**Contribution to professional organizations**

American Dental Association  
2007- Council on Scientific Affairs  
Osseointegration Foundation  
2005-2006 President  
2003-2004 Board of Directors  
Academy of Osseointegration  
2008-2010 Program Committee for the 2010 Annual Meeting  
2001-2003 Planning Committee for 2003 Combined Meeting of the Academy, American Association of Periodontists, and American Association of Oral and Maxillofacial Surgeons  
ADA Commission on Dental Accreditation  
1995-2001 Advisory Committee on OMS  
Dallas County Dental Society  
1995-1996 Continuing Education Committee  
1993-1996 Scientific Session Committee  
1993-1995 Parliamentarian  
American Academy of Osseointegration  
1994-1996 Nominating Committee  
American Association of Oral and Maxillofacial Surgeons  
1996- Committee on Residency Education and Training (CRET)  
1994-2000 Committee on Parameters of Care  
1994 Nominating Committee, Clinical Interest Group on Implants  
1993-1995 Special Committee on Implant Education  
1992-1994 Ad hoc Special Implant Planning Committee  
1991-1996 Implant Committee  
1982-1984 Delegate, House of Delegates  
Oral and Maxillofacial Surgery Foundation
1995- Committee on Research
American Association for Dental Research
1987-1990 Counselor, Oral & Maxillofacial Surgery Study Section
1986-1987 Chairman, Section on Research
1986-1988 Committee on Research
1984-1985 Program Chairman, Section on Research
1983-1984 Secretary/Treasurer, Section on Research
San Antonio Section of American Association of Dental Research
1990 President
Dental School Faculty Practice Plan, University of Texas Dental School
1987-1991 Board of Directors

Participation on national or regional board examination.


Programs and symposiums you organized


Academy of Osseointegration Planning Committee 2003

Advanced Bränemark Implant Course. Baylor College of Dentistry, October 4-5, 1992


Dental Research Symposium, San Antonio Chapter AADR, 1991

Symposium on Orthopedic-Related Research as it Applies to Oral & Maxillofacial Surgery. Section on Research, American Association of Oral and Maxillofacial Surgery, New Orleans, LA. September 26, 1986

Awards

2010 Oral and Maxillofacial Surgery Foundation Research Recognition Award.
1998  Regents Professor Service Award for a career of exemplary professional contributions to Baylor College of Dentistry, The Texas A&M University System, the people of Texas and beyond, The Texas A&M University System.
1989  Elected to the American College of Dentists
1983  Who's Who in Frontier Science & Technology
1982  Doctorate Thesis with Distinction, Georgetown University, Washington, D.C.
1963  Who's Who in American Colleges & Universities, Loyola University Dental School, New Orleans, Louisiana
1963  Omicron Kappa Upsilon, Loyola University Dental School, New Orleans, Louisiana
1962  Blue Key National Honor Fraternity, Loyola University Dental School, New Orleans, Louisiana
1961  C. Victor Vignes Honor Society, Loyola University Dental School, New Orleans, Louisiana
1959-1963  Recipient of Edward A. Gammard Dental Scholarship, Loyola University Dental School, New Orleans, Louisiana

G. Institutional Service to the HSC

TAMHSC Committees

2000-2003  TAMUS Health Science Center P&T Committee

TAMUS HSC Component Committees

Baylor College of Dentistry—Texas A&M Health Science Center

2005-  Committee on Development of Dental Care for Hospitalized/Compromised Patients. Adhoc. Chairman, 2005-
2000-  Research Advisory Committee
1992-  Craniofacial Biology PhD Steering/Admissions Committee
1992-1994  Committee on Clinical Research
1991-2007  Administrative Council
1991-1995  Promotion, Tenure and Appointment Review Committee
           Clinical Non-Tenure Track Subcommittee, 1991-1993
1991-1993  Ad hoc Committee for Craniofacial Biology PhD Program
1991-1993  3rd Year Scholarship Committee
1991-1993  4th Year Scholarship Committee
1991-1992 Academic Planning and Development Search Committee
1991-1992 Graduate Council
1991-1995 Clinical Advisory Committee
1991-1992 Search Committee for Chair of General Dentistry

Baylor College of Dentistry—Department of Oral & Maxillofacial Surgery

1991- OMS Resident Selection Committee
1991- OMS Strategic Planning Committee
1991- OMS Promotion & Tenure Committee

Baylor University Medical Center, Dallas, Texas:

1998- Executive Committee of BUMC/Sammons Cancer Center
1998- Editorial Committee Baylor Proceedings
1993-1994 Executive Committee
1992-1998 By-Laws Committee
1992-1994 Special Nursing Care Committee
1991- Medical Board of Medical Staff
1991- Committee on Surgical Services
1991- Chief of Dentistry
1991-2002 Committee on Medical Education
1991- Head & Neck Tumor Board

University of Texas Health Science Center at San Antonio Dental School:

1989-1990 Continuing Education Committee Member
1988-1991 Promotion and Tenure Committee Member
1988-1989 Periodontology Department Faculty Search Committee Member
1988-1990 Dental School Self-Study Committee Member
1987-1991 Faculty Advisor, Isaac Schour Oral Surgery Literature Review Club
1987-1990 Outpatient Surgery Clinical Management Team Member
1987-1989 Advanced Education Committee Chairman
1987-1988 Cancer Coordinating Committee Member
1986-1990 Committee on Graduate Studies, Department of Cellular and Structural Biology Member
1985-1990 Advanced Education Committee Member
1985-1991 DSRDP Board of Governors Member
1985-1991 Graduate Dentist Scientist Committee Member
1988-1989 OKU Nominating Committee Member
1986-1987 Dental Research Committee Member
1986-1987 Dental Scientist Training Program (DSTP) Committee Member

Bexar County, Texas, Hospital District:
1985-1991 Bexar County Hospital District, Operating Room Committee Member
1985-1989 Bexar County Hospital District, Ambulatory Care Committee Member

_U.S. Navy:_

1983-1984 Graduate Medical Education Selection Board, Navy Medical Department, Chairman
1982-1984 Regional Scientific Review Committee, Naval Hospital, San Diego, CA
1979-1982 Scientific Review Committee, Naval Medical Research Institute, Bethesda, MD

**Patient Care**

_Inpatient:_

1991- Oral & Maxillofacial Surgery, Baylor University Medical Center, Dallas
1984-1991 Oral & Maxillofacial Surgery, Medical Center Hospital, University of Texas Health Science Center, San Antonio
1982-1984 Head, Oral & Maxillofacial Surgery Naval Hospital, San Diego, CA

_Outpatient:_

1995- Dental Clinic, Texas Scottish Rite Hospital for Children, Dallas, Texas
1991- Dept. of Oral & Maxillofacial Surgery, Baylor College of Dentistry
1984-1991 Oral & Maxillofacial Surgery, Brady Greene Community Clinic, Dental School Surgery Suite, Orthognathic Surgery & TMJ Clinic, DSRDP Clinic, University of Texas Health Science Center at San Antonio
1982-1984 San Diego Naval Hospital, San Diego, CA.
1975-1982 Oral & Maxillofacial Surgery Dept., National Naval Medical Center, Bethesda, MD.

**Board Certifications and Specialty Training**

1975 American Board of Oral & Maxillofacial Surgeons
1963 National Board of Dental Examiners
1999 Advanced Cardiac Life Support, Dallas, Texas, July
2001 Advanced Cardiac Life Support, Dallas, Texas, November
2003 Advanced Cardiac Life Support, Dallas, Texas, June

Courses Taken

Ph.D., Georgetown University, 1976-1982

Continuing Education:

5/15-5/17/07 Research Committee. 2007 Association of Oral and
3/10-3/12/05 7.75 hrs Academy of Osseointegration, 20th Annual Meeting. Orlando,
Florida
01-22-05 1.5 hrs Selecting the Right AED for Your Office.
1.5 hrs The Use and Abuse of Prophylactic antibiotic Regimens.
7th Dr. Phillip Earle Williams Lectureship in Oral &
Maxillofacial Surgery. Department of Oral and Maxillofacial
Surgery & Pharmacology, Baylor College of Dentistry-Texas
A&M University System Health Science Center. Dallas,
Texas.
01-20-05 1.0 hrs Mining for Gold: Opportunities for Clinical Research Using
National Health Nutrition Examinatoin (NHANES III) Data.
Dr. Jay D. Shulman. Baylor College of Dentistry-Texas A&M
University System Health Science Center. Dallas, Texas.
12/3-12/4/04 1.5 hrs Immediate Loading of the Edentulous Mandible Using Final or
Provisional P…
1.5 hrs Reconstruction of the Edentulous Maxilla.
1.5 hrs Reconstruction of the Edentulous Mandible.
2004 Dental Implant Conference. American Association of
Oral & Maxillofacial Surgeons. Chicago, Illinois
09-16-04 1.0 hrs Recent Advances in Maxillofacial and Plastic Surgery. Dr.
Uwe Frohberg. Baylor College of Dentistry-Texas A&M
University System Health Science Center. Dallas, Texas.
Symposium, Houston, Texas.
04-18-04 1.0 hrs Techniques & Technology to Enhance Implant Outcomes.
George Priest, DMD. Texas Society of Oral & Maxillofacial
Surgeons. La Jolla, California.
04-17-04 3.0 hrs Collaborative Partnering: Teamwork in Implant Dentistry.
George Priest, DMD. Texas Society of Oral & Maxillofacial
Surgeons. La Jolla, California.
04-16-04  3.5 hrs  Oral & Maxillofacial Surgery Resident Presentations. Texas Society of Oral & Maxillofacial Surgeons. La Jolla, California.

American Association of Dental Schools:
06-24-03  renew  Esthetic Implant Dentistry- Yorba Linda, CA
02-15-03  renew  ARK training, University of Michigan, Ann Arbor, Michigan
07-23-99  renew  Advanced Cardiac Life Support certification (North Texas Society OMS-Am Heart Assn approved)
03-02-98  3 hrs  Designing Learning Strategies for a Competency-Based Curriculum
03-01-98  2 hrs  Maximizing Dental Residency Training Support Under Medicare Graduate Medical Education
02-27-98  3 hrs  The Competency-Based Curriculum


Consultant to accrediting and other educational review boards, industry, health care.

Commission on Dental Accreditation Consultant for Oral & Maxillofacial Surgery

1998  Site visit. Vanderbilt University Department of Oral and Maxillofacial Surgery, Nashville, TN, January
1996  Site visit. Meharry Medical College, Nashville, TN, June 19
1996  External Review. Department of Oral and Maxillofacial Surgery, University of Medicine and Dentistry of New Jersey, New Jersey Dental School, Newark, NJ, July 2-3
1995  Site Visit, Harbor Medical Center-UCLA, Torrance, California
1995  Site Visit, Alameda County Medical Center/Highland General Hospital, Oakland, California, March 21
1993  Site Visit, M.L. King, Jr./Drew Medical Center, Los Angeles, January 5
1992  Senior Member, Site Visit Team, Hospital of St. Raphael, New Haven, Connecticut, February 25
1991  Site Visit, University of New Jersey Dental School, Newark, New Jersey, September 24-25
1991  Senior Member, Site Visit Team, Nassau County Hospital Oral & Maxillofacial Surgery Program, Long Island, New York, June 10
1991  Site Visit, University of Oregon Health Science Center, Portland, Oregon, March 4
**Other Indices of Service**

Community Activities

1996-1997  Fund Raising Committee, Jesuit Preparatory High School, Dallas, Texas
1995-  Jesuit Band Booster Club, Jesuit Preparatory High School, Dallas, Texas
1994-  Fund Raising, Holy Trinity Catholic Church, Dallas, Texas
1989-1991  Reading Motivation at Castle Hills Elementary School, San Antonio, Texas

**H. Publications**

**Refereed Papers**


Received Laskin Award in 2006 as Co-Author for Best Scientific Article in the Journal of Oral and Maxillofacial Surgery, from the American Association of Oral and Maxillofacial Surgeons.


Frohberg U, Triplett RG. Chirurgisch-implantologische rehabilitation des extrem
atrophischen oberkiefers mit bilateraler antrumosteoplastis, anteriores


Curley MD, Walsh JM, Triplett RG. Wartime management of oral and maxillofacial


Non-refereed Papers Refereed Articles


**Triplett RG. Extractions and immediate placement of implants. AAOMS Surgical

Abstracts


Bass SL, Triplett RG. Osseointegrated Implants: The effects of preoperative resorption

Sheridan PJ, Kirkpatrick TC, Aufdemorte TB, Triplett RG, Holt GR. Cartilage is a target for gonadal steroids in the baboon. 8th International Congress of Endocrinology, 1988.


**Book Chapters**

Triplett RG, Wong M. Efficacy of rhBMP$^2$ in association with dental implants. Elsines Publ Co., In Press


Books Edited

### BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.

Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kavitha Viswanathan</td>
<td>Assistant Professor</td>
</tr>
</tbody>
</table>

#### eRA COMMONS USER NAME (credential, e.g., agency login)

<table>
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<th></th>
<th>Dept. of Pediatric Dentistry</th>
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#### EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as coursework or internship)

<table>
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<tr>
<th>INSTITUTION AND LOCATION</th>
<th>DEGREE (if applicable)</th>
<th>YEAR(s)</th>
<th>FIELD OF STUDY</th>
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<tr>
<td>Ragas Dental College, India</td>
<td>Bachelor of Dental Surgery</td>
<td>1995-1998</td>
<td>General Dentistry</td>
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<tr>
<td>The Ohio State University, Columbus, OH, USA</td>
<td>Ph. D</td>
<td>2000-2005</td>
<td>Oral Biology</td>
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<tr>
<td>The Ohio State University, Columbus, OH, USA</td>
<td>Cert</td>
<td>2005-2007</td>
<td>Pediatric Dentistry</td>
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**NOTE:** The Biographical Sketch may not exceed four pages. Follow the formats and instructions on the attached sample.

#### C. Positions and Honors

List in chronological order previous positions, concluding with your present position. List any honors. Include present membership on any Federal Government public advisory committee.

**Positions**

2008  Assistant Professor, Pediatric Dentistry, Baylor College of Dentistry  
2005-2007  Teaching Assistant, Pediatric Dentistry, The Ohio State University  
2000-2005  Teaching Assistant, Oral Biology, The Ohio State University

**Intramural committees and services**

2003-2004  Elected Student Representative on the Graduate Studies Committee, Department of Oral Biology, The Ohio State University  
2003-2004  Delegate for Council for Graduate Students, Department of Oral Biology, The Ohio State University

**Honors and Awards**

2002  PsychoNeuroImmunology Research Society Scholars Award  
2000  Velayutha Perumal Endowment Award for Pediatric Dentistry  
1992  Best Outgoing Student in Curricular, Co-curricular & Extracurricular Activities  
1990  Best Outgoing Student in Curricular, Co-curricular & Extracurricular Activities
Professional Memberships
2008 Texas Dental Association
2008 American Dental Education Association
2005-pres American Association of Pediatric Dentistry
2003-2004 Society for Neuroscience
2002-2003 American Association for Dental Research
2001-2004 PsychoNeuroImmunology Research Society
1998-pres Indian Dental Association

D. Selected peer-reviewed publications (in chronological order). Do not include publications submitted or in preparation. For publicly available citations, URLs or PMC submission identification numbers may accompany the full reference; copies of publicly available publications are not accepted as appendix material.


Abstracts not listed

C. Research Support. List selected ongoing or completed (during the last three years) research projects (federal and non-federal support). Begin with the projects that are most relevant to the research proposed in this application. Briefly indicate the overall goals of the projects and your role (e.g. PI, Co-Investigator, Consultant) in the research project. Do not list award amounts or percent effort in projects.

None
APPENDIX D

FACULTY RECORD

A. Name: John M. Wright
B. Rank: Regents Professor
C. Education and Board Certification:
   1975 – 1977 Indiana University School of Dentistry, Residency in Oral Pathology, M.S.
   1969 – 1973 West Virginia University School of Dentistry, DDS
   1966 – 1969 West Virginia University
   1983 American Board of Oral Medicine, Diplomate
   1980 American Board of Oral and Maxillofacial Pathology, Diplomate
D. Professional Appointments:
   Regents Professor and Chair, Diagnostic Sciences
   Director, Laboratory Services
   Baylor College of Dentistry, TAMUSHSC
   2006 – Present Baylor College of Dentistry TAMUSHSC Chair, Department of Diagnostic Sciences
   2006 – Present Adjunct Professor, AT Still University, Arizona School of Dentistry and Oral Health, Mesa, Arizona
   2006 – Present Regents Professor, Awarded by the Texas A&M University System Board of Regents for a distinguished record of service at the local, state, national and international levels with outstanding accomplishments in teaching and creative or scholarly activity.
   1996 – 2006 Director, Advanced Education Program in Oral and Maxillofacial Pathology
   1990 – 2006 Director, Division of Pathology, Baylor College of Dentistry
   1987 – 2006 Professor, Department of Pathology, Baylor College of Dentistry
   1983 – Present Director, Pathology Laboratory Services, Baylor College of Dentistry
   1981 – Present Baylor University Medical Center, Consultant, Department of Pathology
   1981 – Present Baylor College of Dentistry, Tenure
   1980 – 1987 Baylor College of Dentistry, Associate Professor, Department of Pathology
   1977 – 1980 Indiana University School of Dentistry
   Assistant Professor, Department of Oral Pathology
   1975 – 1977 Indiana University School of Dentistry
   Instructor, Department of Oral Pathology
   1974 – 1975 West Virginia University School of Dentistry
   Instructor, Department of Operative Dentistry
   1973 – 1974 Strong-Carter Dental Clinic, Honolulu, Hawaii, Staff Dentist
E. Teaching Performance:

1. Use the following format for each year of teaching, e.g., Professional Courses, Medical/Dental Courses, Graduate Courses, Undergraduate Courses, and Continuing Education Courses, see 6 below) and for a yearly summary.

**Academic Year: 2012-13**

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<th>Course Number/Title</th>
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<th>Type *</th>
<th>Credit Hours</th>
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<td>L</td>
<td>1.0</td>
<td>30+</td>
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<tr>
<td>4025 / Oral Pathology</td>
<td>DH2</td>
<td>L</td>
<td>2.5</td>
<td>30+</td>
</tr>
<tr>
<td>4010 / National Board Review</td>
<td>DH2</td>
<td>L</td>
<td>1.0</td>
<td>30+</td>
</tr>
<tr>
<td>6740 / Microimmunology</td>
<td>D1</td>
<td>L</td>
<td>3.5</td>
<td>100+</td>
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<tr>
<td>7160 / Oral Pathology</td>
<td>D2</td>
<td>L</td>
<td>2.0</td>
<td>100+</td>
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<td>L</td>
<td>1.0</td>
<td>100+</td>
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**Summary**

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<td>Seminars</td>
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</table>

2. Quality of Teaching

Student evaluations have consistently been in the top quartile. From student surveys, Pathology/Oral Pathology was ranked as the number one academic unit in the college for 2005-06. Individual evaluations available on request. I have received five teaching commendations in my career, including Teacher of the Year Award in 1990 and a statewide Piper Professorship awarded in 2006.

3. Course Coordination

- Oral Pathology #4025
- Oral Pathology #7160
- Clinical Principle of Patient Evaluation #8280
- Oral and General Pathology #4030
- Introduction to Pathology #3410
- Adv. Oral Pathology Seminar/OMFS/AEGD
- Oral and Maxillofacial Pathology Seminar OP5V00
- Oral and Maxillofacial Pathology Service OP5V05
- Entire Oral Pathology curriculum for the AT Still University, Arizona School of Dentistry and Oral Health in Mesa, Arizona
- Entire Oral Pathology curriculum for the Dept of Oral and Maxillofacial Surgery at the Southwestern Medical School in Dallas, TX
- Entire Oral Pathology curriculum for the Dept of Oral and Maxillofacial Surgery at the LSU Medical Center in Shreveport, LA

4. Curriculum and/or Course Development
In 1980, I completely redesigned the pathology curriculum. The laboratory was dropped and I developed a case based PBL format to simulate private practice (Clin Prin Pt Eval 8280). I wrote new case based manual and illustrated all cases which were made available for student utilization.

I designed and currently administer an entire oral pathology curriculum provided to predoctoral students at the AT Still University, Arizona School of Dentistry and Oral Health in Mesa, Arizona as well as a graduate course for the Orthodontic graduate students. I developed and provide with other faculty comprehensive oral pathology courses to the Departments of Oral and Maxillofacial Surgery at the Southwestern Medical School in Dallas, Texas and the LSU Medical Center in Shreveport, Louisiana. Additionally, I devised and, with my faculty, provided a distance education course for a dental hygiene program in East Texas.

I conceived, designed and submitted the entire application and ultimately received accreditation from the Commission on Dental Accreditation for an advanced education program in Oral and Maxillofacial Pathology. I served as the program’s Director from 1996-2006.

I served as a commissioner on the American Dental Association’s Commission on Dental Accreditation from 2006-10. From 2006-08, I chaired the national review process that drafted new educational accreditation standards for the specialty of oral and maxillofacial pathology. Those standards were implemented in 2009 by the commission and will serve as the new educational standards for the profession. As a past President of the International Association of Oral Pathologists, I have and continue to be involved in developing consensus educational standards for the worldwide practice of oral pathology.

5. **Teaching Materials Developed**

   See #4 above.

6. **Continuing Education Courses Given**

   With mandatory CE in Texas, there is little distinction between invited lectures and CE programs as CE credit is given for virtually all lectures given outside the institution today. I have developed and presented independently all courses unless stated otherwise.

   **September 25, 2013**  40th Annual Comprehensive Oral and Maxillofacial Surgery Review Course. Oral Head and Neck Pathology. LSU Health Science Center, New Orleans, LA

   **September 20, 2013**  Back to School, Back to Basics. Update in Oral Path 2013. With other Faculty, TAMU Baylor College of Dentistry, Dallas, TX

   **September 9, 2013**  Differential Diagnosis of Bone Pathology. NW Louisiana Dental Society and the Dept of Oral and Maxillofacial Surgery, LSU Health Science Center, Shreveport, LA

   **July 1, 2013**  A practical approach to evaluating patients with oral mucosal and bone diseases for clinicians. Annual meeting of the Flying Dentists of America. Steamboat Springs, CO

   **June 29, 2013**  A comprehensive review and update of Oral Pathology for clinicians. Annual meeting of the Flying Dentists of America, Steamboat Springs, CO

   **June 17, 2013**  Hyperparathyroidism-Jaw Tumor Syndrome. Indiana Seminar at annual meeting of the AAOMP, Portland OR

   **May 16, 2013**  A practical approach to evaluating patients in private practice. Lake Superior Dental Study Club. Duluth, Minn
April 25-27, 2013  
28th Annual Current Issues in Surgical Pathology. Diagnostic features and pitfalls in the interpretation of odontogenic cysts and tumors.  
UT Southwestern Medical Center, Dallas, TX

March 7, 2013  
A review and update of the clinical features and therapeutic management of oral mucosal disease for the practicing clinician. 42nd Annual Star of the South Dental Meeting. Houston, TX

March 7, 2013  
A practical approach to evaluating patients with oral mucosal and bone disorders for the practicing dentist and dental hygienist. 42nd Annual Star of the South Dental Meeting. Houston, TX

January 19, 2013  
A comprehensive review of Oral Pathology for the practicing dentist and dental hygienist. Southwest Dental Conference. Dallas, TX

January 19, 2013  
Oral cancer, precancer and differential diagnosis of common oral lesions. Southwest Dental Conference. Dallas, TX

December 3, 2012  
Nonodontogenic infectious stomatitis and therapeutic management. NW Louisiana Dental Society and the Dept of Oral and Maxillofacial Surgery, LSU Health Science Center, Shreveport, LA

November 2, 2012  
Red, White and Blue. North Texas Facial and Oral Surgery Annual Dental Symposium. Grapevine, TX

October 19, 2012  
A comprehensive review of clinical oral pathology for the practicing dentist and dental hygienist. UTHSC School of Dentistry, San Antonio

October 16, 2012  
A practical approach to dealing with oral pathology in clinical practice. Black Hill District Dental Society, Rapid City, SD

September 25, 2012  

September 24, 2012  
Differential diagnosis of oral mucosal disease from the clinician’s perspective. Rockwall Dental Study Club, Rockwall, TX

September 13, 2012  
A comprehensive review of clinical oral pathology for the practicing dentist and dental hygienist. UTHSC School of Dentistry, San Antonio

August 24, 2012  

July 13, 2012  
The Beverly Baine endowed lecture. A review and update of oral pathology for the practicing dentist and dental hygienist. 142nd Annual Meeting of the Texas Dental Association. San Antonio, TX

June 25, 2012  
The Beverly Baine endowed lecture. A comprehensive review of oral pathology affecting the bones, teeth and soft tissues. 142nd Annual Meeting of the Texas Dental Association. San Antonio, TX

May 4, 2012  
The Beverly Baine endowed lecture. A review and update of oral pathology for the practicing dentist and dental hygienist. 142nd Annual Meeting of the Texas Dental Association. San Antonio, TX

May 3, 2012  

April 26, 2012  

April 10, 2012  Differential diagnosis of oral mucosal disease. Denton County Dental Society, Denton, TX

April 2, 2012  Benign and malignant neoplasms of the head and neck. NW Louisiana Dental Society and the Dept of Oral and Maxillofacial Surgery. LSU Health Science Center, Shreveport, LA

February 3, 2012  Comprehensive review of oral pathology from A-Z. First District Dental Society, Mount Pleasant, TX.

January 17, 2012  “Red, White and Blue.” Arlington Dental Study Club, Arlington, TX.

January 13, 2012  “Update on Oral Cancer/Precancer.” Southwest Dental Conference, Dallas, TX

January 6 & 9, 2012  “Surgical pathology conference for dermatology.” UTSW Medical School, Dallas, TX.

December 5, 2011  “Developmental cysts of the head and neck.” NW Louisiana Dental Society and the Department of Oral and Maxillofacial Surgery, LSU Health Science Center, Shreveport, LA.

November 15, 2011  “Update on Oral Cancer/Precancer.” Dallas County Dental Society, Dallas, TX.

October 21, 2011  “Oral Pathology Review for Fellowship in the Academy of General Dentistry.” Dallas, TX.

October 20, 2011  “Surgical Pathology Conference. Bone pathology.” University of Texas Southwestern Medical School, Department of Pathology, Dallas, TX.

October 19, 2011  “LSU 38th annual comprehensive review course for oral and maxillofacial surgeons. Oral and Head and Neck Pathology.” New Orleans, LA.

October 13, 2011  Benign fibro-osseous lesions of the craniofacial complex.” University of Texas Southwestern Medical School, Department of Pathology, Dallas, TX.

September 11, 2011  “Non-infectious stomatitis and its therapeutic management.” NW Louisiana Dental Society and the Department of Oral and Maxillofacial Surgery, LSU Health Science Center, Shreveport, LA.


May 1, 2011  “Fibromatous epulis of the dog.” IU Seminar. AAOMP annual meeting, San Juan, Puerto Rico.

April 15, 2011  “A practical approach to oral pathology in clinical practice.” East Texas Dental Association, Tyler, TX.

March 25, 2011  “Clinical Oral Pathology Update.” TAMHSC Baylor College of Dentistry, Dallas, TX.

March 8, 2011  “Differential diagnosis for the practicing dental hygienist.” Mansfield, TX.

January 15, 2011  “Oral cancer, precancer and differential diagnosis of common oral lesions” and “A comprehensive review of oral pathology for the practicing dentist and dental hygienist.” Southwest Dental Conference, Dallas, TX.
December 6, 2010  “Differential diagnosis of oral and maxillofacial bone pathology.” NW Louisiana Dental Society and Department of Oral & Maxillofacial Surgery. LSU Medical Center, Shreveport, LA.

November 6, 2010  “A practical approach to oral pathology in clinical practice.” San Antonio, TX.

October 22, 2010  Review of oral pathology. Fellowship Exam in AGD. Dallas, TX.

September 13, 2010  “Differential diagnosis of oral mucosal disease.” NW Louisiana Dental Society and the Department of Oral & Maxillofacial Surgery, LSU Medical Center, Shreveport, LA.

September 9, 2010  “Oral premalignant lesions, new development.” Oak Cliff Dental Study Club, Dallas, TX.


March 8, 2010  “Infectious stomatitis and its therapeutic management. NW Louisiana Dental Society and the Dept. of Oral and Maxillofacial Surgery, LSU Medical Center, Shreveport, LA.

February 9, 2010  “Update in oral pathology.” Denton County Dental Society, Denton, TX.

January 7, 2010  “A review and update of clinical oral pathology for the practicing clinician.” Texas Criminal Justice System, Huntsville, TX.

December 18, 2009  “Slide seminar on odontogenic cysts and tumors.” Dept. of Pathology, Southwestern Medical School, Dallas, TX.

December 14, 2009  “Oral cancer and precancer.” NW Louisiana Dental Society and the Dept. of Oral and Maxillofacial Surgery, LSU Medical Center, Shreveport, LA.

December 10, 2009  “Classification of odontogenic cysts and tumors.” Dept. of Pathology, Southwestern Medical School, Dallas, TX.

December 4, 2009  “Differential diagnosis of oral mucosal disorders.” 1st District Dental Society, Mount Pleasant, TX.

October 30, 2009  “Non-pulp related periradicular pathology.” American Association of Endodontists, Cancun, Mexico.

October 23, 2009  “Fellowship review of oral pathology.” Academy of General Dentistry, Dallas, TX.

October 12, 2009  “Update on oral premalignancy, from morphology to molecular biology, what’s clinically relevant.” North Texas Society of Oral and Maxillofacial Surgeons, Dallas, TX.


September 14, 2009  “Benign and malignant tumors of the head and neck.” NW Louisiana Dental Society and the Dept. of Oral and Maxillofacial Surgery, LSU Medical Center, Shreveport, LA.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>June 13, 2009</td>
<td>“Review and update of clinical oral pathology for the practicing dentist.” 6th District dental society, Salado, TX.</td>
</tr>
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<td>May 6, 2009</td>
<td>“Diagnostic features and pitfalls in the interpretation of odontogenic cyst and tumors.” 28th Annual Current Issues in Surgical Pathology, UT Southwestern Medical School, Dept. of Pathology, Dallas, TX.</td>
</tr>
<tr>
<td>April 24, 2009</td>
<td>“Update of clinical oral pathology for the practicing clinician.” Seattle Study Club, Houston, TX.</td>
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<td>April 10, 2009</td>
<td>“Classification and diagnostic features of odontogenic tumors.” North Texas Society of Pathologists. Southwestern Medical School, Dallas, TX.</td>
</tr>
<tr>
<td>March 30, 2009</td>
<td>“Cysts of the head and neck.” NW Louisiana Dental Society and Dept. of Oral and Maxillofacial Surgery, LSU Medical Center, Shreveport, LA.</td>
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<td>February 12, 2009</td>
<td>“An update of pediatric oral pathology for pediatric dentists.” North Texas Pediatric Dentists, Dallas, TX.</td>
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<td>December 15, 2008</td>
<td>“Pigmented lesions, reactive lesions and physical/chemical conditions.” Northwest Louisiana Dental Society and Dept. of Oral &amp; Maxillofacial Surgery, LSU Medical Center, Shreveport, LA.</td>
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<td>November 14, 2008</td>
<td>“Update in clinical oral pathology.” McAllen, TX.</td>
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<td>October 24, 2008</td>
<td>“Academy of General Dentistry Fellowship review in oral pathology.” Dallas, TX.</td>
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<td>September 17, 2008</td>
<td>“Differential diagnosis of oral mucosal disease.” Capitol Area Dental Society, Austin, TX.</td>
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<tr>
<td>September 9, 2008</td>
<td>“Non-infectious forms of stomatitis and their therapeutic management.” Northwest Louisiana Dental Society and Dept. of Oral &amp; Maxillofacial Surgery, LSU Medical Center, Shreveport, LA.</td>
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<tr>
<td>July 24, 2008</td>
<td>“Oral cancer and precancer for the practicing clinician.” Sponsored by Zila Pharmaceuticals. Addison, TX.</td>
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<td>June 12, 2008</td>
<td>“Oral cancer, precancer and differential diagnosis of common oral mucosal lesions” and “A practical approach to clinical oral pathology for the practitioner.” 99th annual session of the New Mexico Dental Association, Albuquerque, NM.</td>
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| May 2, 2008      | 138th annual meeting of the Texas Dental Association. “Oral cancer, precancer and differential diagnosis of oral mucosal disease” and “A
review and update of clinical oral pathology for the practicing dentist and dental hygienist.” San Antonio, TX.

April 14, 2008  “Odontogenic tumors.” Northwest Louisiana Dental Society and Dept. of Oral and Maxillofacial Surgery, LSU Medical Center, Shreveport, LA.

February 15, 2008  “Update on oral pathology.” 2008 Symposium for the Dental Professional, Grapevine, TX.

January 18, 2008  “A review and update of oral cancer and precancerous lesions.” Southwest Dental Conference, Dallas, TX.

January 8, 2008  “A review of new diagnostic adjuncts in the clinical evaluation of oral cancer/precancer.” Northwest Louisiana Dental Society, Shreveport, LA.

December 11, 2007  “Oral cancer and precancerous lesions.” Irving Dental Study Club, Irving, TX.

December 2, 2007  “Differential diagnosis of bone pathology.” NW Louisiana Dental Society and Dept. of Oral and Maxillofacial Surgery, LSU Medical Center, Shreveport, LA.

November 13, 2007  “Classification of odontogenic cysts and tumors” with surgical pathology conference. University Texas Southwestern Medical School, Dept. of Pathology. Dallas, TX.

October 26, 2007  “Fellowship review of oral pathology.” Academy of General Dentistry. Dallas, TX.


September 28, 2007  “A practical approach to oral pathology in clinical practice.” 12th District Dental Society, Fort Worth, TX.


September 22, 2007  “Review and update of oral pathology from the clinicians perspective.” Longhorn Dental Study Group. College Station, TX.

September 17, 2007  “Differential diagnosis of oral mucosal disease.” NW Louisiana Dental Society and Department of Oral and Maxillofacial Surgery, LSU Medical Center. Shreveport, LA.


April 12, 2007  “A practical approach to the evaluation and management of clinical patients with oral pathologic conditions.” Seattle Study Club, Houston, TX.

March 12, 2007  “Infections of the Oral Mucosa.” NW Louisiana Dental Society and the Dept. of Oral and Maxillofacial Surgery, LSU Medical Center, Shreveport, LA.

January 19, 2007  “Oral Cancer and Precancer” and “Review and Update of Clinical Oral Pathology.” Southwest Dental Conference, co-sponsored by the Dental Oncology Education Program and The North Texas Dental Society, Dallas, TX.


October 12, 2006  “Oral Cancer and Precancer”, Oak Cliff Dental Study Club, Oak Cliff, TX.


September 20, 2006  “National Board Review for Oral Pathology” AT Still University, Arizona School of Dentistry and Oral Health, Mesa, AZ.

September 18, 2006  “Physical and Chemical Injuries,” “Pigmented Lesions,” “Reactive Lesions,” Northwest Louisiana Dental Society and Dept. of Oral and Maxillofacial Surgery, LSU Medical Center, Shreveport, LA.

September 12, 2006  “Update on Oral Path” Nueces District Dental Society, Corpus Christi, TX

June 25, 2006  “Granuloma inguinale, oral manifestations” Clinicopathologic Conference International Association of Oral Pathologists, Brisbane, Australia. (1 hour)

June 6, 2006  “Benign and malignant neoplasms of the oral cavity” Northwest Louisiana Dental Society and the Dept. of Oral and Maxillofacial Surgery, LSU Medical Center, Shreveport, LA

March 20, 2006  “Review and update of common oral mucosal diseases” Faculty networking and development series. Baylor College of Dentistry, TAMHSC, Dallas, TX.

March 13, 2006  “Developmental conditions and cysts of the head and neck” Northwest Louisiana Dental Society and the Department of Oral and Maxillofacial Surgery, LSU Medical Center, Shreveport, LA.

March 7, 2006  “Review and update of oral cancer and precancerous lesions” Northern Texas Facial Surgery, Grapevine, TX.

March 6, 2006  “Pigmented lesions” “Oral cancer” “Reactive tumors and benign neoplasms” “Differential diagnosis of pigmented lesions, ulceration and mass lesions” AT Still University, Arizona School of Dentistry and Oral Health, Mesa AZ.
February 14, 2006  “Physical and chemical injuries”
“Reactive tumors of the oral tissues”
“Benign neoplasms”
“Odontogenic tumors”
“Pigmented lesions”
AT Still University, Arizona School of Dentistry and Oral Health, Mesa AZ.

February 13, 2006  “Infectious Stomatitis”
“Non-infectious Stomatitis”
“Premalignancy”
“Differential Diagnosis of red and white lesions”
“Developmental conditions of the head and neck”
“Regressive alterations of teeth”
“Healing of Oral Wounds”
AT Still University, Arizona School of Dentistry and Oral Health, Mesa, AZ

February 3, 2006  “Differential Diagnosis of Common Oral Lesions” Texas Dental Hygiene Educators Association. Richardson, TX.

December 12, 2005  “Odontogenic tumors” Department of Oral and Maxillofacial Surgery and NW Louisiana Dental Society. LSU Medical Center. Shreveport, LA.

November 12, 2005  “A review and update or oral pathology for the practitioner”
Sponsored by the Endodontic Group. Dallas, TX.

September 12, 2005  “Infections of the oral mucosa and their therapeutic management”
Department of Oral and Maxillofacial Surgery and the Northwest Louisiana Dental Society, LSU Medical Center, Shreveport, LA.

June 6, 2005  “Noninfectious forms of stomatitis and their therapeutic management”
Department of Oral and Maxillofacial Surgery and the Northwest Louisiana Dental Society, LSU Medical Center, Shreveport, LA.

May 12-14, 2005  “Oral cancer, precancer and differential diagnosis of common oral mucosal conditions” and “A review and update of oral pathology for the practicing dentist and dental hygienist” 2005 Texas Meeting, Texas Dental Association, San Antonio, TX.

March 14, 2005  “Oral cancer and precancerous lesions” Department of Oral and Maxillofacial Surgery and the Northwest Louisiana Dental Society, LSU Medical Center, Shreveport, LA.

March 10, 2005  “Pharmacotherapeutic management of infectious and non-infectious forms of stomatitis” Oak Cliff Study Club, Dallas, TX.

January 20, 2005  “Clinical oral pathology for the practicing dentist, dental hygienist and dental assistant” and “Oral cancer, precancer and differential diagnosis of common oral lesions” Southwest Dental Conference, Dallas, TX.

October 26, 2004  “Update in oral pathology” Review course for Dr. Sunie Marchbanks, McKinney, TX.

October 22, 2004  “Review of oral pathology” and “Review of radiographic features and diseases of the jaws” Academy of General Dentistry Fellowship Exam Review, Dallas, TX.
October 4, 2004  “Diseases affecting the jaws and differential diagnosis of bone pathology”  Department of Oral and Maxillofacial Surgery and the Northwest Louisiana Dental Society, LSU Medical Center, Shreveport, LA.

October 2, 2004  “Update 2004 in clinical oral pathology” Baylor College of Dentistry, TAMUSHSC, Dallas, TX.

June 28, 2004  “Differential Diagnosis of oral mucosal and bone disorders” Department of Oral and Maxillofacial Surgery and the Northwest Louisiana Dental Society, LSU Medical Center, Shreveport, LA.

May 10, 2004  “Sclerosing polycystic adenosis” Indiana Seminar, American Academy of Oral and Maxillofacial Pathology, Charleston, SC.

March 22, 2004  “Benign and malignant neoplasms of the head and neck” Department of Oral and Maxillofacial Surgery and the Northwest Louisiana Dental Society, LSU Medical Center, Shreveport, LA.

February 6, 2004  “Surgical pathology slide conference on odontogenic cysts and tumors” Baylor University Medical Center Department of Pathology, Dallas, TX.

January 29, 2004  “Surgical pathology slide conference on odontogenic cysts and tumors” Baylor University Medical Center Department of Pathology, Dallas, TX.

January 16, 2004  “A practical approach to the diagnosis and management of oral mucosal disease” Academy of General Dentistry, Amarillo, TX.

January 15, 2004  “Pharmacotherapeutics of oral mucosal disease” 18th District Dental Society, Amarillo, TX.

January 6, 2004  “Teaching excellence in the Promotion and Tenure Process” with Dr. Larry Bellinger.  Baylor College of Dentistry Faculty Retreat, Dallas, TX.

November 24, 2003  “Developmental conditions and cysts of the head and neck” Department of Oral and Maxillofacial Surgery and the Northwest Louisiana Dental Society, LSU Medical Center, Shreveport, LA.

November 20, 2003  “Clinical oral pathology update” North Dallas Dental Hygiene Study Club, Dallas, TX.

November 13, 2003  “A review and update of oral pathology for the practicing dentist and dental hygienist” Midwestern State University and the Wichita Falls Dental Hygiene Study Club, Wichita Falls, TX.

November 6, 2003  “What’s up in oral pathology” Rockwall Dental Study Club, Rockwall, TX.

September 18, 2003  “What’s New in Oral Pathology” Garland Dental Research Study Group, Garland, TX.

September 9, 2003  “Review of Oral Pathology” Irving Dental Study Club, Irving, TX.

August 1, 2003  “A practical approach to oral pathology in clinical practice” UT Health Science Center at Houston, Dental Branch, Houston, TX.

June 24, 2003  “Classification of fibro(cemento)-osseous lesions of the jaw” Baylor University Medical Center, Dallas, TX.

May 29, 2003  “At east with AIDS” with Drs. Rees, Plemons, Rankin.  Baylor College of Dentistry, Dallas, TX.

May 1, 2003  “A practical approach to the diagnosis and management of oral pathologic conditions for the practicing dentist and dental hygienist” Texas Dental Association Annual Meeting, San Antonio, TX.
April 26, 2003  “A review and update of clinical oral pathology for the practicing dentist and dental hygienist” Oklahoma Dental Association Annual Meeting, Oklahoma City, OK.

March 28, 2003  “Review and update of clinical oral pathology” Baylor College of Dentistry, Dallas, TX.

January 22, 2003  “Review and update of clinical oral pathology for the general practioner” Rossmann Study Club, Dallas, TX.

January 15, 2003  “Update in Oral Path” Orth Study Club, Dallas, TX.

January 14, 2003  “The dentist’s role in the recognition, diagnosis and management of oral cancer and precancerous lesions” Fort Worth District Dental Society, Fort Worth, TX.

January 9, 2003  “Recognition and management of noninfectious forms of stomatitis” Oak Cliff Dental Study Club, Dallas, TX.

November 15, 2002  “A practical approach to oral pathology in dental practice” UTHSCSA, Dental School, San Antonio, TX.

October 22, 2002  “Mucosal disease and the dental hygienist” NE Tarrant County Dental Hygiene Study Club, Grapevine, TX.

October 15, 2002  “Oral Pathology Update” Dallas County Dental Society, Dallas, TX.

October 14, 2002  “Mucosal disease and the dental hygienist” NE Tarrant County Dental Hygiene Study Club, Grapevine, TX.

October 8, 2002  “Review and update of clinical oral pathology for the general practioner” Del Mar College, Corpus Christi, TX.

June 12, 2002  "Non-infectious stomatitis. Clinical features and herapeutic management". Department of Oral and Maxillofacial Surgery and the Northwest Louisiana Dental Society, LSU Medical Center, Shreveport, LA.

June 8, 2002  "A practical approach to oral pathology in clinical practice" El Paso Dental Hygienists Association, El Paso, TX.

May 16, 2002  "Review and update of oral cancer and precancerous lesions" North Dallas Dental Hygiene Study Club, Richardson, TX.


February 27, 2002  "Everything you have ever forgotten about oral path" Park Cities Study Club. Highland Park, TX.

February 13, 2002  "Odontogenic Neoplasms" Department of Oral and Maxillofacial Surgery and the Northwest Louisiana Dental Society, LSU Medical Center, Shreveport, LA.

January 23-6, 2002  "A practical approach to Oral Pathology in clinical practice". Program shared with Dr. David Cagna of UTHSC San Antonio, TX, Puerta Vallarta, Mexico.

January 10, 2002  "Oral Cancer, precancer and differential diagnosis of common oral lesions" and "A review and update of clinical oral pathology for the practicing dentist and dental hygienist" Southwest Dental Conference, Dallas, TX.
December 14, 2001  "A clinically relevant and practical approach to oral mucosal and bone disease"  East Texas Dental Society. Longview, TX.

November 16, 2001  "A clinically relevant and practical approach to oral mucosal and bone disease"  Green Dental Laboratories, Heber Springs, AR.

November 7, 2001  "Working classification of fibro-osseous (cemento-osseous) lesions of the jaws" National Taiwan University, Taipei, Taiwan.

November 6, 2001  "Working classification of fibro-osseous (cemento-osseous) lesions of the jaws" Yang-Ming Medical University, Taipei, Taiwan.


November 2, 2001  "Working classification of fibro-osseous (cemento-osseous) lesions of the jaws" China Medical College, Taichung, Taiwan.

November 1, 2001  "Working classification of fibro-osseous (cemento-osseous) lesions of the jaws" Kaohsiung Medical University, Kaohsiung, Taiwan.

October 6, 2001  "Differential Diagnosis and Management of Common Oral Mucosal Disorders"  Aggie Dental Study Club, College Station, TX.

October 3, 2001  "Oral Cancer and Precancer"  Department of Oral and Maxillofacial Surgery and the Northwest Louisiana Dental Society, LSU Medical Center, Shreveport, LA.

September 15, 2001  "Oral Pathology for the dental hygienist" Baylor College of Dentistry and the Caruth School of Dental Hygiene Alumni Weekend, Dallas, TX.

August 13, 2001  "The role of basic biomedical sciences in the practice of dentistry" keynote speaker. Baylor College of Dentistry and Alumni Association Reception for first year dental and dental hygiene students. Dallas, TX.

June 20, 2001  "Benign fibro-osseous lesions of the jaws"  Baylor University Medical Center, Dallas, TX.

June 11, 2001  "Odontogenic cysts and tumors"  Baylor University Medical Center, Dallas, TX.

May 17, 2001  "Oral Pathology for the practicing dermatologist"  Dermatology Grand Rounds. UT Southwestern Medical Center, Dallas, TX.

May 10, 2001  "Update on Oral Pathology"  NE Tarrant County Dental Study Club, Grapevine, TX.

April 25, 2001  "Oral Cancer" and "Oral Precancerous Lesions" Walter Reed Army Medical Center, Washington, D.C.

March 31, 2001  Mini lecture "Oral and Systemic Interaction" Parents Day, Baylor College of Denistry/TAMUSHSC, Dallas, TX.

March 30, 2001  "Differential diagnosis of common oral mucosal and bone disorders"  Baylor College of Dentistry/TAMUSHSC and the Dental Oncology Education Program. Dallas, TX.

February 24, 2001  "Oral Pathology"  Southwest Society of Periodontists, Dental Hygiene. Dallas, TX.

January 18, 2001  "What's up in Oral Pathology" 6th District Dental Society. Corsicana, TX.

January 7, 2001  "Red, white and blue lesions of the oral mucosa" North Texas Society of Oral and Maxillofacial Surgeons. Dallas, TX.
December 14, 2000  "Oral Pathology for the dental hygienist" Dallas Dental Hygienists' Society, Dallas, TX.
September 29, 2000  "Review and update of oral pathology" University of Louisiana at Monroe and Monroe District Dental Society. Monroe, LA.
May 6, 2000  Participant. Telemedicine and Teledentistry demonstration. Texas Dental Association Annual meeting. San Antonio, TX.
March 31, 2000  "An update on oral pathology for the dental hygienist" 17th District Dental Society, Abilene, TX.
March 9, 2000  "Oral Cancer, precancer and differential diagnosis of common oral lesions." "A review and update of clinical oral pathology for the practicing dentist and dental hygienist", Southwest Dental Conference, Dallas, TX.
January 24, 2000  "A Review of Clinical Oral Pathology" Master Mind Dental Study Club. Dallas, TX.
January 18, 2000  "Diagnosis and Management of Common Oral Mucosal Conditions" Dallas County Dental Society, Dallas, TX.
January 10, 2000  "Update on Oral Pathology" North Texas Society of Oral and Maxillofacial Surgery. Dallas, TX.
August 6, 1999  "Odontogenic tumors" Dalhousie University College of Medicine and Dentistry and the QE II Health Sciences Center, Halifax, Nova Scotia.
August 5, 1999  "Oral Pathology and Oral Cancer" with Dr. Robert Ord, Canadian Dental Association Annual Convention. Halifax, Nova Scotia
June 29, 1999  Participant - Tele-education and Teleconsultations. Baylor College of Dentistry - TAMUS, Dallas, TX.
June 22, 1999  "Diagnosis and treatment of common oral diseases" Denton County Dental Society, Lewisville, TX.
June 7, 1999  Chair, Essay Program and Moderator, Program I. American Academy of Oral and Maxillofacial Pathology, Mauni Laui, HI.
April 24, 1999  "The role of pathology and medicine in dentistry" Parent's Day, Baylor College of Dentistry/TAMUS and Caruth School of Dental Hygiene. Dallas, TX.
April 15, 1999  "Oral manifestations of mucocutaneous disease" Dermatology Grand Rounds. Southwestern Medical School. Dallas, TX.
April 9, 1999  "Oral cancer and precancer" First District Dental Society sponsored by DOEP, Mt. Pleasant, TX.
June 24, 1998  "Oral Cancer" Tumor Board, Hillcrest Baptist Medical Center, Waco, TX.
May 15, 1998  "A review and update of clinical oral pathology and oral medicine for the general practitioner and hygienist." East Texas Academy of General Dentistry, Tyler, TX.
May 5, 1998  Moderator, Clinico-pathologic Conference, American Academy of Oral & Maxillofacial Pathology, Dallas, TX.
May 5, 1998  Chair, Essay Program II. American Academy of Oral & Maxillofacial Pathology, Dallas, TX.
February 19, 1998  "Differential diagnosis of common oral diseases" 6th District Dental Society, Corsicana, TX.
January 29, 1998  "Clinical applications for telemedicine" with other Baylor faculty.
live telemedicine broadcast from Dallas, TX to Burlington, VT. Third annual national conference on "Implementing effective technologies in Healthcare." Burlington, VT.

January 22, 1998  Oral cancerous and precancerous lesions for dental healthcare providers." Dallas Mid-Winter Dental Clinic, Dallas, TX.

January 8, 1998  "Oral cancer and precancer" Dermatology Grand Rounds. UT Southwestern Medical School, Dallas, TX.

November 18, 1997  "Oral cancer and precancer." Arlington Dental Study Club, Arlington, TX.

November 14, 1997  "A review and update of clinical oral pathology and medicine." Academy of General Dentistry, Fort Worth, TX.

November 7, 1997  "A review and update of clinical oral pathology and medicine." 17th District Dental Society, Abilene, TX.

September 19, 1997  "A review and update of clinical oral pathology / oral medicine for the general practitioner" Baylor College of Dentistry - TAMUS, Dallas, TX.

September 5, 1997  "Differential diagnosis of common oral lesions" Sponsored by DOEP, Tarrant County Junior College, Fort Worth, TX.

May 27, 1997  "A review and update of oral pathology." Rockwall/Rowlett Study Club, Rowlett, TX.

April 11, 1997  "A review and update of clinical oral pathology and medicine." First District Dental Society, Mt. Pleasant, TX.


January 18, 1997  "Oral Cancer" Eat and Learn, Dallas Mid-Winter Dental Clinic, Dallas County Dental Society, Dallas, TX.

January 16, 1997  "A review of oral cancer and precancerous lesions for the dental practitioner" Dallas Mid-Winter Dental Clinic, Dallas County Dental Society, Dallas, TX.

January 14, 1997  "Oral cancer and precancerous lesions" Fort Worth District Dental Society, Fort Worth, TX.

November 12, 1996  "Clinical oral pathology for the general practitioner" Irving Dental Study Club, Irving, TX.

July 24, 1996  Chairman, Plenary session on fibro-osseous lesions and moderator, slide seminar. International Association of Oral Pathologists, Toronto, Canada.


April 1, 1996  "A review of clinical oral pathology" Texas Public Health Association Annual Meeting, Dental Section, Plano, TX.

March 21, 1996  "Clinical oral pathology and medicine for the general practitioner" Smith County Dental Society, Tyler, TX.

January 4, 1996  "Oral mucosal reactions to drugs" Dermatology Grand Rounds. UT Southwestern Medical School, Dallas, TX.

October 2, 1995  "The role of the general practitioner in the detection of oral cancerous and precancerous lesions" Texas Dental Association, 23rd District, Laredo, TX.
August 17, 1995  "Common oral mucosal conditions" Cleburne Dental Society. Cleburne, TX.
March 21, 1995  "Contemporary oral medicine in general dental practice." Dallas County Dental Society, Dallas, TX.
March 22, 1995  "Oral mucosal side effects of therapeutic medication." Veterans Administration Medical Center, Dallas, TX.
February 10, 1995  "Oral Cancer and applied differential diagnosis" with Dr. K.V. Rankin, East Texas Society of General Dentistry. Tyler, TX.
January 28, 1995  "At Ease with AIDS." Clinician in HIV participation clinic. Dallas County Dental Society Midwinter Dental Clinic. Dallas, TX.
January 19, 1995  "Oral manifestations of HIV infection". Dermatology Grand Rounds, St. Paul Hospital, Dallas, TX.
October 1, 1994  "Good lumps, bad lumps" Annual Session of Texas Dental Hygienists Association. Dallas, TX.
September 27, 1994  "Oral cancer, precancer and other mucosal conditions for the general practitioner" San Antonio District Dental Society. Sponsored by the Texas Cancer Council. San Antonio, TX.
August 16, 18, 22, 24, 1994  "At ease with AIDS" Clinician in HIV participation clinic for faculty, Baylor College of Dentistry. Dallas, TX.
April 23, 1994  "Clinical oral pathology for the general practitioner" 8 hour course. Little Rock, AR.
April 9, 1994  "At ease with AIDS". Clinician in HIV participation clinic. Baylor College of Dentistry. Dallas, TX.
February 23, 1994  "Clinical oral pathology/medicine for the general practitioner." Greater Plano Dental Society. Plano, TX.
February 15, 1994  "Clinical oral pathology." Tenth District Dental Society, Austin, TX.
October 22, 1993  "At ease with AIDS." Clinician in HIV participation clinic. Baylor College of Dentistry. Dallas, TX.
April 15, 1993  "Stomatology for the GP." Garland Dental Study Club. Garland, TX.

January 23, 1993  "Mucosal conditions of interest to the dental hygienist." Dallas Co. Dental Hygiene Association. Dallas, TX.

January 22-23, 1993  Stomatologic disorders, participation clinic. Dallas Co. Dental Society Mid-Winter Meeting. Dallas, TX.

September 8, 1992  "Infectious and non-infectious stomatitis." Irving Dental Study Club, Irving, TX.


May 15, 1992  Current Issues in Surgical Pathology, XI. Participant, 3-day course. The University of Texas Southwestern Medical Center at Dallas, Dallas, TX.

April 25, 1992  Reichmann Lectureship, Midwestern Society and Southwestern Society of Oral and Maxillofacial Surgery. Santa Fe, NM.

February 12, 1992  "Interpretation of the panoramic radiograph", VA Medical Center, Dallas, TX.

January 23, 1992  "Stomatological disorders of interest to the physician", Grand Rounds, UT Southwestern Medical School, St. Paul Hospital, Dallas, TX.

January 15, 22, & 29, 1992  "Radiographic interpretation of disorders of the jaw". Department Radiology, Baylor University Medical Center, Dallas, TX.

October 22, 1991  "Biopsy procedures and utilization of an oral biopsy service. Arlington Dental Study Club, Arlington, TX.


September 16, 1991  "Oral precancerous lesions", Institute of Odontology and Stomatology, University of Firenze, Florence, Italy.

March 18, 1991  "Diagnostic problems in periradicular pathology" DFW Metroplex Endodontic Society, Dallas, TX.

October 12-13, 1990  "Clinical Oral Pathology, Oral Medicine and Imaging" The University of Tennessee Medical Center, Knoxville, TN.

September 11, 1990  "Introduction to Oral Pathology" Dallas County Dental Assistants Association, Dallas, TX.

August 16-17, 1990  Oral pathology/oral medicine lectures and seminars. US Army Dental Corps, Fort Hood, TX.

March 26, 1990  "Infectious stomatitis" Delta Sigma Delta Southeast Regional Meeting, Dallas, TX.

February 26 - March 2, 1990  
"Premalignant lesions and conditions of the oral cavity"
"Infectious conditions of the oral mucous membranes"
"Non-infectious stomatitis"

February 2-3, 1990  "Surgical Oral Pathology" with Drs. RA Cawson, WH Binnie, RA Finn, RV Walker. Dallas, TX.

November 1, 1989  "Oral medicine, common grounds for medicine and dentistry" Medical Dental Preparatory Association, The University of Texas at Arlington, Arlington, TX.

September 13, 1989  "Oral Pathology in Clinical Practice" Xi Psi Phi Dental Fraternity, Dallas, TX.

March 4, 1989  "Oral Medicine" Eighth Annual Medical Science Symposium. High School for the Health Professions, Dallas, TX.


September 23, 1988  "The Lighter Side of Oral Pathology" Xi Psi Phi Dental Fraternity, Dallas, TX.

April 22-23, 1988  "The Diagnosis and Management of Oral Mucosal Diseases" with Drs. P-J Lamey, WH Binnie, TD Rees. Salado, TX.

March 9, 1988  "Oral Pathology for the General Practitioner" Department of Family Practice Medicine. Charlton Methodist Hospital. Dallas, TX.


July 23, 1987  "Common Oral Mucosal Diseases and Conditions" Smith County Dental Society. Tyler, TX.

March 31, 1987  "Oral Manifestations of Systemic Disease in Pediatric Patients" Department of Pediatrics, Children's Medical Center. Dallas, TX.


September 21, 1986  "AIDS" Alpha Omega. Dallas, TX.

March 21-22, 1986  Fourth Annual Oral Medicine Seminar. Baylor College of Dentistry and The University of Texas Health Science Center in San Antonio. Salado, TX.

January 25, 1986  "AIDS, Herpes and Hepatitis" Dallas County Dental Hygiene Society. Dallas, TX.


January 24-25, 1986  "Recurrent Intraoral Ulcerations" Dallas County Dental Society, Mid-Winter Meeting. Dallas, TX.

October 8, 22 and  "Precancerous Lesions" Head, Neck and Oral Tumor Conference.

November 12, 1985  Sammons Cancer Center, Baylor University, Medical Center. Dallas, TX.

September 24, 1985  "A Review of Clinical Oral Pathology" Gregg County Dental Society. Longview, TX.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 17, 19, 21, 1985</td>
<td>&quot;Radiographic interpretation of Pathology Conditions of the Jaws&quot; Department of Radiology, Baylor University Medical Center. Dallas, TX.</td>
</tr>
<tr>
<td>March 30, 1985</td>
<td>&quot;Non-infectious Stomatitis&quot; Delta Sigma Delta Southeast Regional Meeting. Dallas, TX.</td>
</tr>
<tr>
<td>March 8, 1985</td>
<td>&quot;The Diagnosis and Management of Common Oral Mucosal Conditions&quot; With Dr. WH Binnie. The El Paso District Dental Society. El Paso, TX.</td>
</tr>
<tr>
<td>February 27 - March 2, 1985</td>
<td>&quot;Pharmacotherapeutics in Clinical Dentistry&quot; With Dr. WH Binnie and in conjunction with the University of Texas Health Science Center in San Antonio. San Antonio, TX.</td>
</tr>
<tr>
<td>January 26, 1985</td>
<td>&quot;Communicable Diseases&quot; Dallas Mid-Winter Dental Clinic, Dallas County Dental Hygiene Society. Dallas, TX.</td>
</tr>
<tr>
<td>June 14, 1984</td>
<td>&quot;Common Oral Mucosal Diseases. Diagnosis and Treatment&quot; Brazos Valley District Dental Society. Huntsville, TX.</td>
</tr>
<tr>
<td>May 18-19, 1984</td>
<td>&quot;The Diagnosis and Management of Oral Mucosal Disease&quot; with Dr. JJ Pindborg, RP Langlais and WH Binnie. Baylor College of Dentistry. Dallas, TX.</td>
</tr>
<tr>
<td>April 18, 1984</td>
<td>&quot;Oral Manifestations of Drug Reactions&quot; Delta Sigma Delta. Dallas, TX.</td>
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<tr>
<td>April 5, 1984</td>
<td>&quot;Oral Pathology Affecting Pediatric Patients&quot; Children's Medical Center. Dallas, TX.</td>
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<tr>
<td>March 9, 1984</td>
<td>&quot;Premalignancy: Recognition, Diagnosis and Patient Management&quot; Oak Cliff Dental Study Club. Dallas, TX.</td>
</tr>
<tr>
<td>March 1, 1984</td>
<td>&quot;Herpes and the Dental Hygienist&quot; Dallas Dental Hygienists' Society. Dallas, TX.</td>
</tr>
<tr>
<td>January 28, 1984</td>
<td>&quot;Clinical Features, Diagnosis, and Management of Herpes Simplex Viral Infections&quot; Dallas Mid-Winter Dental Clinic, Dallas County Dental Hygiene Society. Dallas, TX.</td>
</tr>
<tr>
<td>January 28, 1984</td>
<td>&quot;Oral Cancer Symposium&quot; with Drs. WH Binnie, DL Byrd, ZH Lieberman, and FE Barton. Sponsored by American Cancer Society, Dallas Mid-Winter Dental Clinic.</td>
</tr>
<tr>
<td>January 21-22, 1984</td>
<td>&quot;A Review of Oral Pathology for Oral Surgeons&quot; with Dr. WH Binnie. Baylor University Medical Center. Dallas, TX.</td>
</tr>
<tr>
<td>January 18, 1984</td>
<td>&quot;The Malignant Lymphomas&quot; The University of Texas Health Science Center at Dallas.</td>
</tr>
<tr>
<td>November 30, 1983</td>
<td>&quot;Granulomatous Diseases&quot; The University of Texas Health Science Center at Dallas.</td>
</tr>
<tr>
<td>July 5, 7, 8, 1983</td>
<td>&quot;Radiographic Interpretation of Pathologic Conditions of the Jaws&quot; Department of Radiology, Baylor University Medical Center. Dallas, TX.</td>
</tr>
<tr>
<td>June 8, 1983</td>
<td>&quot;Giant Cell Lesions of the Jaws&quot; and &quot;The Odontogenic Keratocyst&quot; The University of Texas Health Science Center at Dallas.</td>
</tr>
</tbody>
</table>
May 25, 1983  "An Update on Herpes Simplex Viral Infections Diagnosis and Management" Greater Dallas Dental Research Group. Dallas, TX.

March 9, 16, 1983  "Histopathologic Interpretation of Oral Diseases"  The University of Texas Health Science Center at Dallas.


June 3, 1982  "Reactive Lesions in Children"  Children's Medical Center. Dallas, Texas.


March 1-2, 1982  Participant, 24th Annual Oral and Maxillofacial Surgery Seminar. Dallas, TX.

March - April, 1981  Oral Pathology (18 hour course). The University of Texas Health Science Center at Dallas (with Dr. WH Binnie).

March 3, 1981  Participant, 23rd Annual Oral and Maxillofacial Surgery Seminar, Dallas, TX.


November 8, 1979  "Common Oral Lesions in Dental Practice" Indiana University School of Dentistry Student Affairs Council.

June 6, 1979  "Aspects of Aging Relevant to Health Care Professionals - Common Oral Lesions in the Aged Patients" Indianapolis, IN.


February 7, 1979  "Early Diagnosis of Cancer" Indianapolis Association of Dental Assistants.
February 23 and Review of Oral Pathology. Dental Hygiene training program.
March 2, 1978 Gary, IN.

7. Student/Trainee Supervision
   a. Fellows/Postdoctoral/Residents/Visiting Scientist

Derm Path residents
2007 Christof Erickson, Wei Sue
2008 Jim Lyons, Antonella
2009 Crystal Thomas, Barry White, Kien Tran
2010 Melissa Chang, Chris Warner, Brook Brouha, Seema Apichai, Javad Beheshi, Pete Suwatte, Emeka Etufugh
2011 Dipti Anand, Viseslav Tonkovic-Capin, Michelle Jackson, Atsuko Kodama
2012 Mike Peterson, Lindsay Hicks
2013 Travis Vandergriff,

Baylor Univ Medical Center, General Pathology Residents
2007 Nora Katabi
2008 Shrinda Williams
2009 Cherry Starling, Priscilla Wood

VA, GPR
2008 Lynette Page, Andrew Chen
2009 Hanna Nguyen, Gianna Ferranti
2010 Alan Tophan, Aisha Woods
2011 Kyle Frazier, Eunice Rivera
2012 Justin Riel, Radina Petkova

Dental students
2008 Rashida Wiley (Meharry)
2012 Erin Green (LSU)
2011 Jordan Reichart (Ariz School of Dentistry and Oral Health)

Southwestern Medical School, General Pathology Residents
2008 Rich Hopley
2009 Jennifer (Jenny) Hurrell
2010 Greg Moses
2012 Sam Henderson and Joey Ambruozs

OMFS
2008 Campbell Bourland, Russell Cunningham, Michael Ding, Tom Draper
2009 Andy McPhillips, Rob Miner, Gil Selkin, Russell Warren
2010 Paul Wilkinson, Rob Fuentes, Drew Havard
2011 Craig Knell, Mike Malmquist, Todd Kovach
2012 David King (UT Southwestern), Chris King, Reed Gibbons, David Martinez
Sara Harding, Nathan Steele

Oral Pathologists
Keith Hunter – England 2000
Ibrahim Bello - Saudi Arabia; Irit Allon - Israel 2013, Amanda Yen-Harvard 2013,
b. Thesis/Dissertation Committees
   1) Chair/Mentor
   Professor Mario Altini, External Examiner for the University of Witwatersrand, Johannesburg, South Africa, Doctorate in Science (Medicine).
Mansour M. Sarcoidosis and Sjogren’s Syndrome: A comparison of electrophoretic profiles of salivary proteins.
Proenca I. The effects of sanguinarine on oral epithelial cells in vitro.
   2) Member
Barefield DJ: A comparison of two methods of application of formocresol in pulpotomies in primary teeth in monkeys.
Vernor Y: Tissue reaction to N2 and foromocresol. Littekin G: Tissue compatibility of glutaraldehyde fixed tissue implants as a function of fixation properties.
Newbold D: Assessment of osseous changes following non-surgical periodontal therapy.
McWhorter A: Incidence of dental abnormalities in a population of children with vitamin D resistant rickets.
Orth CF: The prevalence of systemic conditions in a periodontal population as revealed by health histories and routine blood studies.
Cherry TD: Free gingival grafting in conjunction with citric acid demineralization of the root surface to obtain root coverage.
Schmitt JC: A study utilizing a topical gel containing human leukocyte interferon (Hu IFN – alpha) on human subjects with recurrent herpes simplex virus lesions of the perioral area.
Humphries LA: The use of iontophoresis in the topical application of acyclovir to treat recurrent herpes simplex labialis of human subjects.
Chao L-S: Histologic evaluation of autogenous dermal grafts for disc replacement in rabbits.
Fields A: Effects of intra-articular injections of non-steroidal anti-inflammatory drugs on the TMJ.
Lynn DB: Regeneration of Class-II furca defects in mongrel dogs utilizing Gore-Tex membranes.
Creel DC: A histologic evaluation of osseous and soft tissue healing responses to the use of fibrin adhesive in surgical wound closure.
Shih, S: The effects of PDGF-B and IGF-1 on dysplasia included in the hamster buccal cheek pouch.
Lipson, D: Direct immunofluorescence of formalin-fixed oral mucosal biopsies.
Najera, MP: Prevalence of periodontal disease in a cross-sectional group of patients with Sjogren's syndrome.
Douthitt, JC: Guided tissue regeneration as an adjunct to periradicular surgery with buccal bone defect.
Smith, NL: Ferric sulfate pulpotomy technique. A retrospective study.
Thompson KS. Evaluation of an alternative method of hemorrhage control in formocresol pulpotomy.
Strange DM. Formocresol sub-base pulpotomy technique - A retrospective study.
Pontikas A. Incidence of periodontal disease in patients diagnosed with atrophic-erosive lichen planus.
Zurn D. Visible light cured calcium hydroxide vital pulpotomy therapy.
Trimaco M. Periodontal status in patients with benign mucous membrane pemphigoid.
Horn J. The effectiveness of 1% pimecrolimus cream in the treatment of oral erosive lichen planus.
Loftus DR. Assessment of MTA, white MTA, Diaket and Geristore when used as surgical root-end fillings in dogs.
Hsu C. The antimicrobial effectiveness of 0.20% chlorhexidine (water-based) and 0.12% chlorhexidine (alcohol-based) Peridex® against salivary bacteria and periodontal pathogens.
Naidu, A. The effects of bisphosphonates on osteoblasts in vitro.
Roberts J. Indirect pulp treatment versus formocresol pulpotomy for vital pulp therapy of cariously involved primary teeth.
Mehta N. Optical coherence tomography of oral mucosa. University of Texas at Arlington, Department of Bioengineering.
Hutchinson C. Multisurface composite vs. stainless steel crown as a restoration for primary molars treated with MTA pulpotomy.
Howley B. Pulpotomy vs. pulpectomy for carious vital primary incisors. A randomized controlled trial.
Trump B. Periostin and Osterix expression in odontogenic and non-odontogenic bone lesions

c. Predoctoral Dental/Medical (non-degreed) and Professional

Simmons ME. Placebo-controlled, double-blind, randomized trial to determine the effects of CDX 101 on the healing of recurrent aphthous ulcers.
Cooley C. Histological assessment of the reproducibility of the grading scheme of labial salivary gland biopsies used for the diagnosis of Sjogren’s syndrome.
Vallabh J. A study of the oral flora of dentulous patients making the transition to complete dentures. A quantitative study with respect to Candida species.

d. Undergraduate
e. Graduate Student Supervision
f. Supervisor of Practicum
g. Other

8. Graduate Faculty Membership
1999 – Present Graduate School of Biomedical Sciences Texas A&M University System
Health Science Center, Graduate Faculty
1996 – Present Baylor College of Dentistry/Texas A&M University System, Graduate Faculty
1983 – 1997 Baylor University, Waco, Texas
Graduate Faculty

9. Teaching Awards
2011 Nominated Teacher of the Year, Baylor College of Dentistry
2010 Nominated Teacher of the Year, Baylor College of Dentistry.
2009  Nominated and one of four finalists for the TIAA-CREF Distinguished Medical Educator in the state of Texas.
2008  Nominated and a finalist for Teacher of the Year, Baylor College of Dentistry.
2008  Nominated and one of four finalists for the TIAA-CREF Distinguished Medical Educator in the state of Texas.
2007  Nominated and a finalist for Teacher of the Year, Baylor College of Dentistry.
2007  Nominated and one of four finalists for the TIAA-CREF Distinguished Medical Educator in the state of Texas.
2006  Piper Professorship. Prestigious and highly competitive award for teaching excellence among all faculty of institutions of higher learning in the State of Texas.
1990  Teacher of the Year, Baylor College of Dentistry Alumni Association.
May 1984  Certificate of Appreciation. Graduating Dental Class of 1984
1981  Teaching Award Dental Hygiene, Class of 1981, Winter Quarter

10. Academic Counseling
As course director for 8 courses as well as chairing an academic department, I spend considerable time counseling students.

11. Teaching Consultantships
1984 – Present  University of Texas Southwestern Medical School, Department of Oral and Maxillofacial Surgery, Dallas, Texas. Visiting lecturer
1996  Speakers Bureau, Physician Oncology Education Program, Texas Cancer Council
1996  Speakers Bureau, Dental Oncology Education Program, Texas Cancer Council

12. Other Indices of Teaching

F. Research and Scholarly Activities
1. Areas of research and scholarship
My research interests have been primarily involved in odontogenic cysts/tumors, oral cancer/precancer and non-infectious forms of stomatitis. I have defined several new pathologic entities. I have also been involved in numerous clinical trails for therapeutic efficacy of new drugs.

2. Invited Presentations
   See E6

3. Non-invited talks without published abstracts.

4. Grants
   a. Funded
Subjects Receiving Combination Anti-Retroviral Therapy: A Phase 2 Clinical Trial. 2007-09, $29,288.


Simmons, ME, Wright JM (mentor). Placebo-controlled, double-blind, randomized trial to determine the effects of CDX-101 on the healing of recurrent aphthous ulcers. Short term training program in Dental and Craniofacial Research. NIH Training Grant (T35), June 1 – August 31, 2002. $4,539.


Binnie WH, Wright JM, Rees TD, Rankin KV, Stanford TW. A phase 2/3 investigator blind, randomized, parallel group study to determine the effects of amlexanox disc, 2mg on the healing of recurrent aphthous ulcers as compared with vehicle discs or no treatment. Protocol AP-C-9E03. Access Pharmaceuticals, Inc., Dallas, TX, June 2000. $30,000

Cooley C, Wright JM, Al-Hashimi IH. Histological assessment of the reproducibility of the grading scheme of labial salivary gland biopsies used for the diagnosis of Sjogren’s Syndrome. National Institutes of Health T35 Grant. $4,072.

Wright JM, Binnie WH, Cundiff EJ. Assessement of toluidine blue rinse as an aid to clinical exam in the identification of recurrent or secondary primary cancers of the oral cavity and in biopsy site selection in patients with previous oral/oropharyngeal and other upper aerodigestive tract squamous cell carcinoma. Protocol 2P-44389-01, Zila Pharmaceuticals, Inc., contract to provide oral pathology laboratory services. February 1, 1999.


Binnie WH, Rees TD, Plemons JM, Rankin KV, Wright JM. AIDS Regional Education Training Center. Univ Texas Houston School of Public Health. July, 1997 - June, 1998. $15,000


Plemons JM, Rees TD, Binnie WH, Rankin KV, Wright JM. A dose ranging study to evaluate the local effects of various dosage regimens of beclomethasone dipropionate on recurrent aphthous ulcers versus Kenalog7 in Orabase7. Protocol C-94-054-03. Alza Corporation, Palo Alto, California, October - December, 1995. $23,800

Binnie WH, Rees TD, Plemons JM, Rankin KV, Wright JM. AIDS Regional Education Training Center. Univ Texas Houston School of Public Health. July, 1995 - June, 1996. $18,000


Binnie WH, Rees TD, Plemons JM, Rankin KV, Wright JM. AIDS Regional Education

Binnie WH, Wright JM, Rees TD, Plemons J, Rankin KV. A phase I open label study to determine peak serum levels of amlexanox and its major metabolite after a single dose and 7 days of dosing with amlexanox paste for the treatment of minor aphthous ulcers. Chemex Pharmaceuticals, Fort Lee, NJ. August - December, 1993. $20,400


Binnie WH, Wright JM, Rees TD. A double-blind, vehicle-controlled, dose titration study to evaluate the tolerance and efficacy of topically applied 1% and 5% amlexanox in the treatment of aphthous ulcers. Chemex Pharmaceuticals, Inc. August, 1991. $23,000

Miller EG, Rivera-Hidalgo F, Wright JM, Binnie WH, Gibson WA. A research initiative on the cancer chemopreventative agents in green coffee beans: Effects on DMBA-induced precancerous and cancerous lesions. The Hillcrest Foundation. March 1988-92. $64,000


Binnie WH, Rankin KV, Wright JM. A proposal to maintain and expand an oral disease registry. The Leonhardt Foundation, New York City, January 1, 1984 - December 31, 1986. $46,269

Formby, WA, Miller E, Rivera H, Wright J. Effects of green coffee beans on 7,12 dimethylbenz (a) anthracene (DMBA) - induced oral cancers. Student Summer Research Fellowship. June - August, 1986. $2,000


Flint D, Wright JM. A comparison of herpes simplex virus excretion in asymptomatic patients
with and without previous recurrent herpetic infections. Student Summer Research Fellowship. June - August, 1985. $2,000


b. Pending
c. Not Funded


5. Manuscript Review

a. Journals Refereed

Ad hoc reviewer
Cleft Palate – Craniofac J
Am J Clin Dermatol
J Amer Dent Assoc
J Prosthodontics
Critical Reviews in Oral Biology and Medicine
Oral Oncology
Oral Surgery
Pediatric Infectious Diseases
J Oral Maxillofac Pathol
Head and Neck Pathology
Case Reports in Medicine
Head and Face Medicine

b. Editorial Boards

2006 Oral Diseases
1999 Editorial Board for Pathology Case of the Month, Texas Dental Journal
1996 - 2004 Editorial Board, Quintessence International
1994 -99 Editorial Board, Advances in Anatomic Pathology

c. Editorship

6. Grant Reviews

a. Study Section, Review Panel, Special Emphasis Panel

b. Ad hoc

1991 American Fund for Dental Health, Grant Reviewer

7. Professional and Scholarly Societies

2005 – Present North Texas Society of Pathology
2002 - Present Fellowship, International College of Dentists
1997 - Present North American Society for Head and Neck Pathology
1992 - 1998 American Association of Bioanalysts
1995 - Present Fellowship, American College of Dentists
1988 - Present American Association for Dental Research
1988 - Present International Association for Dental Research
1987 - Present American Dental Education Association
1986 - Present  International Association for Dental Research,  
               Dallas Section  
1984 – Present  Faculty Membership, Omicron Kappa Upsilon, Omicron Chapter  
1983 - Present  International Association of Oral Pathologists  
1980 - Present  Dallas County Dental Society  
1980 - Present  Texas Dental Association  
1980 - Present  American Dental Association  
1979 - 80      Cytology Society of Indiana  
1979 – 80      Indiana Association of Pathologists  

8. Contribution to professional organizations  
1975 - Present  American Academy of Oral and Maxillofacial Pathology  
               Ad hoc committee to adjudicate ethics complaint 2010-2011 (chair - appointed by President)  
               Ad hoc committee for the Cawson Award 2006 (chair)  
               Immediate Past President 2000-2001  
               President 1999-2000 (elected)  
               President-Elect 1998-1999 (elected)  
               Vice President, 1997-1998 (elected)  
               Secretary-Treasurer, 1991-94 (elected)  
               1994-97 (elected)  
               Executive Council, 1987-90 (elected)  
               1991-94  
               1994-97  
               1997-01  
               2009-10 (ABOMP Liason)  
               Nominations Committee 2000-02  
               2001-02 (Chair)  
               Long Range Planning Committee 2000-02  
               2001-02 (Chair)  
               Program Committee 1991-94  
               1994-97  
               1997-99  
               2000, Chair  
               Finance Committee 1991-94 ex-officio  
               1994-97 ex-officio  
               Ad hoc Committee chair,  
               Report on Specialty Education and Practice to ADA Council on Dental Education and Licensure  
               Local Arrangements 1998  
               Chair  
               Promotional Brochure Committee 1999-2000  
               Fellowship, 1978  
2003 - 10  American Board of Oral and Maxillofacial Pathology
2003-10 (elected) Director
2008-09 (elected) Vice President
2009-10 (elected) President
2004-05, 06-07 Credentials Committee
2004-05, 06-07, 08-09, 09-10 Test Construction Committee

1983 - Present

International Association of Oral Pathologists
1983-present Member
2004-08 (elected) Councillor, North America
2006-08 (elected) President-Elect
2006-08, 2008-10 Scientific Program Committee
2008-10 (elected) President
2010-12 Immediate Past President
2010, 2012 Cawson Award Committee
2010 Best Poster Award Committee
2010 Best Oral Presentation Award Committee
2010 Travel Award Committee
2010, 2012 Nomination Committee
2012 (Chair)

2004 – 05
Dallas County Dental Society
Membership Development Committee

9. Participation on national or regional board examination, certification, or accreditation committee

2010
External Examiner, Department of Periodontics and Oral Medicine, University of Michigan School of Dentistry

2006 – 2010
Commission on Dental Accreditation, American Dental Association
Commissioner, 2006-2010
Chair, Review Committee on Oral and Maxillofacial Pathology
Finance Committee, 2006, 2007
Ad hoc committee on advanced education programs in orofacial pain, 2007
Documentation Committee, 2007
Task Force on Specialty Standards – Proficiency/Competency, 2007, 08, 09, 10
Task Force on Communication, Chair, 2010

1980 – Present
American Board of Oral & Maxillofacial Pathology
Board Certification
Director (elected) 2003 – 2010
President 2009-10

2002 - Present
Consultant, American Dental Association, Commission on Dental Accreditation for Advanced Education Program in Oral and Maxillofacial Pathology

1996
External Examiner, Canadian Royal College of Dentists,
Specialty of Oral and Maxillofacial Pathology

10. Meeting where chaired session

Aug 18, 2010  Symposium on Diagnostic Oral and Maxillofacial Molecular Pathology by Drs. Sakamoto and Li. 15th Biennial Congress of Oral Pathology and Medicine, Seoul, Korea.

Aug 18, 2010  Keynote lecture on Salivary Diagnostics by Dr. David Wong. 15th Biennial Congress of Oral Pathology and Medicine, Seoul, Korea.

Aug 17, 2010  Symposium on Salivary Gland Pathology, the spectrum by Dr. Gary Ellis. 15th Biennial Congress of Oral Pathology and Medicine, Seoul, Korea.


June 25, 2006  Chair, Clinicopathologic Conference, International Association of Oral Pathologists, Brisbane, Australia.

June 7, 1999  Chair, Essay Program and Moderator, Program I. American Academy of Oral and Maxillofacial Pathology, Mauni Lahu, Hawaii (approximately 100 attendees).


May 5, 1998  Chair, Essay Program II, American Academy of Oral and Maxillofacial Pathology, Dallas, Texas (approximately 100 attendees).

July 24, 1996  Chairman, Plenary session on fibro-osseous lesions and moderator, slide seminar. International Association of Oral Pathologists, Toronto, Canada (approximately 200 attendees).

11. Programs and symposiums you organized

August 2012  Moderator, Clinicopathologic Conference, IAOP 16th International Symposium on Oral Medicine and Pathology, Sao Pedro, Brazil

August 2010  Chair, Program and Scientific Advisory Committee, 15th International Congress of Oral Pathology and Medicine. Seoul, South Korea.


May 2000  Chaired the Program Committee for the annual meeting of the American Academy of Oral and Maxillofacial Pathology. Williamsburg, VA (approximately 300 attendees).

June 7, 1999  Chair, Essay Program and Moderator, Program I. American Academy of Oral and Maxillofacial Pathology, Mauni Lahu, Hawaii (approximately 100 attendees).

12.  **Awards**

2012  Honorary Life Membership in the British Society for Oral and Maxillofacial Pathology. For a lifetime contribution and service to the profession of oral and Maxillofacial pathology
2010  Professional Service Excellence Award. TAMHSC Baylor College of Dentistry.
2006  Piper Professor. The Minnie Stevens Piper Foundation established the Piper Professor Awards Program in 1958. The highly competitive award acknowledges excellence and dedication to teaching from all faculty of institutions of higher learning in the State of Texas.
2006  Regents Professor, Texas A&M University System Board of Regents Award
2003  Distinguished Alumnus Award, West Virginia University School of Dentistry
2002 – Present  Fellowship, International College of Dentists
1995 – Present  Fellowship, American College of Dentists

13.  **Other Indices of Scholarly Performance**

G.  **Professional Service**

1.  **Education for public school students on health promotion and disease prevention**
2.  **Career counseling and encouragement of young people to enter health professions**
3.  **Continuing education services to help professionals in the community**
   See E6.
4.  **Advice to community organizations and agencies on health related matters**
   1984-1986  Community Advisory Council, Hospice Care, Inc., Dallas, Texas
   1983  Dental Committee, American Cancer Society, Texas Division, Inc., Dallas Central Unit, Dallas, Texas
5.  **Advice and consultation to health professionals in the community on enhancement of quality, efficiency, and delivery of health services**
   2000  International Oral Lichen Planus Online Support Group
   1998  “Ask the Dentist” Baylor College of Dentistry, TAMUS web site
   1998 – Present  Consultant.  ProPath Services, Dallas, Texas
6.  **Collaboration with local, regional, and state public health agencies**
7.  **Dissemination of research information to the appropriate public sectors**
   2013  TAMHSC Baylor College of Dentistry Webcast. HPV and Oral Cancer
8.  **General advice, consultation, and service to community organizations and agencies**
   2003  Dental Healthcheck interview on aphthous ulcers.  WFAA TV
   1999  Dental Healthcheck interview on Oral CDX.  WFAA TV
   1997  Dental Healthcheck interview on allergic stomatitis.  WFAA TV
9.  **Consultantship to industry related to research, health care, or product development**
   1997  Expert witness.  Testimony at FDA on behalf of Zila, Inc.
10.  **Participation in health events**
11.  **Outreach programs for college students**
   2003-  Summer Pre-Dental Enrichment Program for college students
12.  **Outreach programs for high school, junior high school, and elementary school students**
   2003-  Summer Pre-Dental Enrichment Program for high school students
13.  **Awards**
14. Other Indices of Professional Service
15. Contribution to professional organizations (e.g. committee and offices held) – do not place here, rather include in same category under Research/Scholarship Activities.
16. Manuscript Review (Journals Refereed, Editorial Boards, Editorship) - do not place here, rather include in same category under Research/Scholarship Activities.
17. Grant Reviews (Study Section, Review Panel, Special Emphasis Panel, Ad hoc) - do not place here, rather include in same category under Research/Scholarship Activities
18. Participation on national or regional board examination, certification, or accreditation committee - do not place here, rather include in same category under Research/Scholarship Activities
19. Consultant to accrediting and other educational review boards, industry, health care - do not place here, rather include in same category under Institutional Service to the HSC.

H. Institutional Service to the HSC
1. Component Committee

2013 Restorative Sciences, APT Dept Review Committee; 1 for promotion, 1 for Post-tenure review
2012 Strategic Planning Task Force 2013-18
2009-11 CODA Committee on Standard 3, Faculty and Staff
2009-11 CODA Committee on Standard 2, Biomedical Sciences
2007-08 Search Committee, Chair of Periodontics
2006-present Administrative Council
2005 Strategic Planning Task Force 2005-2012
2003-06 Appointment, Promotion and Tenure Committee (Dean’s appointment)
03-04 Chair (Elected)
04-05 Chair (Elected)
05-06 Chair (Elected)
2003 Focus Group, Strengths and Weaknesses of Research Programs and Infrastructure at Baylor College of Dentistry.
2002-04 Chair, Steering Committee for Accreditation of Advanced Education Programs. American Dental Association. Commission on Dental Accreditation.
2002 Chair, Task Force, Evaluation of Clinical Faculty in Advanced Education Programs.
2002 Health Insurance Portability and Accountability Act (HIPPA) Compliance Committee.
2000-03 Appointment, Promotion and Tenure Committee (Dean's appointment)
01-02, Chair (elected)
02-03, Chair (elected)
2000-03 Committee on Committees (elected)
2000-01 Southern Association of Colleges and Schools, Accreditation, Faculty Self Study
2000-01 Chair, Advanced Education Council. Transition of advanced education programs from quarter to semester system.

1999 Chair, Search Committee - Dean, Baylor College of Dentistry, Texas A&M University System Health Science Center.
1999 Internal Review Committee for promotion of Dr. Robert Cederberg
1999 Hall of Fame and Honorary Degree Committee
1998-2000 Search Committee - Associate Dean for Academic Planning and Development
1998 - 1999 Curriculum Review: Basic sciences preparatory team
1998 - 1999 Streamlining the curriculum task force
1996 - 1997 Curriculum Review Team, Group 3
1996 Accreditation Standard Task Force, Chair
1996 - 1999 Appointment, Promotion and Tenure Committee (Dean's appointment)

1996 - Present Advanced Education Council
1995 - 1997 Steering Committee, Accreditation and Self Study
1994-1995 Administrative Transition Team (elected)
1993-1994 Administrative Council
1993 Omicron Chapter, OKU Membership Committee, Chair
1993 Academic Planning/Problem Solving Team
1992 - 1995 Student Promotions Committee, Chair
1991 - 1994 Committee on Committees (elected)
1990 - 1993 Admissions Committee, Graduate
1990 - 1992 Task Force on Minority Recruitment
1990 - 1991 Periodontic Graduate Program, Self Study
1990 - 1991 Endodontic Graduate Program, Self Study
1988 - 1991 Director, Student Recruitment
1987 - 1990 Tenure and Promotion Committee
1989 - 1992 ADA, AADS SELECT Coordinator
1989 - 1995 ADA National Board Administrator
1989 Search Committee. President and Dean
1989 Ad hoc Committee on Research Histology
1989 Ad hoc Committee on Cancer Education
1988 - 1991 Student Clinic Day, Table Clinic Judge
1987 Omicron Kappa Upsilon, Omicron Chapter, Nomination Committee
1987 Chairman, Subcommittee on Student Affairs and Admissions, Ad hoc Committee on ADA Accreditation
1987 Chairman, Task Force on Student Recruitment
1986 - 1987 Student Awards Committee (Chairman - 1987)
1986 Search Committee. Chairman, Department of Orthodontics
1985 - 1986 Ad hoc Committee: Academic Standards
1985 - 1986 Search Committee. Assistant Dean for Research and Graduate Studies
1982 - 1986 Admissions Committee, Dental ('86 - Vice Chairman)
1984 Search Committee. Chairman, Department of Oral and Maxillofacial Surgery
1981 - 1982 Substitute: Admissions Committee
1981 Ad hoc Committee: Procedural Due Process
1978 - 1980 Academic Standards Committee
1978 - 1980 Admissions Committee
1978 - 1979 Indiana University, Purdue University at Indianapolis Faculty Council,
Unit Representative, Dental School
1978 Chairman, Evaluating Team, Group 3, Fourteenth Annual Indiana University
School of Dentistry Teaching Conference
1974 - 1975 Exhibits Committee

2. Other Component Service

3. HSC Committees
2012-14 Appointment Promotion and Tenure Committee (elected)
   2012 Chair (elected)
   2013 Chair (elected)
2009 – 2012 Appointment Promotion and Tenure Committee (elected).
   Interim Chair – 2011-12.
2006 – 2009 Appointment, Promotion and Tenure Committee (elected)
2006 Ad hoc committee on Distance Education
2005 Pathways to Excellence 2015. Strategic Planning Task Force for Expansion and
Partnerships.
2002 – 2005 Vice Chair, Committee on Academic Freedom, Ethics, Responsibility, Rights and
Tenure, Texas A&M University System Health Science Center.
2000-01 Search committee, President and Vice Chancellor of Health Affairs, Texas A&M
University System Health Science Center, Baylor College of Dentistry
Representative (elected)

4. Other HSC Service
5. Texas A&M University System Committees
6. Other Texas A&M University System Service
7. Patient Care
8. Consultant to accrediting and other educational review boards, industry, health
care
   2002 Consultant, American Dental Association, Commission on Dental Accreditation,
Advanced Education Programs in Oral and Maxillofacial Pathology
9. Outreach programs for college students
   2003 Summer Pre-Dental Enrichment Program for College Students.
10. Outreach programs for high school, junior high school, and elementary school
    students
    2003 Summer Pre-Dental Enrichment Program for High School Students.
11. Awards
12. Other Indices of Service
   I. Patents or Commercialization of Research
   1. Invention disclosures
   2. Patent applications pending
   3. Licensing of technology
   4. Collaboration with other faculty, leading to product development/licensing and
commercialization
   J. Publications
1. Refereed Papers


18. Neupert EA, Wright JM. Odontodisplasia regional que se presenta como una


2. Non-refereed Papers


3. Review Articles

4. Abstracts
32. Cheng YSL, Ren J, Wright JM, Feng J. Expression of osterix and periostinin in cemento-osseous dysplasia as evidence for it PDL origin. Presented at the annual meeting of the AAOMP in Minneapolis, MN www.aaomp.org 2012
25. Wright JM, Chang J, Binnie W, Kessler H. Juvenile inflammatory papillary gingival hyperplasia – a new entity. Presented at the annual meeting of the


5. **Books Authored**

6. **Book Chapters**


7. Books Edited

8. Manuscripts Already Submitted

9. Table Clinics


1988  Oral manifestations of human immunodeficiency virus infection. Dallas County Dental Society Mid-Winter meeting. Dallas, Texas (with Drs. B. Dean, D. Rogers, T. Rees and W. Binnie).
1988  Green coffee bean's effects on oral carcinogenesis in the hamster. Dallas County Dental Society Mid-Winter meeting. Dallas, Texas (with Walter Formby and Drs. Ed Miller and F. Rivera-Hidalgo).
1986  A comparison of herpes simplex virus excretion in asymptomatic patients with and without previous recurrent herpetic infections. Dallas County Dental Society Mid-Winter meeting. Dallas, Texas (with Diane Flint). Awarded honorable mention.
1982  Premalignant oral lesions. Texas Dental Association annual meeting. San Antonio, Texas (with Dr. William H. Binnie).

Revised 03/18/2013
Appendix D

Five-Year Faculty Recruitment Plan/ Hiring Schedule
Appendix D

Five-Year Faculty Recruitment Plan/ Hiring Schedule
Five-Year Faculty Recruitment Plan/Hiring Schedule

The purpose of this proposal is to change our Ph.D. from Biomedical Sciences CIP back to the Oral Biology CIP 51.1399.50 as the latter is much more descriptive of our Ph.D. program. The current Ph.D. program at Texas A&M Baylor College of Dentistry (TAMBCD) was first created in the 1960’s in association with Baylor University. In the 1960’s-1980’s, Ph.D. degrees were awarded in Anatomy, Biochemistry, Microbiology, Pharmacology and Physiology. The Ph.D. program was restructured in 1993 into a single program with an Oral Biology CIP 51.1399.50 with the focus areas of Biomedical Sciences, Craniofacial Biology and Stomatology. In 1996, Baylor College of Dentistry (BCD) became a free-standing member of the Texas A&M University System (TAMUS), and the College offered Ph.D. (CIP 51.1399.50) and M.S. degrees in Dentistry, Anatomy, Biochemistry, Microbiology, Pharmacology and Physiology. TAMUS incorporated TAMUS-BCD into the Texas A&M Health Science Center (TAMHSC) in 1998, and the TAMUS-BCD Craniofacial Biology Ph.D. program was designated by the TAMHSC as the “Biomedical Sciences Ph.D. Program” (after the year 2000, the CIP changed to 26.0102.00).

The faculty members of TAMBCD have taught the Ph.D. students since the inception of degree in the 1960s and there are presently 21 faculty members that are in the Core Faculty and 15 members of the Support Faculty. Therefore, the faculty members are already in place to teach the Ph.D. students. The Department of Biomedical Sciences has two active searches underway and has made two offers. One candidate is NIH R01 funded with a research interest in bone biology and stem cells. The second candidate is a neurophysiologist who is also NIH R01 funded with a research interest in pain. These two individuals will complement the College’s strong research programs in these areas. Over the next five years we would anticipate that two or three other faculty positions would become vacant due to retirements and at that time searchers will be made to replace these individuals with top researchers.
Appendix E

Institution’s Policy on Faculty Teaching Load
Appendix E

Institution’s Policy on Faculty Teaching Load
Faculty are expected to function in the areas below as assigned by each component:

1. **SCHOLARLY ACTIVITY**

   This has two forms:

   1.1. the compilation, synthesis, and transmission of current knowledge

   1.2. the generation of new knowledge through original research, publication of the findings and technology commercialization. Typically, peer review is the most rigorous standard for publications. In addition, publications can be evaluated with regard to their impact and dissemination, e.g. local vs. regional vs. national/international.

2. **EDUCATIONAL ACTIVITIES**

   The criteria for effectiveness that shall be considered in evaluating educational performance are teaching qualities, educational innovation, impact upon students, and degree of teaching responsibility. Evaluation of teaching shall include qualitative and quantitative measurement from multiple sources. Appropriate input from students, peers, department chairs, and other sources help maximize the validity of the value judgment that must be made.

2.1. Teaching Load

   2.1.1. Each full-time person employed from instructional funds by the Texas A&M University System Health Science Center (HSC) is expected to teach classes and to assume a reasonable workload of related activities that constitute a full-time load. Clinical faculty instruction of students, residents, and fellows is considered instructional activity, distinct from clinical care. Likewise, faculty advising graduate students, postdoctoral fellows and residents in research is considered instructional activity, distinct from an individual faculty member’s research. Persons employed on a part-time basis from instructional funds are expected to assume a workload proportionate to the percentage of employment on these funds.

   2.1.2. The nature of full-time teaching load will vary within components of the HSC because of differences in component missions, the nature of the instructional programs, clinical service requirements, and research activities. In all
components, faculty members are expected to engage in those commonly accepted duties that will enhance the teaching/learning process and the quality of the institution’s programs. Recognized duties include classroom teaching; scholarly study, e.g., basic and applied teaching research, peer reviewed teaching publication, national talks/presentations on teaching, etc.; clinical service involving teaching; professional development; student advising and counseling; course and curriculum development; continuing education instruction; public service teaching; assistance in the administration of the academic program; and similar academic activities. These duties are inherent in the life and work of a faculty member and are taken into account in considerations for promotion, tenure, and salary.

2.2. Evaluation of Teaching Loads

2.2.1. Each HSC component is responsible for maintaining the integrity and accreditation of the educational programs under its authority. It is the responsibility of the head of each component to ensure that administrative practices exist for making maximum use of the institution’s educational resources to achieve this responsibility. Through delegation of authority by the President, via the component head, each department chair has the primary responsibility of establishing and evaluating the teaching load for each faculty member of the department. Teaching responsibilities for an individual member may vary from year to year. The department chair, in collaboration with the component head or the designated chief academic officer of the component should provide sufficient faculty teaching resources to meet the curricular needs of the academic program.

2.2.2. Teaching excellence includes some degree of innovative effort. Innovations in teaching must accomplish more than mere change. Rather, new methods should demonstrate measurable advantage over those previously used.

2.2.3. A positive impact of teaching on students should be the primary educational goal of each faculty member. Increased knowledge, skills, professional attitudes and values result from effective instruction. The ultimate outcome of effective teaching is students achieving competency.

2.3. Minimum Teaching Load Standards

2.3.1. Each HSC component will establish standards for teaching loads to meet the instructional obligations of the component and its students consistent with standards issued by the Texas Higher Education Coordinating Board in order to operate efficiently within the range of resources available to the institution.

3. INSTITUTIONAL SERVICE

Institutional service is related to those activities that pertain to an individual’s role as a member of the faculty of the HSC and as a member of a professional discipline (e.g., participation in departmental, component, HSC, or System committees, representing the
institution in professional organizations, and other activities that do not involve an official faculty role in teaching, research, or professional service).

All faculty members must share in the work necessary to maintain the operation of the HSC/component and are expected to contribute to the growth of the HSC/component through efforts that are aimed at improving programs and services.

Clinical faculty members are expected to provide exemplary patient care that is respected by patients and peers both within the HSC and in the professional community.

4. PROFESSIONAL SERVICE ACTIVITIES

The HSC, consistent with tradition and history of the land grant university, provides professional service to the community in many ways. Faculty members should contribute to the maintenance and growth of their profession both locally and/or nationally/internationally. The State of Texas, the profession, and the general public depend on the HSC for assistance in maintaining state of the art practice in health care delivery and public health practice.

1Texas Higher Education Coordinating Board Rule §5.46 Criteria for New Doctoral Programs (5) Teaching Loads of Faculty. Teaching loads of faculty in doctoral programs should not exceed two or three courses per term, and it must be recognized that some of these shall be advanced courses and seminars with low enrollments.

OFFICE OF RESPONSIBILITY

Vice President for Academic Affairs
Appendix F

Itemized List of Capital Equipment Purchases during the Past Five Years
Appendix F

Itemized List of Capital Equipment Purchases During the Past Five Years

Purchased within last 5 years - FY2009-2013
<table>
<thead>
<tr>
<th>Description</th>
<th>Acq Date</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANIMAL CAGE, RODENT RACK 60</td>
<td>10/16/2008</td>
<td>$8,006.81</td>
</tr>
<tr>
<td>ANIMAL CAGE, RODENT RACK 60</td>
<td>10/16/2008</td>
<td>$8,006.81</td>
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<tr>
<td>MICROSCOPE ACCESSORY KIT FROM RF</td>
<td>12/8/2008</td>
<td>$40,000.00</td>
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<tr>
<td>BLOOD-PRESSURE SYSTEM, NON-INVASIVE</td>
<td>12/17/2008</td>
<td>$6,675.00</td>
</tr>
<tr>
<td>THERMAL IMAGER, FLUKE</td>
<td>1/5/2009</td>
<td>$6,609.00</td>
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<tr>
<td>DIGITAL CAMERA WITH SOFTWARE</td>
<td>4/9/2009</td>
<td>$8,417.70</td>
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<tr>
<td>FREEZER, UPRIGHT ULTRA-LOW TEMP</td>
<td>7/15/2009</td>
<td>$7,658.00</td>
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<tr>
<td>MICROWAVE SYSTEM, (DEMO) PELCO</td>
<td>7/15/2009</td>
<td>$19,049.03</td>
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<tr>
<td>OPTI-GRID PADDLE UPGRADE</td>
<td>7/22/2009</td>
<td>$48,785.20</td>
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<td>CENTRIFUGE, MICRO, Z300K BUNDLE</td>
<td>8/5/2009</td>
<td>$5,895.00</td>
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<td>MICROPLATE READER, DEMO FLUOSTAR</td>
<td>8/31/2009</td>
<td>$18,990.00</td>
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<td>ANIMAL CAGE, TECNIPLAST BOX110SS</td>
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<td>LEICA RM2125 CONFIGURATION 2</td>
<td>10/5/2009</td>
<td>$7,441.44</td>
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<tr>
<td>SURGERY WORKSTATION, #31-60-BD(VENT)</td>
<td>11/23/2009</td>
<td>$8,163.00</td>
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<tr>
<td>CHROMATOGRAPHY SYSTEM, (S)AKTA-</td>
<td>11/30/2009</td>
<td>$14,959.65</td>
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<tr>
<td>OCTET QK SYSTEM, REFURBISHED</td>
<td>2/5/2010</td>
<td>$50,316.14</td>
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<tr>
<td>CONFOCAL MICROSCOPE-SCANNER STAGES FOR STITCHING (MOTORIZED)</td>
<td>2/15/2010</td>
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<tr>
<td>MICROSCOPE, OLYMPUS TRINOCULAR</td>
<td>3/16/2010</td>
<td>$10,999.00</td>
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<tr>
<td>DETECTION SYSTEM, REAL TIME CFX96</td>
<td>4/6/2010</td>
<td>$25,284.10</td>
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<tr>
<td>THERMAL CYCLER, C1000, DETECTION SYS, REAL TIME CFX96</td>
<td>4/6/2010</td>
<td>$25,284.10</td>
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<tr>
<td>MICROSCOPE, OLYMPUS STEREOMICROSCOP</td>
<td>4/9/2010</td>
<td>$8,886.60</td>
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<td>RADIOGRAPHY SYSTEM, DIGITAL</td>
<td>6/3/2010</td>
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<td>LASER SCANNER, 3D INCLUDING 3-D</td>
<td>6/23/2010</td>
<td>$9,200.00</td>
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<tr>
<td>SCANCO µCT DISK TOWER; 2X EXTERNAL (MSA30) EACH W/ 14 X 300 GB SCS</td>
<td>8/20/2010</td>
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<td>WORKSTATION, DELL PRECISION T7500,</td>
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<td>LUMINOMETER, GLOMAX(R) 96</td>
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<td>$13,867.10</td>
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<tr>
<td>THERMOCYCLER, MASTERCYCLER PRO AND</td>
<td>10/18/2010</td>
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<tr>
<td>MICROSCOPE, LEICA TSC SP5 FIXED</td>
<td>10/20/2010</td>
<td>$496,414.00</td>
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<td>CAGE, BIOMEDIC STAINLESS W/WATER SY</td>
<td>12/8/2010</td>
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<td>FREEZE DRYER, SYSTEM FREEZONE+ 2.5L</td>
<td>1/28/2011</td>
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<tr>
<td>DETECTOR, DAD3000 ULTIMATE DIODE</td>
<td>6/14/2011</td>
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<td>PYCNOMETER, MICRO-ULTRAPYC 1200E</td>
<td>6/28/2011</td>
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<td>SHAKER, EXCELLA E-24R 120V 60HZ,</td>
<td>8/3/2011</td>
<td>$6,917.20</td>
</tr>
<tr>
<td>Description</td>
<td>Date</td>
<td>Cost</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
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<tr>
<td>TISSUE EMBEDDER, TISSUE TEK</td>
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<td>$10,593.80</td>
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<tr>
<td>CAMERA SYS, SKY-EYE, MARK8, W/ ATT-COMP</td>
<td>12/14/11</td>
<td>$35,000.00</td>
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<td>SMALL ANIMAL CAGE, LAB PRODUCTS</td>
<td>3/27/12</td>
<td>$7,339.00</td>
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<td>ROBOCAST ASSISTED DEPOSITION SYSTEM AGS1000 SERIES LINEAR MOTOR GANTRY</td>
<td>3/28/12</td>
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<td>HPLC SYSTEM, CHROMELEON 7 INCLUDES DELL 790 COMPUTER-B35GLS1</td>
<td>5/7/12</td>
<td>$9,700.40</td>
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<td>SPECTROMETER, IS10 CAP PROMO, ITR DIAMOND AND SPECTA STANDARD BUNDLE</td>
<td>5/22/12</td>
<td>$29,556.33</td>
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<td>DIGITAL CAMERA, OLYMPUS DP26-CU</td>
<td>11/19/12</td>
<td>$7,072.20</td>
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<td>CENTRIFUGAL MIXER, VACUUM-LESS</td>
<td>1/30/13</td>
<td>$11,400.00</td>
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<tr>
<td>FREEZER, PANASONIC VIP UPRIGHT 18CF</td>
<td>2/1/13</td>
<td>$8,089.00</td>
</tr>
<tr>
<td>MICROSCOPE, JEOL SCANNING ELECTRON, JSM-6010LA</td>
<td>2/11/13</td>
<td>$150,000.00</td>
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<tr>
<td>MICRODISSECTION SYSTEM, LEICA LMD700</td>
<td>8/19/13</td>
<td>$195,660.96</td>
</tr>
<tr>
<td>STEREOTAXIC INSTRUMENT, KOPF 900M</td>
<td>8/26/13</td>
<td>$6,910.16</td>
</tr>
</tbody>
</table>

$1,606,502.23
Appendix G

Librarian’s Statement of Adequate Resources
Appendix G

Librarian’s Statement of Adequate Resources
VI. Required Appendices

G. Librarian’s Statement of Adequate Resources

The Baylor Health Sciences Library offers a full range of services and resources in support of the educational, research and clinical programs of the College. The Library also serves the Baylor Health Care System (BHCS), a not-for-profit network of hospitals, primary care physician centers and practices, rehabilitation clinics, and senior health centers in the North Texas area. The Library receives separate funding from TAMU-BCD and BHCS; as a result, the Library provides a deeper level of resources than would be possible if funded by only one institution.

The Library maintains a dental and medical collection of over 18,000 print volumes, over 9,000 electronic journal subscriptions, and over 100,000 electronic books. The Library is open seven days per week (90 hours). The Library’s electronic resources are available for use anywhere on campus, with easy remote access provided via proxy. All TAMU-BCD faculty and students have access to all library services, including book checkout, interlibrary loan, mediated database searching, and direct checkout privileges at libraries throughout Texas (including all libraries within the Texas A&M University System) via the TexShare program. All libraries serving the HSC collaborate on the licensing of core resources relevant to all components. Further, the libraries within the Texas A&M University System have been very successful in securing System-wide licensing for online resources such as Elsevier’s Science Direct and Web of Knowledge. Additional electronic databases made available through the Library include Dentistry and Oral Sciences Source, MEDLINE, CINAHL, Lexicomp Online for Dentistry, VisualDx, Anatomy TV-Dentistry, ClinicalKey, Epocrates Online Premium, EndNote, Micromedex, Scopus, Exam Master, Cochrane Library, and others. Further information regarding the Library’s collections and services may be found on its website: www.bcd.tamhsc.edu/library.

The Library occupies 3,700 square feet. Study space for 140 people is available. The Library also houses an instructional computer laboratory with 30 PCs available for student use.

The Library staff includes 6 FTE professional librarians and 5.5 FTE support staff. Graduate students attend a mandatory library orientation prior to their first semester of study, where they are given an overview of library services and a tour of the Library. The Library offers a variety of classes throughout the year, as well as one-on-one and small group instruction sessions. The Library maintains a kiosk of tip sheets and electronic tutorials for those who prefer self-directed learning. Librarians regularly teach sections in a variety of TAMU-BCD courses and are frequently enlisted by faculty to work with individuals or classes on research projects. The Library is committed to ensuring that all TAMU-BCD students learn to effectively access information in a variety of formats; this is the core of the Library’s mission and goals.
Appendix H\textsuperscript{1}

Articulation Agreements (if relevant) with Partner Institutions

\textsuperscript{1}There are occasions when our student will take courses at University of Texas at Arlington, University of Texas at Dallas or University of Texas Southwestern Medical School and they do so under an agreement between the Board of Regents of Texas A&M University and the University of Texas.
Appendix H

Articulation Agreements (if relevant) with Partner Institutions

There are occasions when our student will take courses at University of Texas at Arlington, University of Texas at Dallas or University of Texas Southwestern Medical School and they do so under an agreement between the Board of Regents of Texas A&M University and the University of Texas.
JOINT RESOLUTION ON THE COOPERATIVE USE
OF COURSES AND FACILITIES IN GRADUATE EDUCATION BY
THE UNIVERSITY OF TEXAS SYSTEM AND THE TEXAS A&M UNIVERSITY SYSTEM

WHEREAS, the institutions in The University of Texas System and
The Texas A&M University System are the major public institutions in Texas
engaged in research and graduate education; and,

WHEREAS, there is an ever-increasing cost for providing the highest
quality education for graduate students in Texas; and,

WHEREAS, the cost of educating certain special students may be
reduced and the quality of education increased by joint use of unique
graduate educational facilities and courses rather than duplicate the
courses or facilities; and,

WHEREAS, on occasion there are laboratory facilities and/or
graduate level course offerings which are unique to a single institution
and graduate students from another institution who would benefit by the
opportunity to take these courses or do research in the laboratory; and,

WHEREAS, the purpose of such cooperation is to help the graduate
students take advantage of unique educational opportunities with minimum
of bureaucratic paperwork;

NOW, THEREFORE, the members of the Board of Regents of The
University of Texas System and the Board of Regents of The Texas A&M
University System jointly adopt the following:

BE IT RESOLVED that every effort will be made by the institution
to maximize the cooperation between institutions in the interest of
quality graduate education with a minimum of administrative paperwork
involved; and,

BE IT FURTHER RESOLVED, that the following operating guidelines
should apply:

1. A graduate student from one institution may study at a
   cooperating institution in a sister System when there exists
   a unique educational opportunity related to the student's
   program and interest (laboratory or course), but only with
the consent of the instructor or director of the laboratory and when all concerned recognize that it is in the best interest of all parties. Such arrangements are contingent on space being readily available in the laboratory or course.

2. The graduate student will maintain registration only at the home institution. Credit for any course or work taken at an institution in a sister System will be through student registration in an appropriate course at the home institution (such as graduate special problems). The graduate dean of the sister System institution will certify the course grade to the graduate dean of the home institution by letter or on a form adopted for this purpose.

3. Graduate students doing work at a sister System institution will comply with all appropriate rules of the sister institution.

4. Graduate students will pay all applicable fees at the home institution, but none at the cooperating sister System institution. (It is anticipated that the number of students participating in this program will be small and that the paperwork associated with money exchanges will not justify such a practice.)

5. Students on a fellowship or receiving financial assistance at the home institution may continue receiving such assistance, if otherwise appropriate, while doing research in a laboratory or taking courses at a sister System institution, but will not at the same time receive financial support from the sister System institution. The cooperating sister System institution assumes no financial responsibility for the student.

6. Other operating details which may be needed will be worked out within these guidelines by the graduate deans of the individual cooperating institutions with the approval of the presidents of the institutions concerned.
Executed in duplicate originals, this _____ day of ________ , 1979.

E. D. Walker
Chancellor
The University of Texas System

Clyde H. Wells
Acting Chancellor
The Texas A&M University System

Certificates of Approval

I hereby certify that the foregoing agreement was approved by the Board of Regents of The University of Texas System on 26th day of July, 1979.

BETTY ANNE THEOFY
Secretary, Board of Regents
The University of Texas System

I hereby certify that the foregoing agreement was approved by the Board of Regents of The Texas A&M University System on 26th day of July, 1979.

BETTY ANNE THEOFY
Secretary, Board of Regents
The Texas A&M University System
Appendix I

Action Plan for Improving Undergraduate Success Measures
(if relevant)
Appendix I

Action Plan for Improving Undergraduate Success Measures
(if relevant)
No action plan is required.