Preface

Welcome to the University of Michigan, School of Dentistry, Oral Health Sciences PhD Program, a program of the Horace H. Rackham School of Graduate Studies.

In compiling this handbook, the OHS Program acknowledges the use and derivation of policies and guidelines from other PhD handbooks and the University of Michigan, the Rackham Graduate Student Handbook and Rackham Graduate School Policies and the Standard Practice Guide of the University.

This handbook is updated annually for reference by students and faculty members in the Oral Health Sciences Program. The policies and procedures are subject to change when indicated and may be superseded by action of the Program Committee and Director on behalf of the Program Faculty. When such changes occur, updates are announced through memos to students and faculty members. Students in the Oral Health Sciences PhD program are expected to be familiar with, and abide by, policies and degree requirements of the Program and of the Rackham School of Graduate Studies.

The OHS Handbook and forms can be accessed at the School of Dentistry MiTools website under the category of “Academic” –“Resources” (http://mitools.dent.umich.edu)

Additional references that contain policies for the OHS PhD Program include: Rackham Graduate School Academic Policies (http://www.rackham.umich.edu/policies/article/gsh/)

Please contact the Oral Health Sciences PhD Program for additional information (734) 615-1970 or ohsphd@umich.edu.
1. The PhD Degree and Participation in the Oral Health Sciences PhD Program
2. Oral Health Sciences PhD Program Basic Information: Getting Started & Useful Resources
3. PhD Program in Oral Health Sciences (Mission, Rationale, Curriculum, Cognate Courses)
4. Research Rotations
5. Oral Health Sciences Journal Club and Seminar Series (ORALHEAL 811)
6. DDS / Oral Health Sciences PhD — Dual Degree Program
   - Introduction
   - Summary and Rationale
   - Working Outline for Dual Degree Curriculum
   - Didactic Curriculum Model
7. Academic Progression
8. Curriculum Vitae & Biosketch Examples
9. Preliminary Examination Guidelines
10. Recommendation for Advancement to Candidacy
11. Dissertation Committee Guidelines
12. Dissertation Timeline: Completion Deadlines, Commencement Participation
13. Participation in Other Academic Activities Policies
14. Vacation and Absences Policy
   - Instructions for Filling out MiTools Online Form
15. Conflict of Interest / Conflict of Commitment Policy
   - Conflict of Interest / Conflict of Commitment: Definition and Procedures
   - Conflict of Interest / Conflict of Commitment Disclosure Form
16. Policies Every Graduate Student Should Know
17. Research Regulatory and Compliance Guidelines / Lab Safety / Research Training
18. OHS Program Contact Information / OHS Program Graduates
19. Michigan Oral Health Sciences Student Association (MOHSSA)
OHS Student Photo Composite

2012 Forms
A. Program Planning
B. Program Planning (Interactive)
C. Rotation Evaluation
D. Review of Progress and Checklists
E. Dissertation Committee Meeting
F. Doctoral Degree Deadlines
G. Conflict of Interest/Conflict of Commitment Disclosure
THE PhD DEGREE
and
YOUR COMMITMENT TO PARTICIPATION IN
THE ORAL HEALTH SCIENCES PhD PROGRAM AND
ORAL HEALTH SCIENCES DUAL DEGREE PROGRAMS

The PhD Degree
The Doctor of Philosophy degree, PhD, is the highest attainable academic degree and is awarded by universities. Indeed it is the PhD degree that prepares individuals for academic positions in universities to teach at an advanced level and conduct research. Achieving the PhD requires deep mastery of knowledge in a particular content area and expanding the body of knowledge in that area. The latter is accomplished through original research. For degree completion, the PhD student’s original research must be written in a dissertation, presented orally in a University - wide forum to faculty members and students, and defended.

In Oral Health Sciences students will master advanced knowledge about specific tissues, cells and molecules of the orofacial complex and will conduct original research on problems related to oral health and disease. Training in the Oral Health Sciences Program provides students with access to deep mastery of knowledge through graduate courses and seminars across the University. Attending scientific meetings in a discipline expands on course work and enables focused time to encounter the newest thinking in a field and current results from leading research groups. Training for success in original research comes through research rotations, precandidate research, dissertation research, and interactions with faculty advisors and mentors throughout all stages in the Program.

Characteristics that define successful PhD students include: intelligence, motivation, creativity, flexibility, initiative and maturity. Other important attributes include outstanding organizational skills, excellent ability to communicate in writing and orally, strong interpersonal skills, and a clear sense of self with integrity in all that one does. Required throughout PhD training is the most sincere commitment to the Program because intense work is essential to mastery of a subject and the completion of original research to expand knowledge in that subject. PhD training mirrors academic life in being immensely interesting, stimulating and rewarding. However the training is challenging and is not for those without primary focus on research training.

Participation in the Oral Health Sciences PhD Program
Commitment to the Oral Health Sciences PhD Program goes beyond program requirements to encompass full participation in all Program events, and continuous engagement of student and faculty member colleagues in a community of knowledge, original thinking and research. When outside interests or other commitments become too extensive, one fails to fully engage the Program and may well be in a conflict of commitment. For dual degree students, there might sometimes be a sense of competing requirements and it requires maturity and a strong sense of purpose to balance pursuit of another degree with PhD training. In the context of a Program community and scholars committed to original research, the balance can be attained.

In the Oral Health Sciences PhD Program you are fully supported in your quest for mastery of scientific knowledge and embarking on original research. In turn, your full participation and commitment complete the circle for success in achieving the PhD degree.

8/2012
Orientation
Upon your arrival to campus, you met with a staff person in the OHS PhD Office. Please refer to the orientation packet you received for detailed information:

A. Mcard (www.finance.umich.edu/treasury/mcard):
The Mcard is your official University of Michigan identification card. You will use it all over campus to identify yourself as a member of the University community. The UMID number is the cardholder’s eight-digit student number or employee number.

B. OHS PhD Student Office:
1. The OHS PhD Program maintains an office on the ground floor (B387) for OHS Students only. The office houses student mailboxes, computers and printer, lockable cabinets for precandidates, refrigerator, microwave, work stations, and lounge area.

2. Key To Student Office B387 (www.plantops.umich.edu/maintenance/zones/KeyOffice/):
A key request is obtained from the Office of Research and PhD Training in Room G306. Then the request is submitted by the student to the key office, 525 Church Street, with a deposit. (Note see below, building hours, for additional information.)

C. School of Dentistry Building Hours:
The School of Dentistry building hours are 6:30AM-6:00PM Monday-Friday. The building is closed on Saturday and Sunday. Entry after hours to the School of Dentistry requires presenting your Mcard at building card reader located at selected entrance.

D. Housing:
For information about on campus and off campus housing, please visit the website:
http://www.housing.umich.edu/

E. Student Business:
1. Wolverine Access (wolverineaccess.umich.edu), Students tab enables students to:
   a. Update contact information
   b. Register for classes
   c. Review student account for tuition bills
   d. Review student benefits
   e. Sign up for the U-M Campus Emergency Alert system
2. Stipend distribution: http://www.mais.umich.edu/student/faforms.html
3. Tax information http://www.rackham.umich.edu/help/funding_and_awards/tax_information/

F. Required Training
Prior to beginning your first research rotation, students should complete the following trainings:
1. PEERRS http://my.research.umich.edu/peerrs/:
   This is a web-based instruction and certification program for members of the U-M community engaged in or associated with research.

2. Regulatory and Compliance Training
   Comprehensive Laboratory Safety Training BLS009
   http://www.oseh.umich.edu/osehtraining/Default.aspx
   Note: Additional research training may be required depending on the research rotation laboratory and project. (i.e. Animal Use, Human Subjects, Radiation, etc.)
Director or the Oral Health Sciences PhD Program:
The role of the Director of the Program is to provide leadership to promote excellence in graduate education. This includes recruitment and admission of excellent students; leading the program committee; advising and mentoring; providing information about sources of funding; counseling students about career and job opportunities; assisting with problem solving and resolution of conflict; monitoring the academic progression of students; collaborating with faculty advisors; and directing the primary staff support for the program.

Precandidate Advisor:
The role of the Precandidate Advisor is to assist the student with course and research rotation selections prior to each term; review the student’s academic progress and complete the program planning document; guide the student through the preparation for seminar and journal club presentation; assist the student with preparation for the Preliminary Examination process; and collaboration with the Program Director about student progress.

Dissertation Advisor:
The role of the Dissertation Advisor is to guide and courage the candidate’s design and execution of an original, high quality, doctoral-level research project; give emotional and moral encouragement; provide feedback on performance; be a source of information and opportunities; and serve as an academic role model. The end result of this effort is expected to be a dissertation that makes a substantive contribution to the candidate’s discipline.

OHS PhD Office Support Staff:
The role of the OHS PhD Office Staff is to support the mission of the Program of training outstanding students to become independent research scientists in their field of specific interest within the oral health sciences. This includes providing information to prospective applicants, assisting with the admission process; providing support during the enrollment process; administering office budgets and student funding; guiding students through the program milestones; and assisting the student in navigating the resources available to support them through the entire time of their training.
Graduate Student Mentoring

Building an effective mentoring and advising relationship is essential toward a rewarding training outcome. This section is adapted from various publications by Rackham School of Graduate Studies with an objective to provide useful resources to our students and program faculty. Complete publication can be located at: www.rackham.umich.edu/downloads/publications/mentoring.pdf

Additional Mentoring Resources:
1. Mentoring & Advising
   http://www.rackham.umich.edu/faculty_staff/information_for_programs/academic_success/mentoring_advising/

2. How to Mentor Graduate Students: A Guide for Faculty

Michigan Graduate Student Mentoring Plan

An early dialogue on the advising and mentoring relationship between faculty advisors and their graduate students or postdoctoral scholars can be an essential tool for setting up expectations for the mentoring relationship. This sample mentoring agreement offers a tool for students and faculty mentors to use in defining those expectations.

It is assumed that these mentoring plans can to be modified in whatever way the individual program and advisor/advisee pair think is most appropriate to their intended relationship. These plans are not intended to serve as any kind of legal document, but rather as an agreement in principle as to the training goals of the advisor and advisee, after discussion between the two.

The following is based on a sample published by the Graduate Research, Education and Training (GREAT) group of the American Association of Medical Colleges (AAMC). Departments and Programs may wish to use it to create a customized mentoring plan that sets up a statement of principles governing student/faculty mentor relationships, and to be used at the time a student commits to working with a primary faculty mentor.

Tenets of Predoctoral Training

Institutional Commitment
Institutions that train graduate students must be committed to establishing and maintaining high-quality training programs with the highest academic and ethical standards. Institutions should work to ensure that students who complete their programs are well-trained and possess the foundational skills and values that will allow them to mature into independent academic professionals of integrity. Institutions should provide oversight for the length of study, program integrity, stipend levels, benefits, grievance procedures, and other matters relevant to the education of graduate students. Additionally, they should recognize and reward their graduate training faculty.
Program Commitment
Graduate programs should endeavor to establish graduate training programs that provide students with the skills necessary to function independently in an academic or other research setting by the time they graduate. Programs should strive to maintain academically relevant course offerings and research opportunities. Programs should establish clear parameters for outcomes assessment and closely monitor the progress of graduate students during their course of study.

Quality Mentoring
Effective mentoring is crucial for graduate school trainees as they begin their academic careers. Faculty mentors must commit to dedicating substantial time to graduate students to ensure their academic, professional and personal development. A relationship of mutual trust and respect should age individual growth. Effective mentoring should include teaching research methods, providing regular feedback that recognizes contributions and insights and offers constructive criticism, teaching the “ways” of the academic research and teaching enterprise, and promoting students’ careers by providing appropriate opportunities. Additionally, good graduate school mentors should be careful listeners, actively promote and appreciate diversity, possess and consistently exemplify high ethical standards, recognize the contributions of students in publications and intellectual property, and have a strong record of research accomplishments.

Provide Skills Sets and Counseling that Support a Broad Range of Career Choices
The institution, training programs, and mentor should provide training relevant to academic and other research and policy careers that will allow their graduate students to appreciate, navigate, discuss, and develop their career choices. Effective and regular career guidance activities should be provided, including exposure to academic and non-academic career options.

Commitments of Graduate Students

- I acknowledge that I have the primary responsibility for the successful completion of my degree. I will be committed to my graduate education and will demonstrate this by my efforts in the classroom and in research settings. I will maintain a high level of professionalism, self-motivation, engagement, curiosity, and ethical standards.

- I will meet regularly with my research advisor and provide him/her with updates on the progress and results of my activities and experiments.

- I will work with my research advisor to develop a thesis/dissertation project. This will include establishing a timeline for each phase of my work. I will strive to meet the established deadlines.

- I will work with my research advisor to select a thesis/dissertation committee. I will commit to meeting with this committee at least annually (or more frequently, according to program guidelines). I will be responsive to the advice of and constructive criticism from my committee.

- I will be knowledgeable of the policies and requirements of my graduate program, graduate school, and institution. I will commit to meeting these requirements, including teaching responsibilities.
• I will attend and participate in relevant group meetings and seminars that are part of my educational program.

• I will comply with all institutional policies, including academic program milestones. I will comply with both the letter and spirit of all institutional research policies (e.g., safe laboratory practices and policies regarding animal-use and human-research) at my institution.

• I will participate in my institution’s Responsible Conduct of Research Training Program and practice those guidelines in conducting my thesis/dissertation research.

• I will be a good research citizen. I will agree to take part in relevant shared research group responsibilities and will use research resources carefully and frugally. I will be attentive to issues of safety and courtesy, and will be respectful of, tolerant of, and work collegially with all research personnel.

• For use in relevant fields: I will maintain a detailed, organized, and accurate records of my research, as directed by my advisor. I am aware that my original notes and all tangible research data are the property of my institution but that I am able to take a copy of my notebooks with me after I complete my thesis/dissertation.

• I will discuss policies on work hours, sick leave and vacation with my research advisor. I will consult with my advisor and notify any fellow research group members in advance of any planned absences.

• I will discuss policies on authorship and attendance at professional meetings with my research advisor. I will work with my advisor to submit all relevant research results that are ready for publication in a timely manner.

• I acknowledge that it is primarily my responsibility to develop my career following the completion of my doctoral degree. I will seek guidance from my research advisor, career counseling services, thesis/dissertation committee, other mentors, and any other resources available for advice on career plans.

Commitments of Research Advisors

• I will be committed to mentoring the graduate student. I will be committed to the education and training of the graduate student as a future member of the scholarly community.

• I will be committed to the research project of the graduate student. I will help to plan and direct the graduate student’s project, set reasonable and attainable goals, and establish a timeline for completion of the project. I recognize the possibility of conflicts between the interests of my own larger research program and the particular research goals of the graduate student, and will not let my larger goals interfere with the student’s pursuit of his/her thesis/dissertation research.
• I will be committed to meeting with the student on a regular basis.

• I will be committed to providing resources for the graduate student as appropriate or according to my institution’s guidelines, in order for him/her to conduct thesis/dissertation research.

• I will be knowledgeable of, and guide the graduate student through, the requirements and deadlines of his/her graduate program as well as those of the institution, including teaching requirements and human resources guidelines.

• I will help the graduate student select a thesis/dissertation committee. I will help assure that this committee meets at least annually (or more frequently, according to program guidelines) to review the graduate student’s progress.

• I will lead by example and facilitate the training of the graduate student in complementary skills needed to be a successful researcher; these may include oral and written communication skills, grant writing, lab management, animal and human research policies, the ethical conduct of research, and scientific professionalism. I will encourage the student to seek additional opportunities in career development training.

• I will expect the graduate student to share common research responsibilities in my research group and to utilize resources carefully and frugally.

• I will discuss authorship policies regarding papers with the graduate student. I will acknowledge the graduate student’s contributions to projects beyond his or her own, and I will work with the graduate student to publish his/her work in a timely manner.

• I will discuss intellectual policy issues with the student with regard to disclosure, patent rights and publishing research discoveries, when they are appropriate.

• I will encourage the graduate student to attend professional meetings and make an effort to help him/her secure funding for such activities.

• I will provide career advice and assist in finding a position for the graduate student following his/her graduation. I will provide honest letters of recommendation for his/her next phase of professional development. I will also be accessible to give advice and feedback on career goals.

• I will try to provide for every graduate student under my supervision an environment that is intellectually stimulating, emotionally supportive, safe, and free of harassment.

• Throughout the graduate student’s time in graduate school, I will be supportive, equitable, accessible, encouraging, and respectful. I will foster the graduate student’s professional confidence and encourage critical thinking, skepticism and creativity.
Oral Health Sciences PhD Program

Useful Resources

School of Dentistry
http://www.dent.umich.edu/

Oral Health Sciences PhD Program
http://www.dent.umich.edu/phd/home/

Oral Health Sciences PhD Program Documents and Forms
http://www.dent.umich.edu/phd/home/current/handbook

Tissue Engineering at Michigan
http://www.dent.umich.edu/research/home/T EAM

Office of Research and PhD Training
http://www.dent.umich.edu/research/home

Horace H. Rackham School of Graduate Studies
http://www.rackham.umich.edu/

Academic Policies
http://www.rackham.umich.edu/policies/gsh/

Office of Academic Records and Dissertations (OARD)
http://www.rackham.umich.edu/about_us/contact_us/

Rackham Graduate School Contacts
http://www.rackham.umich.edu/about_us/contact_us/

Rackham Fellowships/Funding Resources
http://www.rackham.umich.edu/Fellowships/

Forms and Applications
http://www.rackham.umich.edu/policies/forms /

Rackham-CRLT Graduate Student and Postdoc Mentorship Program
http://www.sitemaker.umich.edu/rackham-crlt/gsi_introduction

Michigan Intercollegiate Graduate Studies (MIGS) Program
http://www.rackham.umich.edu/downloads/admissions/migs-transfer.pdf

Rackham Resources
Rackham PLAN (Profession-Life-Academic-Networks)
http://www.rackham.umich.edu/current_students/plan/

Grad Tools
http://gradtools.umich.edu/

Guidelines for Dissertation Committee Service
http://www.rackham.umich.edu/dissertation_information/dissertation_committees/

Student Life
http://www.rackham.umich.edu/index.php/student_life/

Health and Wellness Resources
http://www.rackham.umich.edu/student_life/health_and_wellness/resources/
Problem Solving and Mental Health Resources for Students at the UM Ann Arbor Campus

The University's commitment to diversity and inclusiveness extends to students who have mental health concerns. The University is committed to the academic success, personal development and general health of all students. We want you to be successful and well. If you have mental health concerns, call or visit one of the following offices for confidential support. The following offices have experience working with the diversity of students represented in our student body.

Mental Health Sites on Campus

Counseling and Psychological Services (CAPS)
Counseling and Psychological Services are committed to providing multicultural and multidisciplinary expert therapeutic support. Clinical services include brief personal therapy for individuals, couples and groups and crisis intervention.  
www.umich.edu/~caps

University Health Service (UHS)
University Health Service offers comprehensive outpatient medical services, conveniently located on central campus. The University Health Service is committed to promoting and protecting the health of students and other members of the University community so that they may achieve their educational goals.  
www.uhs.umich.edu

Department of Psychiatry
The Department of Psychiatry is part of the University of Michigan Health System and provides patients with state-of-the-art treatment and care of psychiatric disorders, much of it based on the innovative research done by our faculty.  
www.psych.med.umich.edu

Depression Center
The University of Michigan Depression Center is the first ever multi-disciplinary center dedicated to research, education, and treatment of depressive and bipolar illnesses.  
www.depressioncenter.org

Psychological Clinic
The Psychological Clinic offers help for community members in the Ann Arbor area, including students, staff and faculty from the University of Michigan.  
www.psychclinic.org

University Center for the Child & Family (UCCF)
The University Center for the Child & Family offers a comprehensive range of mental health services for children and families in the community.  
www.umuccf.org

University of Michigan Addiction Treatment Services (UMATS)
University of Michigan Addiction Treatment Services (UMATS) offers assessment, diagnosis and treatment personalized to your life. Our services are rooted in the professional and recovering communities, supported by research, and delivered with compassion, hope, and respect for diversity. We are committed to achieving positive outcomes.  
http://www.psych.med.umich.edu/UMATS/

Student Support Units

Career Center
The Career Center assists students from all academic units with their career exploration, job search skill development and interest in advanced educational opportunities.  
www.careercenter.umich.edu
**Dean of Students (DOS)**
The Dean of Student's Office offers individual support, programs, services, co-curricular opportunities, policy development and advocacy to advance the Michigan experience of all students.

[www.umich.edu/~dofs](http://www.umich.edu/~dofs)

**Multi-Ethnic Student Affairs (MESA)**
The Office of Multi-Ethnic Student Affairs and the William Monroe Trotter Multicultural Center serve as resources of support for diverse student populations in our campus community.

[www.mesa.umich.edu](http://www.mesa.umich.edu)

**Office of Financial Aid**
The Office of Financial Aid is committed to helping students obtain the financial assistance needed to reach their educational goals. This can include financial planning to include costs of mental health services.

[www.finaid.umich.edu](http://www.finaid.umich.edu)

**Ombuds Office**
The Ombuds office is a place where student questions, complaints and concerns about the functioning of the University can be discussed confidentially in a safe environment. The Office offers informal dispute resolution services, provides resources and referrals, and helps students consider options available to them.

[www.umich.edu/~ombuds](http://www.umich.edu/~ombuds)

**Services for Students with Disabilities**
Services for Students with Disabilities provides equal and integrated access for students with visual impairments, learning disabilities, mobility impairments, hearing impairments, chronic health problems and psychological disabilities.

[www.umich.edu/~sswd](http://www.umich.edu/~sswd)

**Sexual Assault Prevention and Awareness Center (SAPAC)**
SAPAC provides educational and supportive services for the University of Michigan community related to sexual assault, dating and domestic violence, sexual harassment, and stalking.

[www.umich.edu/~sapac](http://www.umich.edu/~sapac)

**Spectrum Center**
Spectrum Center provides a comprehensive range of education, information and advocacy services working to create and maintain an open, safe and inclusive environment for lesbian, gay, bisexual, and transgender students, faculty, and staff, their families and friends, and the campus community at large.

[www.spectrumcenter.umich.edu](http://www.spectrumcenter.umich.edu)

**UM Alcohol and Other Drug Prevention Program**
UM Alcohol and Other Drug Prevention Program is a comprehensive and student-centered program. Staff uses evidence-based strategic interventions, collaboration, innovation and the incorporation of the wellness dimensions to reduce the harmful consequences of alcohol and other drug use.

[http://www.uhs.umich.edu/aod](http://www.uhs.umich.edu/aod)

**University Housing, Residence Hall Programs and Services**
Living at Michigan means being part of a dynamic community in which diversity is welcomed, leadership is encouraged, respect is required and learning is paramount. The many programs and services we provide are designed to support the physical, emotional and academic needs of each and every resident.

[http://www.housing.umich.edu/reshalls](http://www.housing.umich.edu/reshalls)
**Student Organizations**

**Finding Voice**
Finding Voice is an organization of University of Michigan students dedicated to improving the campus environment for students with psychological disorders. Some of us have struggled personally with mental illness, some of us have friends or family members who have faced mental illness, and some of us have no prior experience with psychological disorders. We all work together to provide better support and advocacy for students with psychological disorders, mental health education for members of the UM community, and a creative expression forum for individuals impacted by psychological disorders.  
[site](https://sitemaker.umich.edu/findingvoice/home)

**SHARE**
Student Health Advocates and Resource Exchange (SHARE) is a student organization dedicated to educating the University community about mental health concerns and resources on campus. We hope to reduce the stigma surrounding mental illness through dialogue and information sharing.  
[site](https://sitemaker.umich.edu/shareinfo/home)

**PULSE**
Peers Utilizing Leadership Skills for Education (PULSE) is a student-run, UHS-sponsored organization promoting health in residential communities. Members take advantage of peer interactions to share health information. PULSE also works with Res Staff and Greek leadership to identify needs and develop activates to address the health needs of their communities. PULSE is also committed to improving campus climate through its social justice work.  
[site](http://www.uhs.umich.edu/pulse)

**Web Resources**

**MiTalk**
MiTalk is a website created specifically for all students at the University of Michigan. On this site, you will find a number of resources such as online screenings for depression and anxiety, to skill-building tools for stress management and academic skills, as well as digitally recorded lectures, events and workshops. Also you will be able to view and download two-minute videos on yoga, progressive muscle relaxation and guided meditation.  
[site](http://mitalk.umich.edu/)

**Campus MindWorks**
The Campus Mind Works website was created to support University of Michigan students who have been diagnosed with an ongoing mental health disorder. This site provides information and resources to help students manage their illness.  
[site](http://www.campusmindworks.org/)

**Academic Skills**
The University of Michigan offers a variety of academic support services to help you succeed academically. This website is designed to help you learn about the wide range of services on campus.  
[site](http://academicsupport.umich.edu/)
ORAL HEALTH SCIENCES PhD PROGRAM
Mission and Rationale

MISSION

The primary objective of the PhD Program in Oral Health Sciences is to train outstanding students to become advanced research scientists in their field of specific interest within the oral sciences. A major goal is to provide students with an understanding of the functional, structural and molecular properties of the oral region. Areas of research focus include: developmental craniofacial biology; mineralized tissue biology and musculoskeletal disorders; oral and pharyngeal cancer; oral infectious and immunologic diseases; oral sensory systems, pain and central circuits; and tissue engineering and regeneration. This training will prepare dentist scientists who will be strong candidates for faculty positions in dental schools at major research universities. The program includes basic, translational and clinical research approaches to important problems concerned with health maintenance or diseases of the oral and craniofacial complex.

RATIONALE

Within each component of the OHS curriculum, there is opportunity for a student to select among content and methodological approaches to research by choosing laboratory settings and courses in specific topics that emphasize a basic, translational or clinical approach to problems in oral health. On the other hand, core experiences provide a foundation for all students in OHS.

Essential to the OHS curriculum is a strong base of scientific breadth accomplished through the seminar and journal club series; the responsible conduct in research and scholarship presentations; a biostatistics course; the graduate core courses; and basic science courses in biochemistry and cell and molecular biology. Participation in these courses brings OHS students an exposure to science that is foundational to any research approach, and also incorporates students with interests from the laboratory bench to the clinic in the same curriculum. This models a modern approach to science, where teams of investigators who have different content and methodological skills work collaboratively on complex problems in oral health maintenance and disease.

To gain experience in a particular scientific approach, from basic to translational to clinical, the research rotations and graduate core courses are crucial. Research rotations provide a practical experience in research approaches and the core courses give an opportunity to study the literature and understand content and methods that may be more basic or translational in nature.

To acquire a content focus and scientific depth within oral health sciences for the dissertation research, advanced courses in area of specialization and ongoing research rotations provide an advanced knowledge base that solidifies the scientific area for the student to build on in the dissertation.

8/2012
PhD PROGRAM IN ORAL HEALTH SCIENCES – Curriculum
The curriculum for the PhD in Oral Health Sciences has seven main components: oral health sciences core requirements; graduate core courses; basic science courses; advanced courses; cognate courses; the preliminary examination; and, dissertation research. The specific curriculum for each student is designed with the student's academic advisor, in consultation with the OHS Program Committee. Generally OHS students take the preliminary examination and advance to candidacy at the end of the second year in the Program. The OHS PhD and DDS/PhD students should demonstrate readiness to undertake independent dissertation research by achieving candidacy at the end of their second year but no later than three years after the first enrollment in their doctoral program.

ORAL HEALTH SCIENCES CORE REQUIREMENTS

Oral Health Sciences Seminar Series and Journal Club: ORALHEAL 811
(2 credits per term for two years; then noncredit participation required) [8 Total Credits]
Seminars, symposia and journal clubs present current research problems and techniques in oral health sciences. The seminars and journal clubs include speakers or articles that incorporate basic, translational and clinical science approaches to research in oral health.

The OHS Seminar Series includes one to two special, student-directed, speaker events each year. OHS students invite, host and organize the visit for these speakers, to include a full morning with the students for a breakfast discussion about career issues, followed by informal research presentations from OHS degree candidates, to elicit comments and critiques from the visitor. The morning concludes with the speaker’s noon seminar, open to University faculty members. These special speakers represent the range of research topics and approaches in OHS.

Biostatistics (3 credits) [3 Total Credits]
Basic statistics and experimental design for a range of modern scientific approaches. The specific course will be selected from among several at the School of Public Health, to focus on essential design and theory or various applied approaches for health science-related design and analysis. Course options include Introduction to Biostatistics (BIOSTAT 503), Biostatistical Analysis for Health-Related Studies (BIOSTAT 523), Biostatistics for Clinical Researchers (BIOSTAT 524), Applied Biostatistics (BIOSTAT 553), and Fundamentals of Biostatistics (EPID 701).

Research Rotations: ORALHEAL 812
(three rotations of 12 to 14 weeks each, at 3 credits each) [9 Total Credits]
Individual research experience in the research programs and laboratories of members of the Oral Health Sciences Program. Each rotation should be with a different faculty member. Working with the academic advisor, students will select rotations to acquire breadth of scientific approaches and content. The rotations are key elements in determining the research program and laboratory for the dissertation research. Under special circumstances, rotation research projects can be continued during an additional term (Dissertation Research Precandidate, ORALHEAL 990).

Responsible Conduct of Research and Scholarship (Culture of Science)
The University, NIH and NSF require instruction in Responsible Conduct of Research and Scholarship (RCRS) as an integral part of training for all students and postdoctoral fellows who are supported by research or training grants. This program coordinates a series of meetings in which issues in research responsibility and scientific ethics are explored through a mix of seminars, informal debates and small group discussions conducted by faculty members and invited speakers. Topics are varied and include: ethics and scientific integrity; principles of authorship; role of the mentor; data management and ownership; use of human subjects in research; use of animal subjects in research; grant writing and review. The RCRS training program is embedded in the OHS Seminar and Journal Club Series beginning in September and finishing in May.

8/2012
**GRADUATE CORE COURSES** (two courses at 1 or 2 credits each) [2-4 Total Credits]

To provide breadth in the oral health sciences, for content and for scientific approaches, each student will select two graduate courses from the School of Dentistry, Medical School or School of Public Health. School of Dentistry OHS course options include Neural Basis of Oral and Facial Function (ORALHEAL 602); Craniofacial Development and Growth (ORALHEAL 603); Mineralized Tissues (ORALHEAL 606); Molecular Biology in Clinical Dentistry (ORALHEAL 612); - Additional graduate course options include Business of Biology: The New Frontiers of Genomic Medicine (BIOMEDE 523), Cells in Their Environment (BIOMEDE 574), and Advances in Tissue Engineering (BIOMEDE 584).

**BASIC SCIENCE COURSES** (two or three courses at 2 to 4 credits each) [6-9 Total Credits]

Each student will take 6 credits in graduate courses in biochemistry (usually Intro Biochem (BIOCHEM 415/515), Macromolecular Structure and Function (BIOCHEM 550), Histology (CDB 550), Developmental Biology (CDB 580), and in cell and molecular biology (usually Cell Molec Biol 428 or Cell Biology 530). In addition, students can elect an additional 2 to 3 credits in courses such as Organogenesis of Complex Tissues (CDB 680 or 682), Mechanisms of Eukaryotic Gene Expression (BIOCHEM 650), Genetics (CMB 630), Gene Structure and Regulation (HG 541), Molec&Cell Immun (MICRBIOL 640), Molecular and Cellular Biomechanics (BIOMEDE 556), or Bioengineering Physiology (BIOMEDE 519).

**ADVANCED COURSES IN AREA OF SPECIALIZATION** (three to four courses at 1 to 4 credits each) [10+ Total Credits]

Advanced science courses will be taken in the student's area of specialization. These courses are selected to provide in-depth, current knowledge in the content area of the student’s probable dissertation research, or to provide increased knowledge about modern approaches in the design, conduct and analysis of basic or clinical science. Examples may include Medical Imaging Lab (BIOMEDE 510), Cancer Biology (CANCBIO 553), Cancer Pathogenesis & Treatment (CANCBIO554), Principle of Neuroscience I&II (NEURO 601 & 602); Statistical Methods for Biomedical Engineering (BIOMEDE 503), Biological Macro- and Nanotechnology (BIOMEDE 561), Introduction to Bioinformatics & Computational Biology (Bioinformatics 527), Medical Genetics I& II (HUMGEN 650 &651), etc.

**COGNATE COURSES** (two or three courses at 1 to 3 credits each) [4 Total Credits]

A minimum of 4 hours of graduate level course work must be completed in cognate courses. Cognate courses are in fields other than the student's field of specialization, and must be approved by the student's advisor. A course introducing the essential scientific communication skills, Pharm 502, can be considered a cognate course.

**THE PRELIMINARY EXAMINATION**

The Preliminary Examination is designed to evaluate the student’s: knowledge of scientific areas within the oral health sciences; ability to integrate and synthesize knowledge across areas within oral health maintenance and treatment of oral diseases; and ability to think analytically in written and oral communications. The examination is a major component used in making a recommendation about the student’s readiness for advancement to candidacy. The written examination is a research proposal in the NIH R01 grant application style. The oral examination is a presentation of the research proposal to the Preliminary Examination Committee followed by discussion of the proposal. Thus, the examination models several aspects of an academic career in science, including: reading, analyzing and synthesizing the literature; generating hypotheses and original questions; writing research grants; and, presenting ideas to colleagues in a clear and concise format.

**DISSERTATION RESEARCH** (Dissertation Candidate, ORALHEAL 995)

After a student has successfully completed all required courses, identified and accepted into a dissertation lab, passed the Preliminary Examination, and advanced to Candidacy for the degree in Oral Health Sciences, the remaining curriculum is original dissertation research in the laboratory of the Dissertation Advisor, with the direction of a Dissertation Committee.
COGNATE COURSES

Rackham recognizes the value of intellectual breadth in graduate education and the importance of formal graduate study in areas beyond the student's field of specialization. Cognate courses are those that are in a discipline or area different from a student's field of study but are related or connected with some aspect of this field. All cognate coursework must be approved by the OHS program. Prior to registration of the selected cognate course, students should check on whether approval from course director is required. Cognate requirements may be satisfied in three ways:

1. By completing 4 credit hours of cognate coursework in approved graduate-level courses with a grade of B- or better (departments or programs may have additional cognate requirements).
2. By using coursework within the same department or program but in a subfield different from the student's own. A course in a student's program that is cross-listed as a course in another program may satisfy the cognate requirement. In this case, the department or program should notify Rackham OARD*.
3. By completing graduate coursework at another institution that meets the expectation of the cognate requirement, without transferring the credit to the transcript. This coursework must be completed no more than 5 years before admission to the student’s current Rackham doctoral program. The student must provide Rackham OARD with an official transcript including the courses, credit hours, and the department or program should notify Rackham OARD. These courses do not apply toward the minimum 18 credit hour requirement for the degree and do not appear on the University transcript.

[Cited from the Rackham Academic Policies]

For the OHS Program, cognate courses generally are taken outside of the School of Dentistry and outside of the student’s immediate field of scientific focus. Questions should be addressed to the student’s Academic Advisor and the Program Director.

*Office of Academic Records and Dissertations
ORAL HEALTH SCIENCES PhD PROGRAM

Research Rotations
Guidelines for OHS Faculty Members and Students

ROTATIONS:

Three research rotations of one term each are required of PhD students in the Oral Health Sciences Program. Basic lab safety training must be completed prior to first research rotation. (See Section 17)

ROTATION RATIONALE/PURPOSE:

Objectives of the research rotations include:

1) To expose students to the research emphasis and environment of a faculty member’s laboratory or project.
2) To familiarize students with general research approaches of OHS faculty members.
3) To learn various research techniques.
4) To aid students in the selection of a dissertation advisor.

Selecting a Rotation Laboratory or Project:

Students should give serious thought to the selection of laboratories or project groups in which they plan to do a rotation, because this is a principal vehicle for selecting a dissertation advisor. Students should begin interviewing faculty members with whom they share research interests as early as possible. A first and second choice for each rotation should be discussed with the student’s academic advisor before final research decisions are made.

OPTIMIZING THE RESEARCH ROTATION / EXPECTATIONS

Successful completion of a research rotation requires serious commitment by both student and faculty mentor.

Students are expected to devote a minimum of 12-15 contact hours per week throughout the academic term. For all students, rotations during the summer months are expected to be “full time.”

At the beginning of the rotation, clear goals for the term should be outlined.

To ensure that there is clarity about the nature and extent of the research rotation experience, the faculty member and student should jointly draft a written agreement at the beginning of the rotation. The agreement should outline expectations to be met in the course of the rotation, list criteria for evaluating student performance, and make explicit an approximate weekly schedule for when the student will be active in the laboratory or research group.

Appropriate rotations might include conduct of a small project, initiation of a project, participation on a project, or learning new research techniques. The rotation experience should be reasonable for the student’s past experience and current course load.

It is the responsibility of the faculty member to assure that all reagents, supplies, materials and necessary equipment will be available at the beginning or appropriate time in the rotation. The faculty member should be certain that the student has any needed training in animal or human subject research, or in laboratory safety. (See Section 17)

Students should keep a lab or research notebook for each rotation, but the faculty member should be clear that notebooks and data remain in the laboratory or project of origin.

The faculty member should meet with the student on a regular basis and review data.
EVALUATION OF STUDENT PERFORMANCE
At the end of the rotation, students should prepare a brief paper written in the form of a short scientific communication in which they describe their work and results. Faculty members should count this paper as part of the rotation grade, the remaining grade being based on commitment, motivation and performance in the laboratory or research group. The faculty mentor should provide constructive feedback to the student, complete the “Research Rotation Evaluation” form, and have the student submit a copy of the evaluation to the program office.

Making expectations clear in the beginning and interacting regularly with the student during the rotation will improve the quality of the experience and simplify evaluation at the conclusion of the rotation.

OTHER RESPONSIBILITIES OF THE STUDENTS
Because students come to the OHS program with very different backgrounds, individual students will need to spend different amounts of time on coursework and may require different levels of support to become productive in the laboratory or project. Students usually are taking two graduate science courses in addition to their research rotation. They also are expected to attend OHS Course 811, Journal Clubs and Seminars, and other events sponsored by the OHS program or training grants.
Releasing a PhD student from completing all three of the required OHS research rotations represents a significant deviation from OHS Policies and Guidelines (OHS Handbook). In particular, endorsing a student’s progression to “declare” the dissertation lab after completing only one or two rotations, with a waiver for additional rotations, requires careful thought and review for each individual circumstance.

Whereas the OHS PhD Program always has operated to maximize each student’s potential and therefore work flexibly for student progression, a set of guiding principles must be carefully considered should a student petition to declare a dissertation advisor/laboratory before completing 3 required rotations.

The student should present a written request to the Director and Program Committee with a compelling rationale for waiving the second and/or third rotations and fixing a dissertation lab at the beginning of the student’s training.

The student should demonstrate mature understanding of scientific subjects with sufficient breadth and depth and should have acquired adequate training in general research skills.

Student performance and experience in the first research rotation should have been exceptional.

The student should demonstrate academic excellence and commendable academic progression.

The student should, on invitation from the Program Director, present the request to the Program Committee. In addition to addressing all prior items, the student should make a persuasive case for his/her chosen dissertation field as timely and likely to bring substantial contributions to current and future oral health sciences research.

The proposed dissertation advisor should provide a written statement to the Director and Program Committee with an endorsement of the student’s request and supporting information (e.g., quality and depth of student’s first rotation; student’s potential for future progression; student’s motivation for early dissertation advisor selection; how to accomplish breadth of oral health sciences research exposure for the student). The advisor should comment explicitly on how the student will benefit from waiving two required research rotations. The advisor’s letter should be accompanied by a current NIH Biosketch.

The proposed dissertation advisor should provide an active and productive training environment with demonstrated funding suitable to support the student through his/her entire training.

When considering the request for a waiver, the Program Committee will assess whether the student has sufficiently explored the diverse areas of the Oral Health Sciences before reaching their decision and be convinced that the student has carefully thought through their career goals. The goal of rotations is both to give students a broad understanding of the oral health sciences as well as help them make a well-reasoned decision regarding their thesis area. The Program Committee must be convinced that both these goals have been achieved before a waiver is granted.
ORAL HEALTH SCIENCES PhD PROGRAM
Research Rotation Evaluation

OHS Student: ____________________________________________

Rotation Advisor: ________________________________________

Rotation Term: ___________________________ LETTER GRADE: __________

I. Title of Rotation Experience or Project: ______________________________________

II. Summary Evaluation:

(Please check the appropriate box)  

<table>
<thead>
<tr>
<th></th>
<th>Minimal</th>
<th>Satisfactory</th>
<th>Extensive</th>
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<tbody>
<tr>
<td>A. Time expended in research rotation</td>
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<td></td>
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<tr>
<td>B. Student’s intellectual contribution to the research experience or project</td>
<td></td>
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<tr>
<td>C. Student’s capacity to grasp appropriate concepts and follow the transition between concept and experimental design</td>
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</tbody>
</table>

III. Please comment on the student’s strengths and weaknesses:

IV. General Comments:

V. Rotation Mentor (Faculty) Signature: ___________________________ Date: ________

VI. I have discussed the contents of this report with my Research Rotation Advisor.

OHS Student Signature: ___________________________ Date: __________
ORAL HEALTH SCIENCES PhD PROGRAM
Research Rotation Evaluation

Page Two: Optional Confidential Comments for Program Committee Review

OHS Student: ________________________________

Rotation Advisor: ________________________________

Rotation Term: ________________________________

VII. Optional Confidential Comments:
The Oral Health Sciences (OHS) Journal Club and Seminar Series afford PhD students the opportunity to read, critique, present and discuss current topics in the field. Through actively participating in the seminars given by experts in various scientific disciplines, students will broaden their foundational knowledge, interact with potential role models and consult experts on career development and opportunities. While in the journal club series students stimulate critical thinking by bringing forward original research papers in timely and exciting areas for discussion. The journal clubs and seminars also provide practice in critical thinking, analysis of literature, oral presentation, synthesis of critiques and ability to field questions and address comments.

Highlighted in the OHS Journal Club and Seminar Series is a group of special presentations on responsible conduct of research and scholarship (RCRS). Responsible conduct of research and scholarship is defined as the practice of scientific and scholarly 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 and to scholarship. The NIH and NSF require instruction in responsible conduct of research as an integral part of training for all students and postdoctoral fellows who are supported by research or training grants. OHS PhD Students are required to attend the RCRS events embedded as part of the Oral Health PhD curriculum.

Attendance and Grades
ORALHEAL 811 runs on Tuesdays and Thursdays, Noon-1:00pm, from September to May. Journal Club meets Tuesdays in the FAL while Seminars are held on Thursdays in G550; at times we will have a seminar on Tuesday.

Attendance in the journal clubs and seminar series is mandatory for all students. Precandidates must register for ORALHEAL 811 during each precandidate term. For registered students, the course is on a pass/fail basis. All OHS students are expected to participate by asking questions and contributing to the discussion. To pass the course, a student must actively participate.

One excused absence from a journal club and one excused absence from a seminar is allowed each term. Excused absences might be granted for students on outreach rotations, attending a scientific meeting or an illness, for example. Vacation time away or other noon hour conflicts are not excused. Any unexcused absences will result in a Fail grade.

Scheduling
The Office of Research and PhD Training will coordinate a schedule for each calendar year of the Seminar and Journal Club Series. A Google calendar will be maintained by the Office of Research that student’s will be able to subscribe through their umich calendar account. The OHS Seminar Calendar will identify the seminar guest for each Thursday as well as their topic and when available the guest’s website. The Journal Club Calendar will list the presenter and facilitator for each week, journal article with a PDF or URL address as well as the RCRS topic and faculty lead. Detailed flyers that list the Fall and Winter semesters will be distributed in September and December.
ORAL HEALTH SCIENCES PhD PROGRAM

OHS Journal Club and Seminar Series – ORALHEAL 811

Seminar Specifics:
Students are expected to maximize their learning opportunity by being fully engaged in each presentation and by conducting themselves professionally when interacting with the speaker.

Seminar Series Guest Lunches
When an external speaker is scheduled to deliver an OHS Seminar the students are invited to attend a lunch from 1:15-2:30pm. The goal for these lunches is to discuss current research and professional development. OHS PhD students will receive an invite through Google calendars and can respond to the invite as well as make their lunch order. Lunches will be ordered the day before and delivered to the SOD.

Journal Club Specific Guidelines
Every Journal Club will have a Facilitator and an assigned Discussion Leader. The facilitator will be responsible for presenting the context and content of the paper. The discussion leader will start and coordinate the discussion (but not serve as a formal “respondent”), if questions do not come forward spontaneously throughout the presentation. The Facilitator and Discussion Leader will meet and work together as a team for the journal club presentation. PhD students will be matched up to work on the presentation depending on their class level.

Journal Article submission deadlines:
Journal articles need to be submitted electronically a minimum of a week in advance; Noon the Tuesday before the presentation to the Office of Research & PhD Training Administrative Assistant.

Journal Club Facilitator
The Facilitator will work with faculty advisors (initial academic advisor, lab rotation director, dissertation advisor) and Dr. Yvonne Kapila (Journal Club Director) to select an article that is timely, interesting, and from an excellent journal. Additional meetings with Dr. Kapila to prepare for the Journal Club are encouraged.

Two papers could be presented if the facilitator feels that this would improve the discussion (for example, if two papers are published at about the same time on the same topic; or if two papers address a common hypothesis with very different approaches; or if there is controversy about the topic within the scientific community).

- The Facilitator should choose a presentation format or style that promotes discussion.
- The Facilitator is encouraged to present the article by using a combination of audiovisual aids, such as video clips, PowerPoint slides, whiteboard, handouts, etc.
- When using slides, the Facilitator’s PowerPoint slides should have minimal text or no text; only figures or diagrams. This will help the Facilitator to remember to speak to and engage the audience. The number of slides should be minimized. The slides are there to help the discussion and it should not be a lecture or strict presentation format.
- Separate slides for Materials & Methods are not needed – simply talk about how the experiments were done, as the figures and results are presented.
- The Facilitator should not feel a need to present every figure in the article (or every panel of the figures). Just choose key elements of the figures to convey main ideas and point out key experiments/results.
Journal Club Discussion leader
- The Discussion Leader will ensure participation of the students and audience.
- The Discussion Leader will start discussion with a lead question or with a “critique” of experiments, controls, or methods, and will ask the audience for alternative experiments or interpretation of the results; or will ask questions to the audience (the Leader might call on someone specifically if no one is prompt to respond).
- The Leader will monitor timing to allow time for discussion of several topics.

OHS Students – Journal Club
Each student will serve as Facilitator and Discussion Leader approximately one time per year.
- All OHS students should read the paper and be prepared to ask and answer questions about the article.
- Each OHS student should have at least one question prepared ahead of time for the journal club discussion. The Discussion Leader may call on any student to start the discussion or move it forward.

Faculty Members – Journal Club
- Faculty members will participate in and help to stimulate discussion.
- Faculty members will stay after the end of the presentation to provide some informal feedback about the presentation --- to the Facilitator and Discussion Leader.

Journal Club Timing
The Journal Club should flow informally with the intent of promoting discussion about a scientific article. If the Facilitator is presenting without intervening questions, it is important to consider a rough division of time:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>12:05 - 12:25pm</td>
<td>Facilitator presents paper</td>
</tr>
<tr>
<td>12:25 - 12:50pm</td>
<td>Discussion Leader leads discussion</td>
</tr>
<tr>
<td>12:50 - 1:00pm</td>
<td>Facilitator and Discussion Leader remain to meet with any faculty members in attendance for informal feedback.</td>
</tr>
</tbody>
</table>
## Fall 2012 Schedule

<table>
<thead>
<tr>
<th>September 11, 2012</th>
<th>October 23, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>JC / <strong>RCRS</strong> Orientation</td>
<td>Sudha Rajderkar</td>
</tr>
<tr>
<td>OHS Students / Dr. Yvonne Kapila</td>
<td><em>Discussion Leader: Xu Qian</em></td>
</tr>
<tr>
<td><strong>September 18, 2012</strong></td>
<td><strong>October 30, 2012</strong></td>
</tr>
<tr>
<td>Xu Qian</td>
<td><strong>RCRS</strong></td>
</tr>
<tr>
<td><em>Discussion Leader: Chris Donnelly</em></td>
<td><em>Faculty Lead: Dr. Darnell Kaigler</em></td>
</tr>
<tr>
<td><strong>September 25, 2012</strong></td>
<td><strong>November 6, 2012</strong></td>
</tr>
<tr>
<td>Shih-Kai Wang</td>
<td><strong>United Nations Speaker</strong></td>
</tr>
<tr>
<td><em>Discussion Leader: Jae Shin</em></td>
<td>Habib Benzian, MScDPh</td>
</tr>
<tr>
<td><strong>October 2, 2012</strong></td>
<td><strong>November 13, 2012</strong></td>
</tr>
<tr>
<td>Fabiana Soki</td>
<td><strong>RCRS</strong></td>
</tr>
<tr>
<td><em>Discussion Leader: Kathryn Ritchie</em></td>
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<tr>
<td><strong>October 9, 2012</strong></td>
<td><strong>November 20, 2012</strong></td>
</tr>
<tr>
<td><strong>RCRS</strong></td>
<td>Stephanie Nunez</td>
</tr>
<tr>
<td><em>Faculty Lead: Charlotte Mistretta</em></td>
<td><em>Discussion Leader: Joe Nguyen</em></td>
</tr>
<tr>
<td><strong>October 16, 2012</strong></td>
<td><strong>December 4, 2012</strong></td>
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<tr>
<td>Megan Michalski</td>
<td>Christie Scanlon</td>
</tr>
<tr>
<td><em>Discussion Leader: Min Oh</em></td>
<td><em>Discussion Leader: Fatma Mohamed</em></td>
</tr>
</tbody>
</table>

**RCRS:** Responsible Conduct of Research and Scholarship, Culture of Science Series is embedded into the OHS Seminar and Journal Club Series.

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**Oral Health Sciences Ph.D. Program**

All Journal Clubs will be held at **12:00 noon in the Faculty Alumni Lounge**

Contact: Kimberly Smith, 615-1970, kimbsmit@umich.edu
# Fall 2012 Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Speaker/Institution</th>
<th>Host/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>September 20, 2012</strong></td>
<td><strong>OHS Handbook Meeting</strong></td>
<td>Jan Hu, BDS, PhD, Director, Oral Health Sciences PhD Program</td>
<td><strong>November 1, 2012</strong></td>
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<td><strong>OHS Faculty and Student Lunch</strong></td>
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<td><strong>Michigan League</strong></td>
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<td></td>
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<td><strong>11:30am-1:30pm</strong></td>
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<td></td>
<td><strong>United Nations Speaker</strong></td>
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<td><strong>Habib Benzian, MScDPH</strong></td>
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<td><strong>Dentistry G-390</strong></td>
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<td><strong>Sponsored by: Global Initiatives, School of Dentistry</strong></td>
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<tr>
<td></td>
<td><strong>Rackham 100th Celebration</strong></td>
<td><strong>Jacques Nör, DDS, MS, PhD</strong></td>
<td><strong>Robert G. and L. Georgine Craig</strong></td>
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<tr>
<td></td>
<td><strong>October 4, 2012</strong></td>
<td><strong>University of Michigan, School of Dentistry</strong></td>
<td><strong>Biomaterials Award Speaker</strong></td>
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<td><strong>Sponsored by: Oral Health Sciences PhD Program</strong></td>
<td><strong>David Tirell, PhD</strong></td>
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<td></td>
<td><strong>California Institute of Technology</strong></td>
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<td></td>
<td><strong>Sponsored by: Biologic &amp; Materials Sciences</strong></td>
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<tr>
<td></td>
<td><strong>Rackham 100th Celebration</strong></td>
<td><strong>Hong-Jiao Ouyang, DMD, PhD</strong></td>
<td><strong>Christopher Deppmann, PhD</strong></td>
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<tr>
<td></td>
<td><strong>October 11, 2012</strong></td>
<td><strong>University of Pittsburgh</strong></td>
<td><strong>University of Virginia</strong></td>
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<td><strong>Sponsored by: Oral Health Sciences PhD Program</strong></td>
<td><strong>Sponsored by: Oral Health Sciences PhD Program</strong></td>
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<tr>
<td></td>
<td><strong>Rackham 100th Celebration</strong></td>
<td><strong>Bradley Henson, DDS, PhD</strong></td>
<td><strong>Gordana Vunjak-Novakovic, PhD</strong></td>
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<tr>
<td></td>
<td><strong>October 18, 2012</strong></td>
<td><strong>Western University of Health Sciences</strong></td>
<td><strong>Columbia University</strong></td>
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<td><strong>Sponsored by: Oral Health Sciences PhD Program</strong></td>
<td><strong>Sponsored by: Oral Health Sciences PhD Program</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Rackham 100th Celebration</strong></td>
<td><strong>Yong-Hee Chun, DMD, MS, PhD</strong></td>
<td><strong>Asim Beg, PhD</strong></td>
</tr>
<tr>
<td></td>
<td><strong>October 25, 2012</strong></td>
<td><strong>University of Texas Health Science Center</strong></td>
<td><strong>University of Michigan Medical School</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>Sponsored by: Oral Health Sciences PhD Program</strong></td>
<td><strong>Sponsored by: Oral Health Sciences PhD Program</strong></td>
</tr>
</tbody>
</table>

Presented by the University of Michigan School of Dentistry

All seminars will be held at 12:00 noon in G550 Kellogg unless otherwise noted.

Contact: Kimberly Smith, 615-1970 or kimbsmit@umich.edu
Introduction

The **DDS / Oral Health Sciences PhD Program** at the University of Michigan School of Dentistry is designed for outstanding students who aspire to a career in academic dentistry with a focus on conducting research related to oral health. Through the dual degree program, a small number of exceptional students can pursue the DDS and the PhD in Oral Health Sciences (OHS) concurrently. The typical program length is 8 years.

Within the OHS Program, the student can select among areas of research emphasis that include:

- developmental craniofacial biology
- mineralized tissue biology and musculoskeletal disorders
- oral and pharyngeal cancer
- oral infectious and immunologic diseases
- oral sensory systems, pain and central circuits
- tissue engineering and regeneration

On admission to the DDS / PhD Program, an academic advisor is assigned who works with the student, the DDS Program, and the OHS PhD Program to ensure an optimal curriculum design.

On the following pages are the summary and rationale, and outlines for general flow of the DDS / PhD Program. Because our dual degree program can be tailored for individual students, the outlines represent a *model* only, and may vary among students.

Students who embark on the DDS / PhD Program are breaking new ground in dental career patterns. A dual degree program is not for everyone; however, for those who successfully matriculate and complete DDS / PhD dual degrees, there is an exciting future in the continued combination of pursuing clinical dentistry and the science of oral health.
ORAL HEALTH SCIENCES PhD PROGRAM
DDS/Oral Health Sciences PhD
Duel Degree Program
University of Michigan, School of Dentistry

Summary and Rationale

DDS / Oral Health Sciences PhD Dual Degree Program

The DDS / PhD Program in the School of Dentistry combines major elements of the Oral Health Sciences (OHS) PhD Program and the School of Dentistry DDS Program. The DDS / PhD Program is conducted through the mechanism of the Student – Initiated Dual Degree Program of the Rackham School of Graduate Studies of the University of Michigan. Within the Program, a student applies to the School of Dentistry with notice of intent to acquire training for the DDS and PhD degrees. Both the DDS and the Oral Health Sciences PhD Programs review the applicant for admission. If admitted for the DDS / PhD Program, the dual degree curriculum is instituted for both programs from the beginning. The DDS and the PhD degrees are conferred at the same time when the student successfully completed all requirements of both programs.

Summary and rationale for the dual degree curriculum

Components of both DDS and PhD programs are conducted in parallel throughout the dual degree training. Immediately after admission, an initial Academic Advisor is assigned who helps to guide the student in curriculum decisions, and who acts as a mentor for all other aspects of the program throughout the entire training period. Once a Dissertation Advisor is named, specific curriculum decisions are primarily made by the student with the dissertation advisor.

The first two years of the DDS / PhD program are weighted toward completing the basic and advanced science courses and in-depth research laboratory rotations of the PhD curriculum. During this time, the DDS curriculum, although proportionately less intensive, is focused on basic science foundation courses. Thus, from the beginning of the DDS / PhD curriculum, the student is involved in research, and within a two-year period he or she experiences the environment, research objectives and techniques of at least three research laboratories within the OHS Program. Based on these rotations, on other interactions via seminars and journal clubs, and advice and discussions with an initial academic advisor and the OHS Program Director, the student and faculty mentor make a mutual decision about the laboratory for the dissertation research. Successful identification and acceptance into a dissertation laboratory is a significant achievement of the student which will allow the student to be engaged in the preliminary examination. The preliminary exam process is designed to facilitate the consolidation of the student’s research interest, knowledge and skills into a well-defined research proposal that will be examined by the preliminary exam committee. Successful completion of the preliminary exam, with satisfactory academic performance, the student will then be recommended to Rackham School of Graduate Studies for advancing to candidacy.

The subsequent three years of the curriculum emphasizes the DDS training. Student will devote significant effort and engage in the DDS curriculum while participate in journal club and OHS seminar series and continue to work on dissertation research.

The next two to three years focus on completing DDS requirements and devote significant effort on the dissertation research, thesis and manuscript preparation and continuing clinical rotation to sustain dental skills.
Summer before Year 1
OHS Research Rotation 1 and selected DDS course participation
Biostatistics

Fall of Year 1
PhD courses and selected DDS course participation
Continued Research Rotation 1
OHS Seminar Series and Journal Club

Winter of Year 1
PhD courses and selected DDS course participation
Begin Research Rotation 2
OHS Seminar Series and Journal Club

Spring/summer before Year 2
Research Rotation 3

Fall of Year 2
PhD courses and selected DDS course participation
OHS Seminar Series and Journal Club
Identify PhD Dissertation Advisor
Conduct precandidate research

Winter of Year 2
PhD courses and selected DDS course participation
Continue precandidate research
OHS Seminar Series and Journal Club

Spring/summer before Year 3
Preliminary exam and advance to candidacy

Year 3
First year DDS courses
OHS Seminar Series and Journal Club
PhD Dissertation Research

Year 4
Second year DDS courses; clinical dentistry
OHS Seminar Series and Journal Club
PhD Dissertation Research

Years 5 through 6
Complete DDS courses; continue clinical dentistry
PhD Dissertation Research
OHS Seminar Series and Journal Club

Year 7 through 8
Complete all DDS requirements and Advance Dentistry Rotation
PhD Dissertation Research
OHS Seminar Series and Journal Club
[additional advanced science courses]
## DDS/Oral Health Sciences PhD Dual Degree Program Model

<table>
<thead>
<tr>
<th>Summer before Yr 1</th>
<th>Credits</th>
<th>Term</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
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<td>3</td>
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<td>Epid 701</td>
<td>Sum</td>
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*Note: Fall Year 2, select two Rackham Courses starred. Winter Year 2, select 1 Rackham Course starred.  
*Note: See Section 3 for Complete OHS PhD Curriculum

This Model was created in the OHS PhD Office and is used as a guide

8/2012
## ORAL HEALTH SCIENCES PhD PROGRAM
### Academic Progression

<table>
<thead>
<tr>
<th>Precandidates</th>
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<tr>
<td><strong>Program Goal</strong></td>
<td><strong>To Be Completed By</strong></td>
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<table>
<thead>
<tr>
<th><strong>Meet with Academic Advisor</strong></th>
<th>Prior to each term</th>
<th>Program Planning Form</th>
<th>Updated Program Planning Form prior to each term. Include a copy in student's annual report for program review (see Program Planning Form)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Progress Meeting with Program Director(s)</strong> (Dual Degree Students will have meetings with both Program Directors)</td>
<td>Each Term</td>
<td>Program Planning Form, Program Review of Academic Progress, and Curriculum Vitae Template</td>
<td>Updated Program Planning Form, Program Review of Academic Progress Form, and updated curriculum vitae to OHS Ph.D. Office (see Program Review of Academic Progress Form)</td>
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<tr>
<td><strong>Registration</strong></td>
<td>Each fall and winter term</td>
<td>Reviewed by Rackham and OHS Program</td>
<td>Continuous enrollment fall and winter terms throughout Program</td>
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<tr>
<td><strong>Annual Student Evaluation</strong></td>
<td>Annually/winter or spring term</td>
<td>Precandidate Evaluation Form</td>
<td>Satisfactory review by OHS Program Committee</td>
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<table>
<thead>
<tr>
<th><strong>Precandidate OHS Curriculum</strong></th>
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</tr>
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<tbody>
<tr>
<td><strong>1. Graduate Courses</strong></td>
<td>Prior to Preliminary Examination</td>
</tr>
<tr>
<td><strong>2. Research Rotations</strong></td>
<td>Prior to Preliminary Examination</td>
</tr>
<tr>
<td><strong>3. Seminar and Journal Club Series</strong></td>
<td>Must register for fall and winter terms during precandidate years</td>
</tr>
<tr>
<td><strong>Program and Career Development Activities</strong></td>
<td>Attendance</td>
</tr>
<tr>
<td><strong>Dissertation Mentor and Laboratory</strong></td>
<td>Fall term of year two</td>
</tr>
<tr>
<td><strong>Preliminary Examination</strong></td>
<td>Dependent on readiness of student as determined by OHS Program Director, OHS Program Committee, and OHS Student</td>
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<tr>
<td><strong>Advancing to Candidacy</strong></td>
<td>At the end of year two but no later than year three of the training; approval based on review by the OHS Program Committee and Rackham School of Graduate Studies</td>
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</table>

References:
Rackham Graduate School Academic Policies website: [http://www.rackham.umich.edu/policies/gsh/](http://www.rackham.umich.edu/policies/gsh/)
## ORAL HEALTH SCIENCES PhD PROGRAM
### Academic Progression

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<tr>
<th>Program Goal</th>
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<th>For Review and Use</th>
<th>Program Measure</th>
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<td>Annually</td>
<td>Program Review of Academic Progress and Curriculum Vitae Template</td>
<td>Updated Program Review of Academic Progress Form and updated Curriculum Vitae to OHS Ph.D. Office.</td>
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<td><strong>Annual Student Evaluation</strong></td>
<td>Annually/winter or spring term</td>
<td>Candidate Evaluation Form</td>
<td>Satisfactory review by OHS Program Committee.</td>
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<tr>
<td><strong>Seminar and Journal Club Series</strong></td>
<td>Attend every term until program completion</td>
<td>OHS Journal Club Guidelines</td>
<td>Must attend all scheduled dates unless prior approval has been received. Must present at least two seminars during program.</td>
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<tr>
<td><strong>Program and Career Development Activities</strong></td>
<td>Attendance</td>
<td>Memos, calendars, announcements</td>
<td>Must attend all scheduled dates unless prior approval has been received.</td>
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<tr>
<td><strong>Dissertation Committee</strong></td>
<td>Within 9 months of advancing to candidacy</td>
<td>Dissertation Committee Guidelines</td>
<td>Propose Dissertation Committee to OHS Program Committee. Once approved, Dissertation Committee form is forwarded to Rackham for approval.</td>
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<tr>
<td><strong>Dissertation Committee Meetings</strong></td>
<td>First meeting should be convened within 3 months of Committee approval.</td>
<td>Dissertation Committee Meeting Report</td>
<td>Dissertation Committee will help to determine dissertation progress and readiness to defend.</td>
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<tr>
<td><strong>Defense and Evaluation</strong></td>
<td>Dissertation Committee will help to determine readiness to defend</td>
<td>See Rackham Guidelines for Steps for Defense and Evaluation</td>
<td>Approval of degree for conferral if all degree requirements are met. Must be registered in term in which Defense takes place and demonstrate completion of all requirements.</td>
</tr>
</tbody>
</table>

References:
Rackham Graduate School Academic Policies website: http://www.rackham.umich.edu/policies/gsh/
ORAL HEALTH SCIENCES PhD PROGRAM  
Program Planning Form

Name of Student: ________________________________ Date Admitted: ________________________

Academic Advisor: ________________________________________________

Oral Health Sciences Core Requirements:
Oral Health Sciences Seminar and Journal Club Series ORALHEAL 811 (2 credits per term until candidacy; total +8 cr)
COMPLETED: (Term/Year)

<table>
<thead>
<tr>
<th>Term/Year</th>
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<tbody>
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Responsible Conduct of Research and Scholarship
COMPLETED:

Biostatistics (3 cr)
COMPLETED:

Research rotations ORALHEAL 812 (3 rotations at 3 credits each; total = 9 cr)

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Graduate Core Courses (2-4 cr)

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# ORAL HEALTH SCIENCES PhD PROGRAM
## Program Planning Form

**Basic Science Courses** (6 - 9 cr)

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**Advanced Courses in Area of Specialization** (10 or more cr)

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**Cognate Courses** (4 cr)

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**Preliminary Examination**

Projected Date:

Student Signature: ____________________________  Date: __________________

Program Reviewed by Academic Advisor  Name: ____________________________

Advisor Signature: ____________________________  Date: __________________

OHS Director: ____________________________  Date: __________________

Program Planning Form Pg2
8/2012
ORAL HEALTH SCIENCES PhD PROGRAM
Program Review of Academic Progress

The following information is requested as part of the annual Student Evaluation of Academic Progress review. All requested documents should be reviewed by the student’s precandidate or dissertation advisor and signed by both the student and the appropriate advisor.

Student Name: ______________________________________________________

Term and year you first enrolled in OHS Program: ______________

Current Status: _____ Precandidate _____ Candidate
(please check the line)

Degree(s) pursuing (PhD, DDS/PhD, MS/PhD): ______________

For Precandidates, name of Precandidate Advisor: ______________________________

For Candidates, name of Dissertation Advisor: ____________________________

The request for information on the following pages are separated by Precandidate and Candidate. Please select the pages that reflects your current status. When you have completed the requested documents, please review and discuss the content with your advisor. Once this is done, please include signatures from your advisor and yourself on the lines below. Include this page when submitted your review documents.

Advisor Signature: ______________________________ Date: __________________

Student Signature: ______________________________ Date: __________________

Advisor Feedback, comments and additions:

Submit completed documents to Kimberly Smith (kimbsmit@umich.edu)
Please submit the following completed information to Kimberly Smith (kimbsmit@umich.edu).

☐ Program Review of Academic Progress, page 1 with signatures

☐ This form with completed check marks

☐ Curriculum Vitae (updated to include publications, presentations, awards and honors; there is a format example in the OHS PhD Handbook, Section 6)

☐ Transcripts (Request a copy from the OHS PhD office)
  o If not listed on your transcript, attach a list with course numbers and titles, for your current courses during this academic term.

☐ Updated Program Planning Form (see Section 5 in Handbook)
  o Please attach a brief paragraph to the updated Program Planning form that describes your current thinking about possible areas for a dissertation topic and/or advisor. Your progress toward this item will vary widely, depending on length of time in the OHS Program.
  o Please attach a brief statement with your thinking about estimated time (term, year) to take the Preliminary Exam.
  o Attach a list of OHS seminars and/or journal clubs that you presented during the past term, with title of presentation.

☐ The past year’s Research Rotation Reports (Rotation Advisor’s signature required)
  o If you completed a research rotation during the past term, please attach a brief summary (three paragraphs) that describes the goals for the rotation, accomplishments of rotation, and significance of the rotation for your PhD training. Please have this reviewed and co-signed by your rotation director.

☐ A list of your participation in:
  o OHS Committees and Events
  o MOHSSA Events
  o Rackham Committees, Meetings or Events

☐ Scientific meetings attended
  (Please provide: full name of meeting & location; dates; title of presentation if applicable)

☐ Other University of Michigan Seminars attended
  o Attach a list of other seminar series on campus that you attend routinely.

☐ Written summary of progress in the OHS Program over the past year (up to one page)

☐ What is your career goal?
  o one paragraph

☐ Any additional information or concerns you would like to convey to the OHS Program Committee

Submit completed documents to Kimberly Smith (kimbsmit@umich.edu)
Oral Health Sciences PhD Program
Annual Student Evaluation Checklist (Candidate)

Please submit on the following completed information to Kimberly Smith (kimbsmit@umich.edu).

☐ Program Review of Academic Progress, page 1 with signatures

☐ This form with completed check marks

☐ Curriculum Vitae (updated to include publications (published and submitted journal articles and abstracts), presentations, awards and honors; there is a format example in the OHS PhD Handbook, Section 6)

☐ Dissertation (please include the following):
  - Term and year that you advanced to candidacy
  - List of Dissertation Committee Members (include role on committee)
  - Term and Year that Dissertation Committee was named
  - Dates of past Dissertation Committee meetings (summarize one to two paragraphs)
  - Dates of proposed Dissertation Committee meetings
  - Summary of Dissertation Progress (Attach a two to three paragraph statement that summarizes your dissertation progress, to date.)

☐ Proposed time to finish degree

☐ A list of your participation in:
  - OHS Committees and Events
  - MOHSSA Events
  - Rackham Meetings or Events

☐ Scientific meetings attended
  - Include full name of meeting and location; dates; title of presentation if applicable

☐ OHS Seminar and Journal Clubs
  - Attach a list of OHS seminars and/or journal clubs that you presented during the past term, with title of presentation.
  - Attach a list of other seminar series on campus that you attend routinely.

☐ What is your ideal career plan following the completion of the OHS program?
  - one paragraph

☐ Any additional information or concerns you would like to convey to the OHS Program Committee

Submit completed documents to Kimberly Smith (kimbsmit@umich.edu) 8/2012
Outline for Curriculum Vitae - Sample

I. Name in full

II. Education (include calendar years attended and degrees granted)
Undergraduate college, graduate or professional schools, postgraduate training
(list chronologically by years)

III. Academic appointments (list chronologically by years)

IV. Certificates and licenses

V. Military service

VI. Honors and awards

VII. Memberships and offices in professional and research societies

VIII. Teaching activities
A. Courses taught (course title, number, calendar years taught)
B. Student research advisement (student names, years advised, degree achieved, role on student committee)
C. Special instructional materials (handbooks, laboratory manuals, videotapes, etc.)

IX. Service
A. Administrative
   1. Department committees of programs
   2. School committees or programs
   3. University committees
   4. National/International committees
B. Clinical and Patient Care
   1. Intradepartmental
   2. Interdepartmental
C. Continuing Education

X. Invitations to present research seminars or lectures at other institutions

XI. Grant support (include title of grant, role in project, percent effort in project, funding agency, years of award, total direct costs)
A. Past
B. Current active
C. Pending
XII. Publications (include all authors and order of authorship on publication)

A. Published articles in scientific journals listed in chronological order:
   1. Peer-reviewed journals
   2. Journals that are not peer-reviewed

B. Articles in press or accepted (attach copy of acceptance letter)
   1. Peer-reviewed journals
   2. Journals that are not peer-reviewed

C. Articles submitted for publication (indicate when submitted and name of journals)
   1. Peer-reviewed journals
   2. Journals that are not peer-reviewed

D. Books
E. Chapters
F. Abstracts and/or Presentations
   1. Peer-reviewed journals
   2. Journals that are not peer-reviewed

G. Electronic Media
   1. Peer-reviewed contributions
   2. Contributions that are not peer-reviewed

NOTE: DO NOT LIST ARTICLES “IN PREPARATION”

USE THIS FORMAT FOR ALL CITATIONS:

Abraham Schneider DDS
2174 Stone Road • Ann Arbor, MI 48105 • 734-647-2590 • aschneiz@umich.edu

EDUCATION

1999-present
University of Michigan - Ann Arbor, MI
School of Dentistry
Ph.D. Candidate in Oral Health Sciences

Dissertation Topic:
Pathophysiology of bone metastasis

Dissertation Committee:
Laurie McCauley, D.D.S., Ph.D, Periodontics/Prevention/Geriatrics - Mentor and Chair
Nisha J. D'Silva, D.D.S., Ph.D., Oral Medicine/Pathology/Oncology
Paul H. Krebsbach, D.D.S., Ph.D., Oral Medicine/Pathology/Oncology
Kenneth J. Pienta, MD, Urology and Hematology/Oncology

June 1995
University of Connecticut Health Center - Farmington, CT
School of Dental Medicine
Certificate in Periodontology

June 1993
Eastman Dental Center - Rochester, NY
Department of General Dentistry
Advanced Education in General Dentistry

December 1989
Peruvian University Cayetano Heredia - Lima, Peru
Faculty of Stomatology
Bachelor in Stomatology and Doctor in Dental Surgery

ACADEMIC APPOINTMENTS

1996 -1997
Peruvian University Cayetano Heredia - Lima, Peru
Clinical Instructor
Department of Clinical Stomatology
Division of Periodontology

1989 -1991
Peruvian University Cayetano Heredia - Lima, Peru
Assistant Professor
Department of Oral Medicine/Surgery/Pathology

AWARDS AND SCHOLARSHIPS

2004
Harold M. Frost Young Investigator Award
American Society of Bone and Mineral Research

2004
Third prize in Basic Science category, Research/Table Clinic Day
University of Michigan - School of Dentistry

2003
Faculty Recognition Award for Outstanding Research Mentorship
Undergraduate Research Opportunity Program
University of Michigan - College of Literature, Sciences and Arts
2003    Dominic D. Dziewiatkowski Award for Excellence in Graduate Student Research
        University of Michigan - School of Dentistry
2002    First prize in Basic Science category, Research/Table Clinic Day
        University of Michigan - School of Dentistry
2002    Rackham Block Grant Award
        University of Michigan - School of Graduate Studies
2000    Rackham Block Grant Award
        University of Michigan - School of Graduate Studies
1999    Oral Health Sciences Dean's Scholarship
        University of Michigan - School of Dentistry

MEMBERSHIP AND OFFICES IN PROFESSIONAL AND RESEARCH SOCIETIES

1999 - present    American Association for Dental Research, member
1999 - present    American Society for Bone and Mineral Research, member
1997 -1999    Peruvian Association of Periodontology, board director

TEACHING ACTIVITIES

Participation as lecturer/instructor in the following courses:

2001 - 2004    Science and the Practice of Dentistry in the 21st century
                University of Michigan - College of Literature, Sciences and Arts
2001 - 2004    Practical Periodontal Surgery
                (Periodontal surgical simulation - 4th year dental students)
                University of Michigan - School of Dentistry
2002 - 2003    Mineralized Tissues
                University of Michigan - School of Dentistry
                Course director: Laurie K. McCauley, D.D.S., Ph.D.
1994 - 1995    Clinical Instructor - 4th year dental students
                University of Connecticut Health Center - School of Dental Medicine
                Department of Periodontology
                Farmington, CT
1992 - 1993    Clinical Adjunct Instructor - Advanced Education in General Dentistry program
                Eastman Dental Center - Department of General Dentistry
                Rochester, NY

SERVICE

Administrative:
2003    University of Michigan, School of Dentistry
        Member, Oral Health Sciences PhD Program Committee
2000    University of Michigan, School of Dentistry
        President, Michigan Oral Health Sciences Student Association
Patient care:
1995-1999     Private practice limited to Periodontics
               Lima - Peru

INVITED CONFERENCE PRESENTATIONS

October 2003  "Bone tissue engineering: Applying biological principles to achieve a clinical reality"
              I Meeting of the Iberopanamerican Federation of Periodontics
              IX Panamerican Meeting of Periodontics
              Lima, Peru

August 1997   "Clinical Periodontics"
              I National Dental Meeting "Cusco '97"
              Cusco Dental Association
              Cusco - Peru

June 1997     "Periodontal diseases in children and adolescents"
                Peruvian Society of Pediatric Dentistry
                Lima-Peru

October 1996  "Periodontics"
              Santa Maria Catholic University
              Faculty of Dentistry
              Arequipa - Peru

PUBLICATIONS

Articles in scientific peer-reviewed journals:

Chen H, B Demiralp, A Schneider, AJ Koh, C Silve, C Wang and LK McCauley. Parathyroid hormone and
parathyroid hormone-related protein exert both pro- and anti-apoptotic effects in mesenchymal cells. J Bioi Chem
22: 19374-19381, 2002

Schneider A, JM Taboas, LK McCauley and PH Krebsbach. Skeletal homeostasis in tissue engineered bone. J

Kalikin LM, A Schneider, MA Thakur, Y Fridman, LB Griffin, RL Dunn, T J Rosol, RB Shah, A Rehemtulla, LK
McCauley and KJ Pienta. In vivo visualization of metastatic prostate cancer and quantitation of disease progression

Keller, L McCauley and R Taichman. Skeletal localization and neutralization of the SDF-1 (CXCL 12)/CXCR4 axis

Schneider A, LM Kalikin, AC Mattos, ET Keller, MJ Allen, KJ Pienta and LK McCauley. Bone turnover mediates
preferential localization of prostate cancer in the skeleton. Endocrinology, 2004 (conditionally accepted).

Jung Y, J Wang, A Schneider, Y Sun, AJ Koh, NI Osman, LK McCauley and RT Taichman. Regulation of SDF-1
(CXCL 12) production by osteoblasts in the hematopoietic microenvironment and a possible mechanism for stem cell
homing (submitted).

Book chapters:


Rosol T J, SH Tannehill-Gregg, S Cohn, A Schneider and LK McCauley. Animal models of bone metastasis. Cancer
MEETING ABSTRACTS


MEETING ORAL PRESENTATIONS


Schneider A, LM Kalikin, AC Mattos, ET Keller, KJ Pienta and LK McCauley. Increased bone turnover facilitates prostate cancer metastasis to the skeleton. IVth International Conference on Cancer-Induced Bone Diseases, December 7, 2003, San Antonio, TX.

EDUCATION

May 2009  completion of PhD degree, School of Dentistry, University of Michigan

Thesis topic:
Structural and Functional Characterization of Ameloblastin

Thesis committee:
Jan C.-C. Hu, B.D.S., Ph.D., Biologic and Materials Sciences, Co-mentor
James P. Simmer D.D.S., Ph.D., Biologic and Materials Sciences, Co-mentor
Robert S. Fuller, Ph.D., Biological Chemistry
Paul H. Krebsbach, D.D.S., Ph.D., Biologic and Materials Sciences
Laurie K. McCauley, D.D.S., Ph.D., Periodontics and Oral Medicine

August 2005  Advancement to candidacy in the Oral Health Sciences Program, University of Michigan

July 2003 -  Entered the Oral Health Sciences Program, University of Michigan as Ph.D. precandidate

2000 - 2003  Master of Science in Periodontics
University of Michigan
Mentor: Martha Somerman, D.D.S. Ph.D.

2000  Doctoral thesis leading to Dr. med. dent.
University of Göttingen, Germany
Mentor: Prof. Dr. med., Dr. med. dent. Wilfried Engelke

University of Göttingen, Germany

1993  Exchange student
School of Dentistry, University of Minnesota

1992  Visiting summer student
Seoul National University, Korea

ACADEMIC APPOINTMENTS AND POSITIONS

Since June 2009  Post-doctoral Fellow
mentored by Dr. Jan Hu and Dr. James Simmer
Biologic and Materials Sciences
University of Michigan

2005 – Dec 2008  Adjunct Clinical Assistant Professor in Undergraduate Clinic
Periodontics & Oral Medicine
University of Michigan

2001 - 2003  Clinical Instructor in Undergraduate Clinic
Periodontics, Prevention, Geriatrics
University of Michigan
1998  Clinical Assistant Professor
       Department of Periodontics
       Chair: Prof. Dr. med. dent. P. Bernimoulin
       Charité, Humboldt University of Berlin, Germany

1995 - 2000  Clinical Assistant Professor
              Department of Operative Dentistry, Preventive Dentistry and Endodontics
              Chair: Prof. Dr. med. dent. J.-F. Roulet
              Charité, Humboldt University of Berlin, Germany

CERTIFICATES & LICENSES
1998     German Specialty License for Periodontology, Deutsche Gesellschaft für Parodontologie
2005-present  Michigan Specialty License for Periodontics
2004-present  Michigan Dental License
2004     North East Regional Board
2003-present  Diplomate of the American Board of Periodontology
2002     National Board Dental Examination, Part II
2001     National Board Dental Examination, Part I
1994     German Dental License

HONORS AND AWARDS
2009  Rackham Block Grant Award
       University of Michigan – Rackham School of Graduate Studies
       To present: Processing of Porcine Ameloblastin by Mmp-20 and Klk4.
       International Association for Dental Research Conference, Miami, FL

2008     Rackham One-term Dissertation Fellowship
          To speed the process of completing the dissertation

2008  Rackham Block Grant Award
       University of Michigan – Rackham School of Graduate Studies
       To present: Porcine Ameloblastin: Post-translational Modifications and Stable Expression in
       HEK293 Cells.
       Gordon Research Conference: Craniofacial Morphogenesis & Tissue Regeneration, II Ciocco, Italy

2007  New Investigator Award
       9th International Conference on Chemistry and Biology of Mineralized Tissues (ICCBMT)
       To present: Porcine Ameloblastin: Post-translational Modifications and Stable Expression in
       HEK293 Cells.

2007  Dr. Dziewiatkowski Award
       University of Michigan, School of Dentistry, Department of Biologic and Materials Sciences
       For excellence in student research

2007  Rackham Block Grant Award
       University of Michigan – Rackham School of Graduate Studies
       To attend: Mouse embryonic stem cell training at the University of Michigan, Transgenic
       Animal Model Core

2006  Rackham Block Grant Award
       University of Michigan – Rackham School of Graduate Studies
       To present: Structural Characterization of SPARC from Porcine Dentin.
       Gordon Research Conference: Craniofacial Morphogenesis & Tissue Regeneration, Ventura, California
2005  New Investigator Award  
Seventh International Symposium on Tooth Enamel  
To present: *Porcine SPARC: Isolating the protein, cloning the cDNA, and computer modeling.*

2005  Rackham Block Grant Award  
University of Michigan – Rackham School of Graduate Studies  
To present: *Dental Phenotype in MMP20+/− Patient with Splice Acceptor Mutations Defines the Role of MMP-20 in Dental Enamel Formation.*  
Gordon Research Conference: Matrix Metalloproteinases, Big Sky, Montana

2004  Rackham Block Grant Award  
University of Michigan – Rackham School of Graduate Studies  
To attend: Genome Access Course at Cold Spring Harbor

2003 - 2005  Dean’s Scholarship for Precandidate Training in the Oral Health Sciences Ph.D. Program  
University of Michigan – School of Dentistry

2003; ’04; ’05  Rackham Travel Grant Award  
’06; ’07; ’09 University of Michigan – Rackham School of Graduate Studies

2003  Chasens Fellowship for Teaching and Research  
American Academy of Periodontology

MEMBERSHIPS IN PROFESSIONAL AND RESEARCH SOCIETIES (PRESENT)  
2009  German Association for Basic Science in Dentistry  
2008  German Association for Periodontology  
2008  German Association for Orofacial Sciences  
2004  International Association for Dental Research (IADR)  
2004  American Association for Dental Research (AADR)  
2000  American Academy of Periodontology (AAP)

TEACHING ACTIVITIES

Classroom Teaching  
1995 - 2000  Faculty Lecturer for dental students:  
• Speech disorders  
• TMJ anatomy and function  
• Occlusion and articulator  
• Basics of occlusion  
• Treatment of TMD  
• Impression taking and impression material  
• Laboratory fabrication of cast gold restorations  
• Adhesion principles  
• Composite restorations  
• Base materials  
• Cast gold restorations  
• Ceramic restorations  
Charité, Humboldt University of Berlin, Germany  
Department of Operative Dentistry, Preventive Dentistry and Endodontics
Preclinical Laboratory Teaching
2005, '06; '07  Instructor
Advanced periodontal/implant surgery: a practical course
Surgical simulation – dentists, oral surgeons
University of Michigan
Course Director: Hom-Lay Wang, DDS, MSC, PhD

2004  Instructor
Practical Periodontal Surgery
Periodontal surgery simulation – 4th year dental students
University of Michigan
Course Director: William V. Giannobile, DDS, MS, DmSc

1995 – 2000  Faculty Instructor
Preclinical Operative Dentistry
Preclinical Endodontics Laboratory
Department of Operative Dentistry, Preventive Dentistry and Endodontics
Charité, Humboldt University of Berlin, Germany

1991  Teaching Assistant
Gross Anatomy
Center for Anatomy, University of Göttingen, Germany

Clinical Teaching
2006 – 2008  Adjunct Clinical Instructor in Undergraduate Clinic
Periodontics and Oral Medicine
University of Michigan

2005  Clinical Instructor in Graduate Clinic
Periodontics, Prevention, Geriatrics
University of Michigan

2001 – 2003  Clinical Instructor in Undergraduate Clinic
Periodontics, Prevention, Geriatrics
University of Michigan

1995 – 2000  Faculty Clinical Instructor in Undergraduate Clinic
Incl. Operative Dentistry, Endodontics, Preventive Dentistry
Department of Operative Dentistry, Preventive Dentistry and Endodontics
Charité, Humboldt University of Berlin, Germany

1998  Faculty Clinical Instructor in Undergraduate Clinic
Department of Periodontics
Charité, Humboldt University of Berlin, Germany

Student Research Advisement
2007  Visiting Summer Student at Arizona School of Dentistry & Oral Health
Reda Telab, senior
Laboratory of Dr. Simmer and Dr. Hu, University of Michigan

2001-2003  Dental Student, at University of Michigan
Patricia Lukasavage
Laboratory of Dr. Somerman, University of Michigan
1999-2002  
**Doctoral thesis leading to Dr. med. dent.**  
Charité, Humboldt University of Berlin, Germany  
Constanze Raffelt  
*The strength of anterior teeth restored with bonded porcelain veneers and crowns.*

1999-2002  
**Doctoral thesis leading to Dr. med. dent.**  
Charité, Humboldt University of Berlin, Germany  
Hanjo Pfeiffer  
*The quality of anterior veneers placed on composite restorations.*

1998-2001  
**Doctoral thesis leading to Dr. med. dent.**  
Charité, Humboldt University of Berlin, Germany  
Matthias Roloff  
*Coronal leakage along root fillings with different apical plugs.*

**SERVICE**

**Administrative**

2008  
Student ambassador at the Michigan Clinical Research Symposium

2007  
Profile for success, School of Dentistry, University of Michigan  
Introduction to academic dentistry for prospective dental students

2006-2007  
Member of the program committee Oral Health Sciences Ph.D. Program,  
University of Michigan

2006  
Member of the subcommittee of graduate students for Strategic Assessment of the School of Dentistry, University of Michigan

2005-2006  
Member of the admissions committee, Oral Health Sciences Ph.D. Program,  
University of Michigan

1995-2000  
Departmental faculty manual, introduction of patient database, coordination of patient care  
Charité, Humboldt University of Berlin, Germany

**External**

Reviewer: Journal of Periodontology, Journal of Adhesive Dentistry

**Patient Care**

1998 – 2000  
Faculty Clinic  
TMJ Clinic, Department of Prosthodontics  
Charité, Humboldt University of Berlin, Germany

1995 – 2000  
Faculty Clinic and Emergency Clinic  
Operative Dentistry, Preventive Dentistry and Endodontics  
Charité, Humboldt University of Berlin, Germany

1998  
Faculty Clinic  
Periodontics  
Charité, Humboldt University of Berlin, Germany

1994 – 1995  
General Dentistry  
Practice of Drs. Vandré & Vandré-Holmes  
Göttingen, Germany
INVITED TALKS

June 2008  
*Ameloblastin: Structure and function in enamel formation.*  
University of California at San Francisco, Division of Periodontology

April 2008  
*The epithelium-tooth interface in amelogenesis imperfecta and periodontal disease.*  
University of Texas Health Science Center at San Antonio, Department of Periodontology

2005  
*SPARC: Structure, Function & Evolution.*  
University of Michigan, Oral Health Sciences Seminar Series

2003  
*Periodontal disease, premature birth, and disabilities.*  
University of Michigan, MAC Disability Series

2002  
*Periodontal Training at the University of Michigan.*  
University of Würzburg, Germany

1999  
*Impression taking and impression material.*  
Regional Dental Study Club, District Plön, Schellhorn, Germany

PUBLICATIONS

A. Published articles in scientific peer-reviewed journals

   *Effect of a 5000 ppm fluoride toothpaste and a 250 ppm fluoride mouth rinse on the demineralisation of dentin surfaces.*  
   BMC Research Notes (accepted 7-23-2009)

   *Comparative clinical study of the effectiveness of three different bleaching methods.*  
   Operative Dentistry (accepted 1-02-2009)

   *Restoring strength of incisors with veneers and full ceramic crowns.*  
   Journal of Adhesive Dentistry (in print)

   *Role of Bcl-2 in osteoclastogenesis, cell survival, and PTH anabolic actions in bone.*  

   *Microflora of exposed root surfaces after periodontal maintenance therapy. A 3-year evaluation.*  
   J Periodontol (2007) 78, 1580-1589

   *Enamel Formation and Amelogenesis Imperfecta.*  
   Cells Tissues Organ (2007) 186, 78-85

   *Effect of a 40% Chlorhexidine Varnish on Demineralization of Dentin Surfaces in situ.*  

   *Porcine SPARC: Isolating the protein, cloning the cDNA, and computer modeling.*  
9. Chun, Y.-H. P., Foster, B., Berry, J., Lukasavage, P., Zhao, M., Tenenbaum, H. C., Somerman, M.  
Bisphosphonate modulates cementoblast behavior in vitro.  
J Periodontal (2005) 76, 1890-1900

Biological foundation for periodontitis as a potential risk factor for atherosclerosis.  
J Periodont Res (2005) 9, 87-95

11. Peroz, I., Chun, Y.-H. P., Karageorgi, G., Schwerin, C., Bernhardt, O., Roulet, J.-F., Freesmeyer, W. B.,  
Meyer, G., Lange, K.-P.  
A multi-center clinical trial on the use of pulsed electromagnetic fields in the treatment of temporomandibular disorders.  

Treatment of anterior disk displacement without reduction with PEMF.  
Dtsch Zahnärztl Zeitschr (1999) 54, 284-287

B. Book chapter
1. Chun, Y.-H. P., Krebsbach, P. H., Simmer, J.-P.  
Disorders affecting the Dentition: Genetic  
Primer on the Metabolic Bone Diseases and Disorders of Mineral Metabolism,  

C. Poster abstracts
1. International Association for Dental Research (IADR) in Miami, FL 2009  
Chun, Y.-H. P., Yamakoshi, Y., Nagano, T., Bartlett, J. D., Simmer, J. P.  
Processing of Porcine Ameloblastin by Mmp-20 and Klk4.

2. Gordon Research Conference, Craniofacial Morphogenesis & Tissue Regeneration in Il Ciocco, Italy 2008  
Chun Y.-H. P., Kobayashi K., Yamakoshi Y., Hu J. C-C, Simmer J. P.  
Porcine Ameloblastin: Post-translational Modifications and Stable Expression in HEK293 Cells.

3. 9th International Conference on Chemistry and Biology of Mineralized Tissues (ICCBMT)  
Austin, Texas, November 4-8, 2007  
Chun Y.-H. P., Kobayashi K., Yamakoshi Y., Hu J. C-C, Simmer J. P.  
Porcine Ameloblastin: Post-translational Modifications and Stable Expression in HEK293 Cells.

4. Research Day 2007, University of Michigan, School of Dentistry  
Structural Characterization of SPARC from Porcine Dentin.

5. Gordon Research Conference, Craniofacial Morphogenesis & Tissue Regeneration in Ventura, CA 2006  
Structural Characterization of SPARC from Porcine Dentin.

Yamashita, J., Chun, Y.-H. P., Data, N.S., McCauley L.K.  
The Evidence that Bcl-2 Is Dispensable for the Anabolic Action of PTH in Bone.

7. Gordon Research Conference, Matrix Metalloproteinases in Big Sky, MT 2005  
Chun Y.-H. P., Bartlett J.D., Simmer J.P.  
Dental Phenotype in MMP20-/- Patient with Splice Acceptor Mutations Defines the Role of MMP-20 in Dental Enamel Formation.
8. **Seventh International Symposium on the Composition, properties and fundamental Structure of tooth enamel, Brewster Cape Cod Bay April 2005,**
   Chun, Y.-H. P., Yamakoshi Y., Kim J.-W., Iwata T., Hu J.C.-C., Simmer J.P.
   Porcine SPARC: Isolating the protein, cloning the cDNA, and computer modeling.

9. **University of Michigan Musculoskeletal research core center, 3rd Annual Research Symposium 2005**
   Yamashita, J., Chun, Y.-H. P., McCauley L.K.
   The role of Bcl-2 in PTH-induced bone formation.

10. **IADR in Honolulu 2004**
    Chun, Y.-H. P., Foster, B., Berry, J., Lukasavage, P., Zhao, M., Tenenbaum, H. C., Somerman, M.
    Bisphosphonate modulates cementoblast behavior in vitro.

11. **Europerio 4 in Berlin, Germany, June 2003**
    Chun, Y.-H. P., Foster, B., Berry, J., Lukasavage, P., Zhao, M., Somerman, M.
    Effect of bisphosphonate on cementoblasts.

12. **Table Clinic at the University of Michigan, February 2003**
    Chun, Y.-H. P., Foster, B., Berry, J., Lukasavage, P., Zhao, M., Somerman, M.
    Effect of bisphosphonate on cementoblasts.

13. **IADR in San Diego 2002**
    The quality of anterior veneers placed on composite restorations.

14. **IADR in San Diego 2002**
    Roulet, J.-F., Raffelt, C., Pfeiffer, H., Blunck, U., Chun, Y.-H.
    The strength of anterior teeth with bonded porcelain veneers and crowns.

15. **IADR in San Diego 2002**
    Peroz, I., Chun, Y.-H., Roulet, J.-F., Lange, K.-P.
    Pulsed electromagnetic fields in treatment of anterior disk displacement without reduction and osteoarthritis.

    Chun, Y.-H. P., Roloff, M., Barthel, C. R., Roulet, J.-F-
    Coronal leakage along root fillings with different apical plugs.

17. **IADR in Nice, France 1998**
    Chun, Y.-H. P., Engelke, W., Bruns, T., Schöngle, P. W.
    Orofacial kinematics during production of consonants in dysarthric patients.
CURRICULUM VITAE

KATHLEEN GABOARDI NEIVA

DATE AND PLACE OF BIRTH: October 1, 1975, Curitiba, PR Brazil

ADDRESS
4141 Lake Forest Dr E
Ann Arbor, MI  48108-9678
Home: +1 (734) 214-5319
Mobile: +1 (734) 717-9981
Email: kgneiva@umich.edu

EDUCATION

2003-2009  Ph.D. in Oral Health Sciences
University of Michigan, School of Dentistry
Ann Arbor, MI, USA

2000-2001  Certificate in Endodontics
Federal University of Parana, School of Dentistry
Curitiba, PR, Brazil

1998  Postgraduate non-degree in Endodontics
Brazilian Dental Association
Curitiba, PR, Brazil

1998  Postgraduate non-degree in Prosthodontics
Brazilian Dental Association
Curitiba, PR, Brazil

1993-1997  Doctor of Dental Surgery
Vale do Itajai University, School of Dentistry
Itajai, SC, Brazil

PROFESSIONAL EXPERIENCE

Research and clinical

2003  Laboratory Research in Angiogenesis
Mentor: Jacques Eduardo Nor
University of Michigan, School of Dentistry
Ann Arbor, MI, USA

2002  Instructor in Clinical Foundations I – Preclinical teaching
University of Michigan, School of Dentistry
Ann Arbor, MI, USA

2001-2002  Assistant in Graduate Periodontics Clinic
University of Michigan, School of Dentistry
Ann Arbor, MI, USA
Administrative service

2008-2009 Oral Health Sciences Ph.D. Program Committee
University of Michigan, School of Dentistry

2006 Oral Health Sciences Seminar Committee
University of Michigan, School of Dentistry

2006 Strategic Assessment Committee, Research Discussion Group
University of Michigan, School of Dentistry

Private Practice

1997-2001 General Dentistry
Curitiba, PR, Brazil

ACADEMIC APPOINTMENTS

2002-2009 Adjunct Clinical Lecturer
Department of Cariology, Restorative Sciences, and Endodontics
University of Michigan, School of Dentistry
Ann Arbor, MI, USA

LICENSURE AND CERTIFICATION

2002 Clinical Academic Limited License
Board of Dentistry
State of Michigan, USA

2001 Certificate in Endodontics
National Council of Dentistry
Curitiba, PR, Brazil

1997 Doctor of Dental Surgery
National Council of Dentistry
Curitiba, PR, Brazil

AWARDS AND SCHOLARSHIPS

2009 Hatton Award - First Place
AADR/Johnson & Johnson Oral Health Products Hatton Award (Senior category)
Neiva KG and Nör JE. Endothelial cell-initiated crosstalk enhances tumor cell survival and migration.

2009 Dr. Dominic Dziewiatkowski Award
Excellence in Student Research
University of Michigan - School of Dentistry

2009 Hatton Award
Brazilian Society of Dental Research (SBPqO - Brazilian Division of IADR)
Sakai VT, Zhang Z, Dong Z, Neiva KG, Machado MAAM, Shi S, Santos CF, Nör JE. Mechanisms underlying dental pulp stem cell differentiation into functional odontoblasts and angiogenic endothelial cells.

2009
Research Day – Third Prize
University of Michigan - School of Dentistry (PhD, Postdoctoral, Staff category)
Neiva KG, Zhang Z, Nör JE. Endothelial cell-initiated crosstalk enhances tumor cell survival and migration.

2009
Rackham Block Grant Award
University of Michigan - School of Graduate Studies
International Association for Dental Research Meeting
Miami, FL, USA

2009
Keystone Symposia Scholarship
Angiogenesis and Lymphangiogenesis in Cancer
National Cancer Institute Scholarship
Big Sky, Montana, USA

2009
Rackham Travel Grant Award
University of Michigan - School of Graduate Studies
Keystone Symposia - Angiogenesis and Lymphangiogenesis in Cancer
Big Sky, Montana, USA

2008
Research Day - First Prize
University of Michigan - School of Dentistry (PhD, Postdoctoral, Staff category)
Neiva KG, Zhang Z, Nör JE. Endothelial cells induce STAT3, Akt, and ERK signaling in tumor cells.

2008
Hatton Award
Brazilian Society of Dental Research (SBPqO - Brazilian Division of IADR)

2007
Hatton Award
Brazilian Society of Dental Research (SBPqO - Brazilian Division of IADR)

2006
Rackham Block Grant Award
University of Michigan - School of Graduate Studies
Nature Biotechnology Winter Symposium - Angiogenesis in cancer and vascular disease
Miami, FL, USA

2005
Rackham Block Grant Award
University of Michigan - School of Graduate Studies
Gordon Research Conference - Vascular Cell Biology
Ventura, CA, USA

2004
Rackham Block Grant Award
University of Michigan - School of Graduate Studies
International Association for Dental Research Meeting
Honolulu, Hawaii, USA
2003  **Oral Health Sciences Dean’s Scholarship**  
University of Michigan - School of Dentistry

**TEACHING ACTIVITIES**

**Clinical Instructor**

2005-2009  Endodontics - Undergraduate Clinic  
2002-2004  Course 519: Clinical Foundations I  
2002-2004  Course 520: Clinical Foundations I  
2003  Course 612: Principles of Endodontics  
2002  Course 521: Dental Anatomy/Occlusion I

**Special instructional materials**

2003  Peters MC, Neiva GF, Neiva KG  
CD ROM – Procedural information: Class IV Cavity Preparation

**PRESENTATIONS**

2009  Crosstalk between endothelial cells and tumor cells in head and neck cancer.  
Post-doctoral Candidate Seminar  
Comprehensive Cancer Center, University of Wisconsin, Madison, WI

2009  Crosstalk between endothelial cells and tumor cells in head and neck cancer.  
CE course, Faculty Candidate Seminar  
University of Texas, Dental Branch, Houston, TX

2009  Crosstalk between endothelial cells and tumor cells in head and neck cancer.  
Dissertation Defense Seminar  
University of Michigan, School of Dentistry, Ann Arbor, MI

2009  Crosstalk between endothelial cells and tumor cells in head and neck cancer progression.  
Dr. Dominic Dziewiatkowski Award Seminar  
University of Michigan, School of Dentistry, Ann Arbor, MI

2009  Endothelial cell-initiated crosstalk enhances tumor cell survival and migration. (Poster)  
International Association for Dental Research Meeting, Miami, FL

2009  Endothelial cell-initiated crosstalk enhances tumor cell survival and migration. (Poster)  
Research Day, University of Michigan, School of Dentistry, Ann Arbor, MI

2009  Crosstalk initiated by endothelial cells enhances head and neck tumor cell survival and migration via STAT3, Akt, ERK signaling. (Poster)  
Keystone Symposia in Angiogenesis and Lymphangiogenesis in Cancer, MT

2008  Endothelial cells induce STAT3, Akt, and ERK signaling in tumor cells. (Poster)  
Research Day, University of Michigan, School of Dentistry, Ann Arbor, MI
2005 Role of Bel-2 in monocyte recruitment to cancer.
Oral Health Sciences Seminar
University of Michigan, School of Dentistry, Ann Arbor, MI

2001 Evaluation of the efficiency of root canal preparation with different rotary systems.
Federal University of Parana - Curitiba, PR, Brazil
(Oral presentation - Requirement for Certificate in Endodontics)

1997-1998 Pulpal response to total-etching technique.
XVIII International Meeting of Dentistry - Sao Paulo, SP, Brazil (Oral)
VIII Dental Meeting of Santa Catarina - Florianopolis, SC, Brazil (Oral)
IV International Meeting of Dentistry - Curitiba, PR, Brazil (Oral)
XVII Academic Dental Meeting - Aracatuba, SP, Brazil (Poster)
VII Week of Scientific Initiation - Itajai, SC, Brazil
(Oral presentation - Requirement for Doctor of Dental Surgery)

PUBLICATIONS


Zhang Z, Neiva KG, Lingen, MW, Ellis LM, Nör JE. VEGF-dependent tumor angiogenesis requires the inverse and reciprocal regulation of VEGFR1 and VEGFR2. Cell Death Differ. 2009 (accepted for publication)

A. Personal Statement
Our research interests focus on enamel and dentin development and our ultimate goals are to understand the regulation of tooth development and to generate biomimetic dental structures for basic science and clinical applications. Specifically, mouse models with Enam and KLK4 gene knockout and β-galactosidase gene knockin resulting in enamel defects have been established and characterized. Transgenic mouse models over-expressing either Enam or Ambn have also been established and demonstrated to be able to recover the enamel defect in the specific null mouse background. To elucidate the native enamel and dentin protein structure and function, we use developing porcine molars. This group of studies has allowed us to isolate and purify various enamel and dentin proteins, express their recombinant forms and generate antibodies to aid characterization and functional study of enamel and dentin components. In addition, we are actively recruiting families with inherited dental defects involving tooth size, number and structure for mutational analyses. Investigating the genetic control of tooth formation has advanced our understanding of the specific function of genes and gene products critical for the development of dentition.

B. Positions and Honors.
Positions:

1991 - 1993 Postdoctoral Research Associate, Center for Craniofacial Molecular Biology, University of Southern California, School of Dentistry.
1993 - 1999 Assistant Professor, University of Texas Health Science Canter at San Antonio (UTHSCSA).
1999 - 2002 Associate Professor, School of Dentistry, UTHSCSA.
2002 - 2006 Associate Professor, Prosthodontics/BMS, School of Dentistry, University of Michigan.
2006 - present Professor, Prosthodontics/BMS, School of Dentistry, University of Michigan.

Honors:

1983 Distinguished Service Award, Detroit American Indian Health Center.
2001 Distinguished Service Award, Member of the Editorial Board, J. Dent. Res.
2007 Distinguished Scientist Award, Basic Research in Biological Mineralization, IADR/AADR.

C. Selected peer-reviewed publications (selected from over 150 publications)
Most relevant to the current application


Additional recent publications of importance to the field (in chronological order)


A. Research Support.

Ongoing Research Support

RO1 DE019775-04 James Simmer (PI) 9/1/09-8/31/14
NIDCR  Title: Functional Studies of Kallikrein4
Proposed Aims: (1) to determine the temporal and spatial expression of Klk4 in ameloblasts during the secretory, transition, and maturation stages and in the underlying odontoblasts, (2) to characterize enamel formation in the absence of Klk4 expression, (3) to characterize the enzymatic activity of Klk4 on amelogenin, ameloblastin and enamelin, (4) to investigate the expression of protease activated receptors (PARs) by ameloblasts, and (5) to identify other organs and tissues that express Klk4.

RO1 DE015846-08 James P. Simmer (PI) 9/25/09-6/30/14
NIDCR  Title: Proteomics and Genetics of Enamel and Dentin.
Isolate and characterize molecules in the extracellular matrices of developing enamel and dentin. Identify genes and mutations that cause Amelogenesis imperfecta and dentinogenesis imperfecta.
RO1 DE018020-05 James Simmer (PI) 2/20/08-12/31/12
NIDCR  Title: Structure and Function of Dentin Sialophosphoprotein,
Three Specific Aims are proposed to (1) identify the protease that catalyzes the initial cleavage of
DSPP, and (2) determine which DSPP-derived proteins are structural (long-lived) and which are
transient (degraded), and characterize the structural/functional properties of the DSPP-derived proteins.

RO1-DE019622-04 Jan C-C. Hu  (PI) 04/01/09-03/31/14
NIDCR  Title: Why is Fam83h important for enamel formation?
We proposed to (1) characterize the temporal and spatial pattern of Fam83h expression during
odontogenesis and to determine its subcellular localization, (2) isolate Fam83H protein for structural
and functional characterization, (3) identify Fam83H interacting proteins, and (4) determine if the
expression of truncated Fam83h interferes with amelogenesis.
Role: Investigator

Completed Research Support

R21 DE18878-02 Petros Papagerakis (PI) 1/1/09-12/31/11
NIDCR  Title: Exploratory innovations in biomedical computational science and technology
The study is designed to measure growth lines in the crowns of human bicuspid and determine the
appositional growth rate, the duration of appositional growth, the extension rate, the duration of
ameloblast extension, and the spreading rate of appositional termination. To develop mathematically
based 2D and 3D computer models that will simulate the growth of human dental enamel.
Role: Investigator

RO1 DE 016276-05 John D. Bartlett (PI)  8/1/06–6/30/11
NIDCR  Title: Enamelysin Processing Mechanisms in Amelogenesis.
The focus of this application is to define how enamelysin (MMP20) processes enamel proteins in vitro
and in vivo, and to determine how such processing allows for proper enamel development.
Role: Investigator

R56 DE11301-11 Jan C-C. Hu  (PI) 07/01/10-06/30/11
NIDCR  Title: Enamel and Enamelin
Four specific aims are proposed to (1) determine the functional consequences of altered enamelin
expression on crystal number and shape, (2) establish a transgenic system to assay the function of
enamel proteins in vivo and use it to determine the functions of the enamelin N-terminal/32kDa and C-
terminal cystine-rich domains, (3) discern whether reduced enamelin or cell pathology alters
ameloblastin and/or amelogenin expression, and (4) express and purify recombinant enamelin for in
vitro functional analyses.
Role: Investigator
BIOGRAPHICAL SKETCH

Provide the following information for the Senior/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>David H. Kohn</td>
<td>Professor</td>
</tr>
</tbody>
</table>

**eRA COMMONS USER NAME (credential, e.g., agency login)**
dhkohn

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

<table>
<thead>
<tr>
<th>INSTITUTION AND LOCATION</th>
<th>DEGREE</th>
<th>MM/YY</th>
<th>FIELD OF STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tulane University, New Orleans, LA</td>
<td>BSE</td>
<td>1983</td>
<td>Biomedical Engineering</td>
</tr>
<tr>
<td>University of Pennsylvania, Philadelphia, PA</td>
<td>MSE</td>
<td>1985</td>
<td>Bioengineering</td>
</tr>
<tr>
<td>University of Pennsylvania, Philadelphia, PA</td>
<td>Ph.D.</td>
<td>1989</td>
<td>Bioengineering</td>
</tr>
</tbody>
</table>

A. Personal Statement

The primary objective of this Training Program is to provide an interdisciplinary research-intensive environment for individuals who wish to pursue careers in the oral sciences, with a focus in the area of restoration of oral-craniofacial tissues. I have the scientific expertise and leadership qualities to serve as Director of this Training Program. Since starting my laboratory the University of Michigan over 20 years ago, significant contributions to the fields of biomaterials and biomechanics have been made. Specifically, my laboratory has generated important insights into the behavior of synthetic biomaterials, synthesized biological materials and developed strategies to better control cell function in-vitro and in-vivo. In parallel, we have been instrumental in developing approaches for understanding how mineralized tissues fail, how mechanical competence can be explained by changes in composition and even improved by exogenous mechanical stimulation. This work has resulted in over 100 peer reviewed publications, 5 patents, over 80 invited presentations. I have served as PI or co-investigator on NIH grants (as well as grants from NSF, DoD, Whitaker Foundation and private industry) continuously for the past 20 years, successfully administering projects, collaborations and student mentoring. I have served on the Operating Committee for this T32 grant since 2003 and as Associate Director since 2007. I have trained 36 graduate students, 6 post-docs, 40 undergraduates, 14 clinical fellows and 5 visiting scholars in my laboratory and many of my past trainees now hold academic positions and are funded independent investigators. Several trainees received NSF and NIH individual fellowships. More global leadership experience that makes me well suited to direct this Training Program include service as Chair of the Graduate Committee in Biomedical Engineering, advisor of students in the biomaterials track, service on advisory boards of several academic tissue engineering programs and on the Board of Directors of the Society for Biomaterials. As a result of my experiences directing my lab and administering programs that extend beyond my lab, I am able to interact and communicate effectively with students and faculty from a variety of engineering, biological and clinical backgrounds, as well as help develop research plans and organize and manage timelines and budgets.

B. Positions and Honors

**Positions and Employment**

1982 – 1983 Research Assistant, Biomechanics Laboratory Tulane University, New Orleans, LA
1983 Research Assistant, Dept. of Biomechanics, Hospital for Special Surgery, New York, NY
1983 Teaching Assistant, Dept. of Bioengineering, University of Pennsylvania, Philadelphia, PA
1984 – 1989 Research Fellow, Dept. of Bioengineering, University of Pennsylvania, Philadelphia, PA
1987 – 1989 Health Science Specialist, Veteran's Administration, Philadelphia, PA
1989 – 1996 Assistant Professor, Dept. of Biologic and Materials Sciences, University of Michigan
1990 – 1996 Assistant Professor, Graduate Program in Bioengineering, University of Michigan
1992 - Director, Bioengineering Consulting, Inc., Ann Arbor, MI
1996 - 2004  Associate Professor (with tenure), Dept. of Biologic & Materials Sciences, University of Michigan
1996 - 2004  Associate Professor, Dept. of Biomedical Engineering, College of Engineering, University of Michigan
2000 – 2001  Visiting Professor, Craniofacial and Skeletal Diseases Branch, NIDCR, NIH
2002 - 2008  Chair, Graduate Committee, Department of Biomedical Engineering, University of Michigan
2004 -      Professor, Depts. of Biologic & Materials Sciences; Biomedical Engineering, University of Michigan

Selected Awards and Other Professional Activities
1994 - 1997  The Whitaker Foundation - Biomedical Research Award,
1994 - 1998  National Science Foundation, Research Initiation Award
1996 - 1999  Chair, Society for Biomaterials - Oral/Craniofacial Biomaterials Special Interest Group
1996 - 2000  NIH, Orthopaedics Study Section for SBIR/STTR Grants; Chair 1998 - 2000
1997 - 2000  Society for Biomaterials Program Committee; Symposium Organizer
1998 – 2001  Arthritis Foundation - Biomechanics/Biotechnology Study Section
1998 - 2000  NIH, Oral Biology and Medicine II Study Section, Ad-Hoc member
2000 - 2001  NIH IPA Award
2001 - 2002  President, International Association for Dental Research, Implantology Research Group
2003 - 2006  NIH, Skeletal Biology Development and Disease, Ad-Hoc member
2005 -      Fellow, American Institute for Medical and Biological Engineering
2006 - 2009  NIH, Skeletal Biology Structure and Regeneration, Ad-Hoc Member
2006 - 2007  Member-at-Large, Society for Biomaterials
2006 -      Advisory Board, University of California Santa Barbara, Bone Diagnostic Program
2007      Hunter Distinguished Lecturer, Dept. of Bioengineering, Clemson University
2008 –      Omicron Kappa Upsilon Honor Society
2008 -      Advisory Board, Clemson Univ/MUSC Orthopaedic Research & Training Program
2008      Discussion Leader, Tissue Engineering, Gordon Research Conference on Biomineralization
2009 - 2011  NSERC (Canada), Strategic Projects Panel on Biomedical Technologies
2009 – 2015  Society for Biomaterials, Board of Directors and Council
2009 – 2013  NIH, Skeletal Biology Development and Disease, Chartered Member
2012      Fellow, International Union of Biomaterials Scientists and Engineers
2012      International Association for Dental Research, Distinguished Scientist Award

C. Selected Peer-reviewed Publications (from > 100 Papers and Chapters)


D. Research Support

**Ongoing Research Support**

**R01-DE 013380-09 (PI: DH Kohn)**

NIH/NIDCR/NIAMS

Three Dimensional Biomimetic Scaffolds for Functional Bone Tissue Engineering

The major goals of this grant are to test the hypothesis that the extracellular microenvironment provided by a biomaterial controls the ability of human progenitor cells to proliferation and differentiate toward an osteoblast phenotype through solution as well as substrate mediated effects, which collectively can direct cells to regenerate a mineralized matrix.

There is no budgetary or scientific overlap with any other grant.

**T32 DE07057-36 (Co-PI/Co-Director, with PH Krebsbach)**

NIH-NIDCR

Tissue Engineering and Regeneration

The primary objective of this training program is to provide an interdisciplinary research-intensive environment for individuals who wish to pursue careers in the oral sciences, with a focus in the area of restoration of oral-craniofacial tissues.

There is no budgetary or scientific overlap with any other grant.

**1 RC1 DE020721-01 (co-PI, with R Taichman)**

NIH/NIDCR

The Use of Erythropoietin to Reprogram Oral and Craniofacial Stem Cells

The overall objectives of this challenge grant are to test the hypotheses that: erythropoietin (Epo) can be used to reprogram skeletal precursors and mesenchymal stem cells to facilitate osseous repair in nonhealing and irradiated critical sized bone defects.

There is no budgetary or scientific overlap with any other grant.
1 R01-AR-056657-01 (Co-I; PI: MD Morris) 8/01/10 to 4/30/15
NIH/NIAMS
Chemical Structure Effects on Bone Response to Mechanical Load

The overall aim of this proposal is to apply solid-state magic angle spinning nuclear magnetic resonance spectroscopy (MAS-NMR) to measure changes in the chemical structure of bone under mechanical load.

There is no budgetary or scientific overlap with any other grant.

2 R01 AR052010-06 (Co-I: Kohn/PI: MD Morris) 8/18/11 – 7/31/16
NIH/NIAMS
Advanced Glycation End Products Effects on Bone Biomechanics

The aim of this proposal is to assess bone ultrastructural and mechanical properties as a consequence of the presence of advanced glycation end products (AGEs). AGEs are introduced in animal models, via chemical treatment, aging and diabetes and investigated using NMR, Raman spectroscopy and mechanical testing.

There is no budgetary or scientific overlap with any other grant.

Completed Research Support (Last 3 Years)

R01 DE 015411 (PI: DH Kohn) 8/01/03 to 7/31/08
NIH/NIDCR
Organic/Inorganic Hybrids to Guide Bone Regeneration

The major goals of this project were to synthesize hybrid biomaterials consisting of self-assembled bioactive mineral layers containing organic phases that can actively provide cues for stem cell differentiation.

R56-DE 013380-06A1 (PI: DH Kohn) 04/01/07 to 07/31/08
NIH/NIDCR/NIAMS
Three Dimensional Biomimetic Scaffolds for Functional Bone Tissue Engineering

The major goals of this bridging grant were to test the hypothesis that the extracellular microenvironment provided by a biomaterial controls the ability of human progenitor cells to proliferation and differentiate toward an osteoblast phenotype through solution as well as substrate mediated effects, which collectively can direct cells to regenerate a mineralized matrix.

DAMD17-03-1-0556 (PI: DH Kohn) 10/01/03 to 09/30/08
DoD/Dept. of the Army
Effects of Age and Exercise on Microdamage and Composition of Bone

The major goal was the examination of age and physical activity on whole bone mechanical and geometric properties, fatigue-induced microdamage and local composition of bone mineral and matrix.

1 S10 RR026475-01 (PI: DH Kohn) 10/1/09 - 9/30/10
NIH/NCRR
Micro-CT 100

This is a proposal to support the purchase of a Scanco CT100 specimen micro computed tomography scanner that is to be part of an Imaging Core Facility at the University of Michigan.
NAME OF FELLOWSHIP APPLICANT
Fabiana Naomi Soki

POSITION TITLE
Oral Health Sciences PhD candidate

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

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

<table>
<thead>
<tr>
<th>INSTITUTION AND LOCATION</th>
<th>DEGREE (if applicable)</th>
<th>YEAR(s)</th>
<th>FIELD OF STUDY</th>
</tr>
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<tbody>
<tr>
<td>University of Sao Paulo, Sao Paulo - Brazil</td>
<td>DDS</td>
<td>2007</td>
<td></td>
</tr>
<tr>
<td>University of Michigan, Ann Arbor</td>
<td>PhD pre-candidate</td>
<td>2008-2010</td>
<td>Oral Health Sciences</td>
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<tr>
<td>University of Michigan, Ann Arbor</td>
<td>PhD candidate</td>
<td>2010-present</td>
<td>Oral Health Sciences</td>
</tr>
</tbody>
</table>

A. Personal Statement
The goal of the proposed research is to investigate the role of macrophages and efferocytosis in skeletal metastasis. I am highly motivated and have the training and support to successfully complete the proposed research. My interest in science started with a dental materials research experience I had during my Dental School training in Brazil. This experience resulted in two publications and motivated me to pursue an academic career and initiate my PhD training at the University of Michigan. As a pre-candidate in the School of Dentistry I rotated in three laboratories focused in different areas of Oral Health Sciences all of which lead to co-authorship publications. In my first laboratory rotation with Dr. Jacques Norl I worked with dental pulp regeneration and a cancer stem cell project that gave me experience in basic techniques such as cell culture and flow cytometry. In the second laboratory rotation with Dr. Paul Krebsbach I was introduced to bone biology studies which expanded my interest to explore this field. Finally, the third laboratory rotation in Dr. Laurie McCauley’s laboratory provided me a strong animal study experience for investigating bone biology and cancer. Dr. McCauley is an expert in the area of parathyroid hormone (PTH) and PTH-related protein (PTHrP), bone biology and skeletal metastasis. I decided to join Dr. McCauley’s laboratory for my dissertation not only because of her outstanding research experience but also because of the great mentorship skills and role model combining research, clinical practice and teaching. Moreover, my interest in prostate cancer skeletal metastasis and tumor immunoregulation lead to my dissertation project on “Osteomacs and Skeletal Metastasis”. We have two papers currently in press, a review paper in Future Oncology and a research paper on the effects of Zoledronic acid in the endosteal and vascular niches. Attaining the F32 fellowship will be a valuable acknowledgment of my career potential and will enable me to acquire the research expertise and strong interdisciplinary basic-science research training necessary to achieve my goals to become a successful and independent dentist researcher.

B. Positions and Honors

<table>
<thead>
<tr>
<th>ACTIVITY/OCCUPATION</th>
<th>BEGINNING DATE (mm/yy)</th>
<th>ENDING DATE (mm/yy)</th>
<th>FIELD</th>
<th>INSTITUTION/COMPANY</th>
<th>SUPERVISOR/EMPLOYER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traineeship</td>
<td>01/2006</td>
<td>12/2006</td>
<td>Dental Implants Course - Surgery</td>
<td>University of Sao Paulo</td>
<td>FFO- FUNDECTO / FOUSP</td>
</tr>
<tr>
<td>Traineeship</td>
<td>01/2006</td>
<td>06/2006</td>
<td>Fixed Prosthetics</td>
<td>University of Sao Paulo</td>
<td>Fixed Prosthetics Department</td>
</tr>
<tr>
<td>Assistantship</td>
<td>01/2006</td>
<td>06/2006</td>
<td>Implants clinic</td>
<td>University of Sao Paulo</td>
<td>Post-Graduation Implants Clinic Napem - FOUSP</td>
</tr>
<tr>
<td>ACTIVITY/OCCUPATION</td>
<td>BEGINNING DATE (mm/yy)</td>
<td>ENDING DATE (mm/yy)</td>
<td>FIELD</td>
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<td>SUPERVISOR/EMPLOYER</td>
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<td>PhD pre-candidate</td>
<td>06/2008</td>
<td>08/2010</td>
<td>Oral Health Sciences</td>
<td>University of Michigan OHS PhD program</td>
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<tr>
<td>PhD Candidate</td>
<td>08/2010</td>
<td>present</td>
<td>Oral Health Sciences</td>
<td>University of Michigan</td>
<td>Laurie K. McCauley</td>
</tr>
</tbody>
</table>

**Academic and Professional Honors**

Academy of Dental Materials annual Student Award- student who has demonstrated outstanding Academic achievement in dental materials science. Academy of Dental Materials. 2007

Dean's scholarship for Precandidate Training in Oral Health Science PhD Program University of Michigan – School of Dentistry. 2008- 2010

Rackham Conference Travel Grant. University of Michigan - Rackham School of Graduate Studies. To attend: AACR Joint Conference on Metastasis and the Tumor Microenvironment, Philadelphia, PA. 2010

Co-president of the Michigan Oral Health Sciences Student Association, Oral Health Sciences PhD Program, University of Michigan, 2010

Rackham Block Grant Award, University of Michigan–Rackham School of Graduate Studies. To attend: ASBMR Annual Meeting. San Diego, CA, 2011

Rackham Graduate Student Forum, Oral Health Sciences Ph.D. Program, University of Michigan., 2011

**C. Publications**

Original Research


Abstracts


14. Park SI; Sadler WD; Koh AJ; Soki FN; McCauley LK. Potentiation of Myeloid-Derived Suppressor Cells (MDSCs) within the Bone Marrow by Tumor-Derived Parathyroid Hormone-related Peptide (PTHrP). 11th International Conference on Cancer-Induced Bone Disease (CIBD).2011. Chicago, IL.

Meeting oral presentations


**D: Ongoing Research Support:**

**T32 DE 7057-36 (PI- Krebsbach, Paul H) NIH/NIDCR**

Tissue Engineering and Regeneration (TEAM) Training Grant

University of Michigan- Ann Arbor

Role: Post Doc

**E. Scholastic Performance**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SCIENCE COURSE TITLE</th>
<th>GRADE</th>
<th>YEAR</th>
<th>OTHER COURSE TITLE</th>
<th>GRADE</th>
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<tbody>
<tr>
<td>2008</td>
<td>Fundamental Biostatistics</td>
<td>-</td>
<td>2009</td>
<td>Successful Scientific Writing</td>
<td>-</td>
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<tr>
<td>2008</td>
<td>Science Lab Rotation</td>
<td>-</td>
<td>2009</td>
<td>Science Lab Rotation</td>
<td>-</td>
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<td>2008</td>
<td>Introduction Biochemistry</td>
<td>-</td>
<td>2009</td>
<td>Organogenesis Complex Tissue</td>
<td>-</td>
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<td>2008</td>
<td>Mineral Tissue</td>
<td>-</td>
<td>2009</td>
<td>Science Seminar Series</td>
<td>-</td>
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<td>2008</td>
<td>Academic Writing I</td>
<td>-</td>
<td>2009</td>
<td>Cancer Biology</td>
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<tr>
<td>2008</td>
<td>Science Seminar Series</td>
<td>-</td>
<td>2009</td>
<td>PIBS -Ethics Biomedical Sci. Lect.</td>
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<td>2008</td>
<td>Science Lab Rotation</td>
<td>-</td>
<td>2010</td>
<td>Signal Transduction</td>
<td>-</td>
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<td>2009</td>
<td>Cell Biology</td>
<td>-</td>
<td>2010</td>
<td>AdvTopics Sec. Endocytic Path</td>
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<td>2010</td>
<td>Clinical Oral and Maxillofacial Path</td>
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<tr>
<td>2009</td>
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<td>-</td>
<td>2010</td>
<td>Introduction to Sci. Comunication</td>
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<td>2009</td>
<td>Science Lab Rotation</td>
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<td>Infectious Disease</td>
<td>-</td>
<td>2010</td>
<td>Experimental Immunology</td>
<td>-</td>
</tr>
</tbody>
</table>

Science Seminar Series, Dissertation and the Ethics (PIBS) courses are graded as Satisfactory(S) or Unsatisfactory(U).
NAME OF FELLOWSHIP APPLICANT
Christopher R. Donnelly

POSITION TITLE
Graduate Student

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

<table>
<thead>
<tr>
<th>INSTITUTION AND LOCATION</th>
<th>DEGREE (if applicable)</th>
<th>YEAR(s)</th>
<th>FIELD OF STUDY</th>
</tr>
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<tbody>
<tr>
<td>Oakland University, Rochester, MI</td>
<td>B.S.</td>
<td>2011</td>
<td>Biochemistry</td>
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<tr>
<td>University of Michigan, Ann Arbor, MI</td>
<td>D.D.S./Ph.D.</td>
<td>2011-Present</td>
<td>Neuroscience, Oral Health Sciences</td>
</tr>
</tbody>
</table>

Please refer to the application instructions in order to complete sections A, B, C, and D of the Biographical Sketch.

A. Personal Statement

My long term research interests are primarily related to understanding the mechanisms underlying the development of neural circuits and how these mechanisms could facilitate nerve regeneration following pathological conditions or injury. Both my academic training and research training have provided me with an excellent background as I move forward in my graduate training and hopefully continue on to a tenure-track faculty position. As an undergraduate student at Oakland University, I was able to gain exposure to several different research areas by working in the laboratory of Dr. Rasul Chaudhry on the potential therapeutic application of human umbilical cord blood stem cells to degenerative disc disease; the laboratory of Dr. George Gamboa, where I studied the ecological effects of invasive biological species on native populations; and in the laboratory of Dr. Gerard Madlambayan, where I studied the role of leukemic cell-derived endothelial cells in the proliferation of acute myeloid leukemia. My work in the laboratory of Dr. Gamboa resulted in the development of a second-author publication, which is currently under review. Additionally, in the laboratory of Dr. Madlambayan, a new investigator, my work was critical for establishing many of the laboratory techniques and in training incoming graduate students. At the University of Michigan, I have worked in the laboratory of Dr. Brian Pierchala studying growth factor signaling in neural development. While working in Dr. Pierchala’s laboratory, I have had the opportunity to pursue multiple projects related to the signal transduction mechanisms and functions of the receptor tyrosine kinase, Ret, an area of tremendous focus in Dr. Pierchala's laboratory.

During my undergraduate training, I was heavily involved in teaching activities; I served as a teaching assistant for biochemistry I (BIO 325), biochemistry II (BIO 425), and biochemistry laboratories (BIO 426) at Oakland University. My duties as a teaching assistant included preparing and delivering lectures, generating study and testing materials, tutoring students, and providing technical assistance during laboratory classes. I have also received several research-related awards during my undergraduate career, including multiple student research awards. My work in Dr. Madlambayan's lab culminated in a poster presentation at the 2011 World Stem Cell Summit in Detroit, Michigan, for which I was awarded a research-related travel grant. In 2011, I graduated magna cum laude with Departmental and College Honors. I also received the Distinguished Achievement Award from the Department of Biological Sciences. As a graduate student, I have received several awards, including the Rackham Merit Fellowship and an appointment to the Tissue Engineering at Michigan (TEAM) training grant. I was also awarded the Rackham Conference Travel Grant and Rackham Block Grant to allow me to attend the ‘NGF 2012’ meeting in Wurzburg, Germany, where I was selected to give an oral presentation in the ‘hot topics’ session. I have also been accepted to present my research at the upcoming Society for Neuroscience 2012 conference in October.

My thesis research in the laboratory of Dr. Brian Pierchala will allow me to continue to improve my skills and knowledge as a scientist and to further understand the mechanisms of neural circuit formation and how these mechanisms may be used and abused in nerve regeneration and neural pathologies. Dr. Pierchala was trained by extraordinary scientists and is well-known and respected in the field of neural development and growth factor signaling. My proposed project will allow me to study the mechanism and functions of Ret signaling during sensory neuron circuit development. My choice of institution, thesis mentor, and project will help me reach my eventual goal of attaining a tenure-track faculty position at a research-intensive university so that I will have the opportunity to continue to study development, regeneration, and pathologies of the nervous system.
B. Positions and Honors

<table>
<thead>
<tr>
<th>ACTIVITY/OCCUPATION</th>
<th>BEGINNING DATE (mm/yy)</th>
<th>ENDING DATE (mm/yy)</th>
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<th>INSTITUTION/COMPANY</th>
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<tr>
<td>Undergraduate Student Research</td>
<td>June 2008</td>
<td>April 2011</td>
<td>Biology</td>
<td>Oakland University</td>
<td>Department of Biological Sciences</td>
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<td>Assistant</td>
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<tr>
<td>Biochemistry Teaching Assistant</td>
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<td>April 2011</td>
<td>Biochemistry</td>
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<tr>
<td>Graduate Student</td>
<td>May 2011</td>
<td>Present</td>
<td>Oral Health</td>
<td>University of Michigan</td>
<td>Department of Biologic and Materials Sciences</td>
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<td></td>
<td></td>
<td></td>
<td>Sciences</td>
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Academic and Professional Honors

- 2007-2008   Michigan Promise Scholarship
- 2008-2010   Oakland University Distinguished Transfer Award, Oakland University
- 2009-2010   Provost’s Undergraduate Student Research Award, Oakland University
- 2010       Oakland University Student Research Travel Grant, Oakland University
- 2011       B.S. awarded magna cum laude with Departmental and College Honors, Oakland University
- 2011       Distinguished Achievement Award, Oakland University
- 2011-Present Rackham Merit Fellowship, University of Michigan
- 2012-Present Tissue Engineering at Michigan (TEAM) Training Grant, University of Michigan
- 2012       Rackham Conference Travel Grant
- 2012       Rackham Block Grant

Memberships in Professional Societies

- Michigan Oral Health Sciences Student Association
- American Association for Dental Research
- Society for Neuroscience

C. Publications

Papers:


Abstracts:


### D. Scholastic Performance

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SCIENCE COURSE TITLE</th>
<th>GRADE</th>
<th>YEAR</th>
<th>OTHER COURSE TITLE</th>
<th>GRADE</th>
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<tr>
<td>2007</td>
<td>Principles of Biology</td>
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<td>2007</td>
<td>Advanced Algebra</td>
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<tr>
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<td>Principles of Biology II</td>
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<td>2007</td>
<td>Introduction to Psychology</td>
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<td>Composition I</td>
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<td>2008</td>
<td>Genetics</td>
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<td>2008</td>
<td>Introduction to Logic</td>
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<tr>
<td>2008</td>
<td>Anatomy and Physiology I</td>
<td></td>
<td>2008</td>
<td>Experimental Psychology</td>
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<td>Vertebrate Zoology</td>
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<td>Introduction to Film</td>
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<td>French Language and Culture I</td>
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<td>Scientific Communication</td>
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<td>2008</td>
<td>Music History and Foundations</td>
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<td>2009</td>
<td>Biochemistry I</td>
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<td>2009</td>
<td>World Religious Traditions</td>
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<td>Introduction to Statistical Concepts</td>
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<td>Topics in Behavioral Biology</td>
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<td>American History Since 1877</td>
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<td>2010</td>
<td>Introduction to Human Microbiology</td>
<td></td>
<td>2010</td>
<td>Precalculus</td>
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<td>Independent Research</td>
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<td>Introduction to Sociology</td>
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<td>2010</td>
<td>Organic Chemistry II</td>
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<td>Calculus I</td>
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<td>Organic Chemistry Lab</td>
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<td>2010</td>
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<td>2011</td>
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<td>2011</td>
<td>General Physics Lab</td>
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</table>

#### Undergraduate Coursework

#### University of Michigan Coursework

<table>
<thead>
<tr>
<th>YEAR</th>
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<tbody>
<tr>
<td>2011</td>
<td>Fundamentals of Biostatistics</td>
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<tr>
<td>2011</td>
<td>Macromolecular Structure &amp; Func.</td>
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<td>2011</td>
<td>Scientific Seminar Series</td>
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<td>2011</td>
<td>Scientific Laboratory Rotation</td>
</tr>
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<td>2011</td>
<td>Principles of Neuroscience I</td>
</tr>
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<td>2011</td>
<td>Precandidate Research</td>
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<td>2012</td>
<td>Developmental Biology</td>
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<td>2012</td>
<td>Scientific Seminar Series</td>
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<tr>
<td>2012</td>
<td>Introduction to the Orofacial Complex</td>
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<tr>
<td>2012</td>
<td>Neural Basis of Orofacial Function</td>
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<td>2012</td>
<td>Precandidate Research</td>
</tr>
<tr>
<td>2012</td>
<td>Basic Histology</td>
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Objectives

The Preliminary Examination is designed to evaluate the student’s:

- ability to integrate and synthesize knowledge across areas within oral health maintenance and treatment of oral diseases;
- ability to identify key questions in a chosen scientific area;
- ability to think analytically in written and oral scientific communications;
- knowledge of scientific areas within the oral health sciences.

The examination is a major component used in making a recommendation about the student’s readiness for advancement to candidacy.

Committee

The Preliminary Examination Committee will be composed of at least four members of the Oral Health Sciences Program Faculty. (a) Two members of the committee usually will be the same for all students taking the Preliminary Exam in a given academic year. (b) The other two members may be appointed by the Program Committee to represent breadth and specific areas of expertise within the Oral Health Sciences, and these members may be different for different student’s committees. (c) A fifth member may be added as necessary to ensure appropriate expertise for evaluating the written exam. (d) A student’s proposed dissertation advisor will not serve on the Preliminary Examination Committee for the student.

After completion of the written and oral portions of the Preliminary Examination, the Chair of the Committee will forward results to the Oral Health Sciences Program Committee.

Structure of the Preliminary Examination

Written Examination

The written examination will consist of an in-depth research proposal.

The research proposal will be written in the style of NIH grant applications, on a topic selected by the student in consultation with the proposed dissertation advisor. The topic must be approved in advance by the Preliminary Examination Committee. To obtain approval for the topic, the student should write an abstract on the topic and include: a statement of the general problem to be investigated, with specific objectives or hypotheses; the scientific rationale for, and significance of, the problem; the experimental methods to be used in studying the problem; and the relation of the problem to Oral Health Sciences. This abstract (about one page, single-spaced) should be submitted to the Chair of the Preliminary Examination Committee.
It is essential that the specific research problem be an original idea, conceived independently by the student. Although the problem will probably relate to the student’s future research, and can include the general area of the probable dissertation research, it should not be a specific idea that is currently under active investigation in the laboratory of the student’s advisor or mentor. The student should write a statement, to be submitted with the abstract, indicating how the research problem is original and divergent from areas of active research in the advisor's laboratory. The student’s advisor also should write a statement to indicate ways in which the research problem is different from specific, ongoing research problems in the laboratory, and indicating that the research problem is primarily the student's idea. This should be submitted with the abstract.

The research proposal should have five main components, and should not exceed 10 single spaced pages (this limit excludes references). The five components are: (1) **Significance**, including the general objective of the proposed research and specific aims or hypotheses to be addressed; including briefly the scientific background, present state of the field, significance of the problem to be addressed, and a clear statement of the relation of this research to oral health sciences; (2) **Innovation**, including statements about whether the proposal incorporates particularly novel or original concepts, approaches or methods; whether the proposal includes experiments that challenge existing paradigms or develop new methods; (3) **Approach**, including the experimental characteristics of animal or human subjects; for each specific aim, describe how you will approach the research; include positive and negative controls necessary to interpret experiments; (4) **References**, including the full citation for each article that is referenced. The amount of research proposed should be no more than a graduate student could accomplish in about three years.

The written research proposal is a key component in determining whether a student is ready to advance to candidacy. All portions of the proposal should be written independently, without help from other students, colleagues or professors. Students writing the proposal should not show the proposal to anyone or consult with anyone about specific aspects of the exam.

**Oral Examination**

The oral examination will be chaired by the Chair of the Preliminary Examination Committee and will include other members of that committee. The student will begin the exam with a 15 minute summary of the written research proposal. After this summary, faculty members will question the student about aspects of the proposal and the science that underlies the proposed research. After these questions the Preliminary Examination Committee will confer alone about the results of the written and oral examinations.
Evaluation and Results of the Preliminary Examination

Evaluation of the written and oral examinations will include analysis of the scientific quality of material presented; originality of scientific ideas; quality of analytical thinking reflected in written and oral exams; clarity of written and oral presentations; feasibility of experimental approaches proposed for different research problems; knowledge of scientific detail related to the proposal; and, knowledge of related areas of oral health sciences.

The total examination, written and oral components, will be graded as: pass; conditional pass; or fail. A conditional pass will require further work to make up deficiencies (e.g., revision of the research proposal; in depth reading in a specific topic area; etc.). Students who fail the preliminary examination may request to retake the exam only once, and must have approval of the Program Committee to retake the exam within a specified timeline.

Steps in Completing the Preliminary Examination

• Readiness of the student determined by the proposed dissertation mentor, academic advisor and program director
• Projected timeline of the preliminary exam process determined by the proposed dissertation advisor, the student, the program coordinator and the program director
• Submit abstract for research proposal and statements of originality to Preliminary Examination Committee
• Receive approval for research proposal topic, or notice to revise topic
• Write research proposal
• Turn in research proposal
• Oral examination
• Complete the preliminary exam by addressing conditions, if any, required by the preliminary exam committee.

Notes:
The schedule and dates for the Preliminary Examination will be established by the Preliminary Examination Committee.

The specific academic term in which a student takes the Preliminary Examination will vary, according to when the student entered the OHS Program and progress made by the student.
The Program Committee will make a recommendation on whether the student is ready to advance to candidacy, based on review of: (a) the student’s academic record for courses taken as a student in the Oral Health Sciences Program; (b) performance in annual seminars and journal clubs; (c) successful identification of a dissertation advisor; (d) performance on the Preliminary Examination; (e) overall performance in and contributions to the Program; and, (f) adherence to all Program guidelines and policies.

The OHS PhD and DDS/PhD students should demonstrate readiness to undertake independent dissertation research by achieving candidacy at the end of their second year but no later than three years after the first enrollment in their doctoral program. (Adapted from: 5. Doctoral Degrees in “Graduate School Academic Policies” http://www.rackham.umich.edu/policies/academic_policies/section5/#51)
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ORAL HEALTH SCIENCES PhD PROGRAM

Request for Dissertation Committee

Once a student has advanced to Candidacy for the PhD degree, a Dissertation Committee will be established according to the rules and recommendations of the Horace H. Rackham School of Graduate Studies. Please see Rackham guidelines for dissertation committee service: [http://www.rackham.umich.edu/dissertation_information/dissertation_committees/guidelines_for_dissertation_committee_service/](http://www.rackham.umich.edu/dissertation_information/dissertation_committees/guidelines_for_dissertation_committee_service/)

The recommended Committee membership should be sent to the Program Committee from the Candidate and Dissertation Advisor about 9 months after advancing to candidacy, or sooner.

- The doctoral candidate in consultation with his/her dissertation advisor will suggest a committee of at least four members, chaired by the dissertation advisor.
- At least three members (including the dissertation advisor) must be from the Oral Health Sciences Program Faculty.
- At least one appropriate cognate member must be named from outside of the School of Dentistry. The cognate member must be familiar with the standards for doctoral research and hold at least a 0.5 appointment in a Rackham PhD program, other than the student’s home department/program.

To propose a Dissertation Committee, each doctoral candidate will submit the following information (please see attached example reprinted with permission from Candidate for degree, Erica Scheller and Dr. Paul Krebsbach).

**Cover letter to OHS Program Committee addressing the following:**
- Advanced to Candidacy: Date
- Dissertation Advisor: Name
- Dissertation: Proposed title or focus
- Proposed members of dissertation committee (Chair, Cognate Member, Members)
- Signatures of both doctoral candidate and advisor

**Dissertation Committee Proposal:**

The OHS Candidate should submit a Proposal to the Program Committee for all Dissertation Committee members that includes:

- Name, professional degrees / academic title
- Role on committee (i.e., Chair, Cognate Member, Member)
- Rationale for membership
- Recent publications (list 2 or 3 references)

Membership of the Dissertation Committee must be approved by the OHS Program Committee. All dissertation committees require final approval by the Rackham School of Graduate Studies. A Dissertation Committee Form will be completed by the OHS Program and sent to the Graduate School. [http://www.rackham.umich.edu/downloads/oard-dissertation-committee-form.pdf](http://www.rackham.umich.edu/downloads/oard-dissertation-committee-form.pdf)

After formal approval of the Dissertation Committee by the Graduate School, the Committee should be convened to meet within three months, or sooner, and then again about every six to nine months. Following each dissertation committee meeting, the student should complete the “Dissertation Committee Meeting Report”, review the report with dissertation advisor, obtain advisor signature and submit a copy of the form to the Program.

Students should view the Dissertation Committee members as important mentors and resource persons who will provide strong intellectual support for their dissertation research. Students should not wait until they have substantial data or several completed experiments to convene the Committee. The Committee should be of help in addressing research questions and problems throughout phases of the dissertation. Further, Dissertation Committee members should serve as important advisors for various aspects of the student's current and future academic career.

8/2012
GUIDELINES FOR DISSERTATION COMMITTEE SERVICE

IMPORTANT TO REMEMBER: It is recommended that the membership of the dissertation committee be submitted to the Graduate School for approval at least 6 months prior to the student’s oral defense.

The Graduate Faculty

For dissertation committee purposes, “The Graduate Faculty” consists of persons who are tenure or tenure-track instructional faculty holding an “unmodified” (i.e., not visiting, adjunct, etc.) appointment at the University of Michigan as Professor, Associate Professor, or Assistant Professor with an earned Doctorate from an accredited institution.

Composition of the Dissertation Committee

Dissertation committees must have at least four members, three of whom are members of the Graduate Faculty (see definition above), and two of whom are from the doctoral candidate’s home program. Furthermore, each committee

- Must have a sole chair or two co-chairs;
- Must have a cognate member who is familiar with the standards for doctoral research and holds at least a .50 appointment in a Rackham doctoral program, other than the student's home department/program (except IDP programs.)
- May include a University faculty member who is not Graduate Faculty (see definition above), a University staff member, or a qualified individual outside the University to provide expertise in the candidate’s discipline.

Roles of the Chair (or Co-chairs) and Cognate Member

The chair (or each co-chair) is responsible for guiding and encouraging the candidate’s design and execution of an original, high quality, doctoral-level research project. The end result of this effort is expected to be a dissertation that makes a substantive contribution to the candidate’s discipline.

The cognate member’s role is to broaden the scholarly representation of the dissertation committee beyond the candidate’s home program. The cognate member also serves the Graduate School and its Faculty by providing a non-specialist’s perspective on the quality of the dissertation.

Eligibility for Service on Dissertation Committees

Nominations for dissertation committee service are made by means of the Dissertation Committee form found on the Rackham OARD website, which must be signed by the chair of the doctoral candidate’s program. All nominations must be approved by the Graduate School and are subject to the following guidelines:

1. Graduate Faculty (see definition above) – i.e., Professors, Associate Professors, and Assistant Professors – affiliated with a Rackham doctoral program and who hold an earned Doctorate from an accredited institution may serve as a member of the committee, or as sole chair, co-chair, or cognate member.

2. Graduate Faculty (see definition above) not affiliated with a Rackham doctoral program may serve on dissertation committees. They may also serve as co-chair with a member of the Graduate Faculty (see definition above) affiliated with a Rackham doctoral program, but not as sole chair or cognate member.

3. Instructors and Lecturers who have no appointment as members as Graduate Faculty (see definition above) may serve on dissertation committees if they hold an earned Doctorate from an accredited institution. They may also serve as co-chair with a member of the Graduate Faculty (see definition above) affiliated with a Rackham doctoral program, but not as sole chair or cognate member.

4. Retired and emeriti Professors who were affiliated with a Rackham doctoral program may serve on dissertation committees. They may also serve as co-chair or, by special arrangement (see Special Membership form), as sole chair or cognate member.
5. Research Professors (RP, i.e., Research Professors and Research Associate Professors) who are affiliated with a Rackham doctoral program may serve on dissertation committees if they hold an earned Doctorate from an accredited institution. They may serve as a co-chair, regular member or by special arrangement as a sole chair.

6. Research Scientists (RS, i.e., Research Scientists, Associate Research Scientists, Assistant Research Scientists, Research Assistant Professors, and Research Investigators) who are affiliated with a Rackham doctoral program may serve on dissertation committees if they hold an earned Doctorate from an accredited institution. They may serve as a co-chair, regular member or by special arrangement as a sole chair.

7. All those who do not have an earned Doctorate, whether affiliated with a Rackham doctoral program or not, must be approved for dissertation committee service on a case by case basis. If approved, they may serve as a member of the committee, as the sole chair, co-chair, or cognate member.

8. University faculty and staff not included in the preceding categories and qualified individuals outside the University whose service is desirable may serve on dissertation committees, subject to review on a case by case basis. They may also serve as co-chair with a member of the Graduate Faculty (see definition above) affiliated with a Rackham doctoral program, but not as sole chair or cognate member.

N.B. No person working toward a doctoral degree may serve on a dissertation committee until all requirements for the degree have been met.

N.B. University faculty who were approved to serve as sole chair or cognate member but who are no longer affiliated with the University may not continue to serve as the sole chair or as the cognate member. The faculty member may serve as a co-chair or as a regular member based upon the eligibility guidelines for dissertation committee service.

Additional Documentation Required

The Dissertation Committee form must always be accompanied by the Special Membership form, available online at www.rackham.umich.edu, and by additional documentation when the following nominations are being made:

1) Nomination for special assignment on the dissertation committee:

   University faculty and staff who are not Graduate Faculty (see definition above), and qualified people from outside the University of Michigan who may or may not hold academic appointments and whose service on the Dissertation Committee would contribute significantly, may be nominated for special membership by submitting:

   Special Membership form with appropriate signature, a memo detailing the nominee’s expertise in the dissertation topic, a Vita or resume, and the Dissertation Committee form.

2) Nomination to have a retired professor serve as chair or cognate on a dissertation committee:

   A retired Professor may be nominated to serve as a chair or cognate* on a dissertation committee by submitting: Special Membership form with appropriate signature, the Dissertation Committee form, and a memo signed by the retired professor confirming that he/she has:

   • experience in serving on, and chairing dissertation committees (decision-making experience as chair is required)
   • service as a teacher of formal courses or seminars
   • served as a counselor or advisor for doctoral students

* Previous experience as a cognate is not required for nomination as cognate (cognate criteria must be met).
<table>
<thead>
<tr>
<th>ROLE</th>
<th>SOLE CHAIR</th>
<th>CO-CHAIR</th>
<th>COGNATE*</th>
<th>MEMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full, Associate, or Assistant Professor with earned Doctorate and Rackham affiliation*</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Research Professors or Research Associate Professors with earned Doctorate and Rackham affiliation*</td>
<td>With Special Membership Form and Supporting Documents</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Full, Associate, or Assistant Professor without earned Doctorate but with Rackham affiliation**</td>
<td>With Special Membership Form and Supporting Documents</td>
<td>With Special Membership Form and Supporting Documents</td>
<td>With Special Membership Form and Supporting Documents</td>
<td>With Special Membership Form and Supporting Documents</td>
</tr>
<tr>
<td>Clinical Professor with earned Doctorate</td>
<td>No</td>
<td>With Regular Member</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Instructor or Lecturer with earned Doctorate***</td>
<td>No</td>
<td>With Regular Member</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Clinical Professor with earned Doctorate</td>
<td>No</td>
<td>With Regular Member</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Research Scientists, Associate Research Scientists, Assistant Research Investigators, all with earned Doctorate</td>
<td>No</td>
<td>With Special Membership Form and Supporting Documents</td>
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</tr>
<tr>
<td>Retired/Emeritus Professor</td>
<td>With Special Membership Form and Supporting Documents</td>
<td>Yes</td>
<td>With Special Membership Form and Supporting Documents</td>
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</tr>
<tr>
<td>Non-University of Michigan with or without earned Doctorate</td>
<td>No</td>
<td>With Special Membership Form and Supporting Documents</td>
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<tr>
<td>University of Michigan Non-Regular Faculty with or without earned Doctorate</td>
<td>No</td>
<td>With Special Membership Form and Supporting Documents</td>
<td>No</td>
<td>With Special Membership Form and Supporting Documents</td>
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<tr>
<td>Committee Member no longer employed at University of Michigan****</td>
<td>No</td>
<td>With Regular Member</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* Professors with less than a 50% appointment must have special approval from the Director of OARD (or designee) to serve as cognate.

** Must be approved on a case by case basis by the Director of OARD (or designee).

*** No Rackham affiliation required.

**** University faculty who were approved to serve as sole Chair or Cognate member but who are no longer affiliated with the University may not continue to serve as the sole Chair or Cognate member. The faculty member may serve as a Co-Chair or as a regular member based upon the eligibility guidelines for dissertation committee service.

- A committee must have a minimum of four members.
- Of the four, three members must be from a Rackham Doctoral Program.
- Of the four, two members must be from the student's home department or program.
- Of the four, one member must have a 50% appointment in a Rackham doctoral program, other than the student's home department/program (except IDP programs).
- Three members must have an appointment as professor, associate professor, or assistant professor with an earned Doctorate.

Updated 4.08

4-25-08

Dear OHS Program Committee,

Since advancing to candidacy in Fall of 2007 I have been pursuing my dissertation research with Dr. Paul Krebsbach. Everything is moving forward smoothly and we would like to schedule my first dissertation committee meeting in the near future. We have decided to nominate five total members, including Dr. Krebsbach, to serve on the committee. Attached to this letter you will find details about these proposed members along with rationale for their membership.

Chair: Paul Krebsbach
Cognate Member: Ormond MacDougald
Member: Kurt Hankenson (UPenn)
Member: Laurie McCauley
Member: Renny Franceschi

My dissertation research will focus on a project titled “A Role for Osteoimmunology in Adipocytokine-Regulated Bone Metabolism”. It will require synthesis of cytokine signaling and macrophage function with mineralized tissues biology. The committee members we recommend are all excellent scientists individually with many outstanding qualities. Together, they will provide more than adequate experience to support this challenging project.

Thank you for your time.

Sincerely,

Erica L Scheller
Paul H Krebsbach
Dissertation Committee Proposal
Erica Scheller
4-18-08

Dissertation Committee Chair: Paul Krebsbach DDS MS PhD
Title: Professor, Biologic and Materials Sciences,
Professor, Biomedical Engineering
Roy H. Roberts Professor of Dentistry

Rationale: Our dual-degree program requires three research lab rotations before a PI is selected. I worked with Dr. Paul Krebsbach during my second lab rotation. I decided to pursue my doctoral research with Dr. Krebsbach for many reasons. First, he is an excellent mentor and encourages me to think and develop my own ideas. I have been working in his lab for about one year and over this time I developed an F30 proposal that was submitted April 2008. Dr. Krebsbach worked closely with me and helped to refine my ideas while always pushing me to go deeper into the research. In our bi-weekly meetings we discuss science, grantsmanship, clinical skills, and general balance of an intense program. The fact that Dr. Krebsbach is both a clinician and a scientist allows him to provide mentoring in both areas. Secondly, I am very interested in the bone tissue engineering and bone biology research pursued by the members of his lab. They have knowledge about skills that are relevant to my interests and access to all the technical resources I need. I strongly believe that working with Dr. Krebsbach and his lab members during the remainder of my program will prepare me for a future in basic research.

Recent Publications:


Cognate Committee Member: Ormond MacDougald PhD
Title: Professor of Molecular and Integrative Physiology and Professor of Internal Medicine,
Medical School

Rationale: Dr. MacDougald has an extensive background in the area of bone physiology, signaling, and adipocytokines. Interestingly, the specific mutation in the leptin protein that results in the obese phenotype of ob/ob mice was discovered in his laboratory. This mouse will be one of the primary mouse models utilized by the student for her dissertation research. The student has worked with Dr. MacDougald to discuss ideas pertaining to both Wnt and leptin signaling and was also a member of his small group during the PIBS ethics course. Dr. MacDougald will be the sole member of this committee with specific expertise in adipocytokine signaling.

Recent Publications:


**Committee Member #3: Kurt Hankenson DVM PhD**
**Title:** Assistant Professor of Cell Biology at the University of Pennsylvania

**Rationale:** Dr. Hankenson is an expert in the area of matrix biology and is extensively familiar with the student's dissertation topic. The topic developed by the student began by extending a portion of a R01 grant on which Dr. Hankenson is the primary investigator. The student's dissertation advisor is a co-investigator on the same R01. Since September 2007, the student has had bi-weekly phone conferences with Dr. Hankenson and he has been a valuable resource in the progression of her project. Dr. Hankenson also collaborates extensively with Paul Krebsbach and Ormond MacDougald.

**Recent Publications:**


**Committee Member #4: Laurie McCauley DDS MS PhD**
**Title:** William K and Mary Anne Najjar Professor of Periodontics, Professor of Dentistry, Department of Periodontics, School of Dentistry, Associate Professor of Pathology, Medical School

**Rationale:** Dr. McCauley is interested in hormonal controls of bone remodeling and has extensive knowledge about bone metabolism and homeostasis related to specific functions of cells in the marrow. Apart from being an excellent scientist, Dr. McCauley is a wonderful mentor. Her mentoring skills and knowledge about cells of the myeloid lineage, including macrophages and osteoclasts, will help to facilitate the immunology component of the proposed dissertation research.

**Recent Publications:**

Committee Member #5: Renny Franceschi PhD
Title: Professor of Dentistry, Department of Periodontics/Prevention and Geriatrics, School of Dentistry
Professor of Biological Chemistry, Medical School

Rationale: Dr. Franceschi is a trained biochemist and very critical thinker. He consistently takes the time to think about proposed research and asks highly relevant questions. His laboratory studies signals regulating the differentiation and functioning of osteoblasts. The study of osteoblast differentiation and function will be a major component of the student’s dissertation work. Dr. Franceschi will be able to critically evaluate the proposed research and the experimental results to aid the student in deepening her understanding of the science behind her work.

Recent Publications:


ORAL HEALTH SCIENCES PhD PROGRAM  
Dissertation Committee Meeting Report

Student name: __________________________________________________

Date of Dissertation Committee Meeting: ____________________________

<table>
<thead>
<tr>
<th>Members Present:</th>
<th>Members Absent:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair:</td>
<td></td>
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<tr>
<td>OHS Faculty:</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Cognate:</td>
<td></td>
</tr>
</tbody>
</table>

Items Discussed at Meeting:

Objectives to be accomplished for next meeting:

Proposed date for next meeting: ____________________________

Comments from Dissertation Advisor:

Student signature: _________________________________________

Dissertation Advisor signature: ____________________________

Date: ____________________________________________________
ORAL HEALTH SCIENCES PhD PROGRAM
Doctoral Degree Completion Deadlines

When a PhD student is getting ready to defend, please refer to Rackham’s Doctoral Degree Deadlines six months before the planned degree conferral. Many requirements need to be completed through Rackham and Wolverine Access. The dates/times are fluid with the graduating term. 
http://www.rackham.umich.edu/help/graduating/doctoral_degree_deadlines/

I plan to defend by: ________________________________

All Requirements must be done by: ________________________________

Projected degree conferral date: ________________________________

I plan to participate in the following commencement exercises (please specify term and year):

University of Michigan Commencement: ________________

Rackham: ________________________________

School of Dentistry: ________________________________

When your defense date is determined, please consult with the OHS PhD Office to complete this form.
Horace H. Rackham School of Graduate Studies
Dissertation Timeline

1. Register for group Pre-Defense meeting via https://secure.rackham.umich.edu/OARD/predef/ at least 3 days prior to group Pre-Defense meeting.

2. Attend group Pre-Defense meeting at Rackham (at least 10 working days prior to your oral defense of dissertation) receiving Dissertation Evaluation forms for committee members.

3. Check Wolverine Access 3 days prior to oral defense to confirm that Dissertation Evaluation forms have been received from ALL committee members.

4. Distribute Dissertation Evaluation forms, copies of abstract and dissertation to committee members at least 10 working days prior to oral defense of dissertation.

5. Pick up Defense Packet from Rackham OARD prior to defending.


7. Complete any changes/corrections/revisions to dissertation as required by Chair/Co-Chair.

8. Verify with Chair that he/she submitted the Final Oral Examination Report to Rackham OARD.


10. Obtain signed Certificate of Dissertation Committee Approval from Chair/Co-Chair.

11. Apply for doctoral degree through Wolverine Access.

12. Verify committee has been approved by reviewing your unofficial transcript through Wolverine Access https://wolverineaccess.umich.edu 6 months prior to Group Pre-Defense.

13. Follow up with committee members if Dissertation Evaluation forms have not been received. Then confirm on Wolverine Access that forms have received.


15. Graduate Degree Conferring

Note: Actual time to complete varies by discipline and departmental requirements.
**Commencement Participation**

### OHS PhD Student

#### Hooded: PhD Only

Successfully defended and completed all final dissertation and degree requirements by Rackham deadlines:

- Participation in Dental, Rackham, and University commencements. PhD cap and gown; walk on stage, hooded and diploma received.

#### Participation Only

Successful defense, but have not completed final dissertation and defense requirements by Rackham Deadlines:

- Dental School commencement; seated on stage; acknowledged; PhD cap & gown. (Rackham/University commencement when all requirements are completed).

*Students must complete all Rackham requirements by Rackham’s published deadlines to participate in Rackham Commencement*

### OHS DDS/PhD Student

#### Hooded: DDS/PhD

Student has met all graduation requirements of both the DDS and PhD program by the Rackham and Dental School deadlines:

- Participation in Dental, Rackham, and University commencements. PhD cap and gown; walk on stage, dual degree acknowledged & hooded and diploma received.

#### Hooded: DDS Only

*Student has met all graduation requirements of the DDS and the PhD program by the Dental School commencement date:

- Option 1: Participate in Dental School commencement. Seated on stage, PhD cap & gown; dual degree acknowledged.
- Option 2: Participate in Dental School commencement. Walk on stage, hooded, DDS cap & gown; dual degree acknowledged.

*Student who is provisionally approved by DDS and who has successfully defended, but has not completed all requirements for PhD by the Dental School commencement date:

- Option 1: Participate in Dental School commencement. Seated on stage, PhD cap & gown; dual degree acknowledged.
- Option 2: Participate in Dental School commencement. Walk on stage, hooded, DDS cap & gown; dual degree acknowledged.

*Student who has met all DDS requirements by April and has defense date set by Rackham’s August conferral deadline:

- Seated with DDS students; dual degree acknowledged & hooded; DDS cap & gown.

*Students will not receive diplomas until all dissertation and degree requirements of both DDS and PhD are completed.*

ORAL HEALTH SCIENCES PhD PROGRAM

Participation of OHS PhD Students in Clinical Activities
School of Dentistry - Guidelines and Policies

Overview
The principal goal of the Oral Health Sciences (OHS) PhD Program is to train students to become outstanding scientists who will engage in research to understand oral health maintenance and disorders. This requires a focused effort from the student on the OHS curriculum and on original research. Such an effort is not only time consuming, but also entails enormous creative energy. Therefore, it generally is not optimal to have OHS students engage in ancillary activities that can distract from the primary program focus.

At the same time, however, the OHS Program recognizes potential benefits from limited participation in clinically related activities in the School of Dentistry for some students. Among these benefits are opportunities to engage in teaching, maintain dental skills, participate in clinical research projects, and, where appropriate in nature and effort, to enhance students’ academic experience. Participation in clinically-related activities should not in any way interfere, or compete, with the principal goals of the OHS Program. Nor is such participation assumed to be beneficial or appropriate for all OHS students, but should be considered on an individual basis.

Process
Requesting clinic participation:

- communication with clinic director and department chair who will evaluate the student to determine proper clinic-specific training, clinical competency, support and initiate credentialing, secure faculty supervision, and establish a mutual understanding about scheduling priorities. Tuition/fee requirements by the specific clinic, if any, will be the student’s responsibility.
- written rationale from student seeking clinical activity (must demonstrate how participation will enhance overall PhD. training)
- discussion with academic advisor (precandidate) or dissertation advisor (candidate), and written advisor endorsement
- discussion with training grant director, if applicable
- discussion with OHS Director, ensure no conflict exists with funding sources
- discussion with OHS Office, ensure that there are no visa-related issues
- annual review of clinic participation in advance of request for continuation.

Recommendations
Clinic participation:

precandidate: no more than one half day per week total time
usually no more than 2 of the 3 academic terms each year

candidate: no more than two half days per week total time
usually no more than 2 of the 3 academic terms each year

Note: OHS students pursuing a Student-Initiated Dual Degree Program must participate in clinic activities as part of their dual degree curriculum. Therefore, these students would not ordinarily be involved in any additional clinic activities.
ORAL HEALTH SCIENCES PhD PROGRAM
Participation of OHS PhD Students in Classroom Teaching Activities
School of Dentistry - Guidelines and Policies

Overview
The principal goal of the Oral Health Sciences (OHS) PhD Program is to train students to become outstanding scientists who will engage in research to understand oral health maintenance and disorders. This requires a focused effort from the student on the OHS curriculum and on original research. Such an effort is not only time consuming, but also entails enormous creative energy. Therefore, it generally is not optimal to have OHS students engage in ancillary activities that can distract from the primary program focus.

At the same time, however, the OHS Program recognizes potential benefits from limited participation in teaching and/or observational activities in School of Dentistry courses for some students. Among these benefits are opportunities to learn how to effectively convey oral health science material in a classroom setting and how to efficiently prepare for teaching. Further, different ideas on a particular scientific area can emerge through classroom interactions, and thereby expand an OHS student’s perspective. Where appropriate in nature and effort, such experiences may enhance academic skills. For example, participation in School of Dentistry graduate courses related to a student’s area of research might be useful.

Certainly participation in teaching activities should not in any way interfere, or compete, with the principal goals of the OHS Program. Nor is participation in teaching activities assumed to be appropriate for all OHS students, but should be considered on an individual basis.

Process
Requesting teaching participation:
• communication with course director and department chair who will determine assignment based on competency and expertise; mutual understanding about scheduling priorities, and specific training and credentialing requirements
• written rationale from student seeking teaching activity (must demonstrate how participation will enhance overall PhD training)
• discussion with academic advisor (precandidate) or dissertation advisor (candidate), and written advisor endorsement
• discussion with training grant director, if applicable
• discussion with OHS Director, ensure no conflict exists with funding sources
• discussion with OHS Office, ensure that there are no visa-related issues
• annual review of teaching participation in advance of request for continuation.

Recommendations
Teaching participation:
precandidate: no more than two contact hours per week total time
usually no more than 2 of the 3 academic terms each year
candidate: no more than three contact hours per week total time
usually no more than 2 of the 3 academic terms each year

Would generally not have involvement in classroom teaching and clinical activities that would exceed 2 half days per week in the same term.
**ORAL HEALTH SCIENCES PhD PROGRAM**  
**Vacation and Time Away/Off Policy**

**Time off policy:** 2-week vacation time per year (July to June). One week is defined as 7 continuous days. Therefore, 2 weeks means 10 work days.

**Holidays:** University holidays observed include Memorial Day, 4th of July, Labor Day, Thanksgiving and the day after, and Christmas day to New Year. In addition, Rackham spring break is observed. When this break does not coincide with the Dental school break and you are taking time off, please manage your responsibilities and inform program and your mentor/course directors accordingly.

**Conference/Scientific meetings:** In addition to vacation requests, the Electronic Time Away system should be used for conferences or other scientific meetings away from the University of Michigan campus. Mentor approval needed for conferences.

**Outreach Rotations:** Dual Degree students will participate in outreach clinical rotations as part of their DDS training. The DDS program requires you to fill out an absence form through MiTools to document the rotation. Please include Kimberly Smith’s unique name (kimbsmit) to the individuals being notified.

**Travel Registry:** When students are traveling outside the United States registering with the UM-Travel Registry is required. (Itinerary, emergency contacts are stored, extra insurance is recommended but not required.) [http://globalportal.umich.edu/register-travel.php](http://globalportal.umich.edu/register-travel.php)

**Requesting Time Away:** An electronic time off request must be submitted two weeks before the proposed time away for vacation, conference and other planned absences from campus. The electronic Time Away form is found in MiTools in the Student pull down menu Report an Absence for PhD Students. PhD students need to communicate with their lab advisor or mentor and be able to document the date approval was given. In an emergency situation when you do not have time to submit the time off request, please inform the program and your mentor face-to-face if possible. If time does not permit, call or email. Submit the online request as soon as possible.

**Informing the OHS PhD Office:** When you are traveling or away from campus for holiday breaks or outreach rotations please inform Kimberly Smith (kimbsmit@umich.edu) the week before. This time is not recorded as vacation, but in an emergency situation, we need to know where you are and how to get in touch with you. The OHS PhD Office will keep emergency contact information in case a situation should arise. The emergency contact information will be used only for emergency situations, so, be sure to provide the most important contact. In addition, the program advises that you update your emergency contact information found on Wolverine Access, Campus Personal Information.

We all acknowledge that mentors and laboratory managers may have different policies or feelings toward students taking time off. The Program cannot dictate how mentors run their lab. We will provide mentors the time off policy for their reference and consideration. Based on faculty experience, timely communication is the key. Be open and honest about your needs and your plan. With appropriate justifications and mentor support, linking personal vacation time with Christmas-New Year holiday may be approved. Taking time off for vacation or taking more than two weeks off while school is in session is not encouraged.

The Time off policy and many other policies are created to avoid unequal treatment and ensure standards. But in reality everyone’s needs and circumstances may be different. Appropriate communication and responsible conduct are the guiding principles to successfully manage time off.
ORAL HEALTH SCIENCES PhD PROGRAM

Electronic Time Away System for OHS PhD Students

MITools

*Note: No later than two weeks prior to your anticipated departure, contact your mentor and discuss your time-away plans and receive their verbal approval.

I. First Step-Setup
1. Access School of Dentistry MiTools on the web
2. Log in with Kerberos password
3. Pull down the Students Menu arrow
4. Select: Report an absence for PhD Students
5. First time you access, you will be taken to a screen and asked to select group
   (It will be under Office of Research and PhD Training-OHS PhD Students)

II. Request Time-Away
Access School of Dentistry MiTools on the web
Log in with Kerberos password
Pull down the Students Menu arrow
Select: Report an absence for PhD Students
Click on: +Fill Out New Time Away Request

ONLINE FORM – Please Fill in:
Reason: Vacation, Medical, Conference, Consulting,
   Other: Rotations off campus
First Day Away & Last Day Away: Click on the date and a calendar will drop down, select the appropriate dates.
Explain Details, if necessary: for conference/meeting give name, location, etc.
Request Filled Out By: Should always be you
Your Uniquename: Should be filled in when you login
Your Department Unit: Office of Research and PhD Training-OHS PhD Students (Should be filled in automatically when you login)
Describe Assignments Requiring Coverage- indicate that you have met with your mentor by entering your mentor’s name and the date you met to discuss your vacation, indicate you have approval for this time away.
Persons Providing Coverage in Your Absence-Add a coverage person: enter your mentor’s unique name, your mentor will receive a copy of the time away request.

**Note: If you are planning to add vacation to your meeting/conference time away, you will need to complete two separate time away requests; one for the meeting/conference and one for vacation.

A time away request needs to be filled out for: Vacations, Medical absence, Conference/Meetings, and any other event that takes you off campus. Outreach rotations are documented through student absences, include Kimberly Smith’s unique name in Person’s receiving notices (kimbsmit)
ORAL HEALTH SCIENCES PhD PROGRAM
Conflict of Interest / Conflict of Commitment: Definitions and Procedures

Participation in the Oral Health Sciences DDS/PhD, MS/PhD, or PhD Program, without regard to the source of financial support, is to be full-time; that is, 12 months per year. Outside commitments may detract from the time and energy a student needs to devote to his or her research and academic program, and could greatly slow progress towards completion of their degree. Participation in any outside employment or major commitment must be requested in writing and approved by the dissertation mentor and Program Committee.

A potential conflict of interest (COI) arises when external activities or associations might appear to bias a student’s judgment in performing his or her University obligations. Specifically, a potential conflict of interest exists whenever personal, professional, commercial, or financial interests or activities outside of the University have the possibility (either in actuality or in appearance) of:

- compromising a student’s judgment;
- biasing the nature or direction of scholarly research;
- influencing a student’s decision or behavior with respect to PhD training, course work, uses of University resources, or other matters of interest to the University;
- resulting in a personal or family member’s gain or advancement at the expense of the University. (Family members include spouse, domestic partners and dependents.)

Students enrolled in the OHS PhD Program are expected to commit full time (12 months) effort to the program. Other commitments outside of the program that could be perceived as competing, such as external employment or additional course work, must be approved by the OHS Program Committee in conjunction with student’s dissertation advisor.

A potential conflict of commitment (COC) arises when a student engages in external activities or assumes external commitments that might appear to compromise his or her ability to fulfill the responsibilities of his or her University position. Such a situation exists when a student’s external relationships or activities have the possibility (either in actuality or in appearance) of interfering or competing with the University’s educational, research, or service missions, or with that individual's ability or willingness to perform the full range of responsibilities associated with his or her position within their program.

All potential conflicts of interest and commitment must be disclosed to the OHS Program Director for review with the OHS Program Committee. If necessary, a management plan to mitigate possible conflicts will be developed and agreed upon with the Committee and the student. This plan will be reviewed at the student’s annual evaluation.

Supporting Documentation:
- The University Standard Practice Guide (SPG) 201.65-1 on Conflict of Interest (COI) and Conflict of Commitment (COC)

Near the beginning of each academic year, the OHS PhD Program will ask each student in the Program to read these definitions, and submit a signed disclosure form. (Form attached) Depending on the funding mechanism, students may be required to complete COI report established by the School of Dentistry on annual basis.
Full disclosure of all conflicts of interest (COI) and conflict of commitment (COC), either real, perceived or potential, must be made to the Program Director as soon as reasonably practical. Please refer to the UM Conflict of Interest and Conflict of Commitment Policy SPG 201.65-1 for further information on what conflicts require disclosure.

**Procedure:**

1. This form is to be completed by anyone wishing to disclose a COI/COC.

2. Complete this Disclosure Statement and provide it to the OHS Program Director as soon as possible either by sending it as an attachment to an email titled “Conflict of Interest” or by giving it to the OHS Director in person.

3. On receipt of the Disclosure Statement, the OHS Director will discuss it with you in a timely way. The Director will exercise his or her judgment in determining an appropriate plan for managing the COI/COC. Where necessary, the Director will seek the advice of the Oral Health Sciences Program Committee.

4. You and the OHS Director should agree on a plan for managing the COI/COC. Where a plan cannot be agreed upon, the matter may be referred to an appeal. The management plan should be recorded in Part D of the Disclosure Statement.

5. The completed Disclosure Statement will be maintained in your OHS Program file.

**Disclosure Statement:**

Name of person disclosing:

A. Describe the nature of the real, perceived or potential conflict of interest. (Provide sufficient information to enable a procedure for management of the conflict of interest to be established. If third parties are relevant to the disclosure, the third parties should be informed. Use a separate sheet of paper if necessary.) **If no conflicts exist, state “None” and go to the signature section.**

B. Describe how the situation might affect or be seen to potentially affect you or your progress in the OHS Program.

C. Explain how you propose to manage this conflict.

D. Outline the agreed procedure for the management or elimination of the above conflict of interest. (Record of the procedure for the management or elimination of the conflict of interest and agreement by the parties should be provided here unless an appeal is pending.)
**Certification of Conflict of Interest:**

I have disclosed all relevant matters to my Program Director.

Name of person disclosing:  
Signature of person disclosing: ___________________________ Date: _____________  
Program:  
Name of Program Director: ___________________________  
Signature of Program Director: ___________________________ Date: _____________

**Certification of Conflict Management:**

I agree to abide by the conflict management specified above.

Name of person disclosing:  
Signature of person disclosing: ___________________________  
Program:  
Name of Program Director: ___________________________  
Signature of Program Director: ___________________________ Date: _____________

**Disclosure and Privacy Statement:**

The information you provide in this document is collected in accordance with the requirements of the UM Conflict of Interest and Conflict of Commitment Policy. This Policy requires the disclosure of all potential conflicts of interest by an individual to their Program Director. Failure to disclose potential conflicts could lead to disciplinary action up to and including dismissal from the program.

*Sensitive and Confidential Information*

The OHS PhD Program recognizes that the information provided by you in this disclosure is personal and sensitive. The OHS PhD Program considers the information to have been given in confidence, and undertakes to treat it confidentially to the extent permitted by law. In addition, the information you provide related to your conflict may also be disclosed to others that need this information to perform their UM obligations or to make decisions on behalf of UM (e.g., Human Resources, Compliance Officers, the UM Conflict of Interest Board, Rackham School of Graduate Studies).

*Access and Retention*

This document and any copies will be retained in your OHS Program file. It will be accessible only to others that demonstrate a need to view this information.
Policies Every Graduate Student Should Know*

- Statement of Student Rights and Responsibilities
- Rackham Academic Dispute Resolution Policy and Procedures
- Policy Statement on Academic, Scientific and Professional Misconduct, Rackham School of Graduate Studies and the School of Dentistry
- Leaves of Absence Policy for Ph.D. Students
- Graduate Student Parental Accommodation Policy
- Continuous Enrollment Policy Overview
- Continuous Enrollment Dispute Resolution Policy
- The University’s Nondiscrimination Statement
- The University’s Policy on Discrimination (Sexual Orientation, Gender Identity or Gender Expression)
- The University’s Policy on Discriminatory Harassment
- Sexual Harassment Policy
- Faculty-Student Relationships Policy
- Faculty Allies for Diversity

*These are just some of the University policies that apply to students. Please visit the UM and Rackham websites to familiarize yourself with other policies.
Statement of Student Rights and Responsibilities

Introduction

The University of Michigan - Ann Arbor (the University) is dedicated to supporting and maintaining a scholarly community. As its central purpose, this community promotes intellectual inquiry through vigorous discourse. Values which undergird this purpose include civility, dignity, diversity, education, equality, freedom, honesty, and safety.

When students choose to accept admission to the University, they accept the rights and responsibilities of membership in the University's academic and social community. As members of the University community, students are expected to uphold its previously stated values by maintaining a high standard of conduct. Because the University establishes high standards for membership, its standards of conduct, while falling within the limits of the law, may exceed federal, state, or local requirements.

Within the University, entities (such as schools and colleges; campus, professional, and student organizations) have developed policies that outline standards of conduct governing their constituents and that sometimes provide procedures for sanctioning violations of those standards. This Statement of Student Rights and Responsibilities (the Statement) does not replace those standards; nor does it constrain the procedures or sanctions provided by those policies. This Statement describes possible behaviors which are inconsistent with the values of the University community; it outlines procedures to respond to such behaviors; and it suggests possible sanctions which are intended to educate and to safeguard members of the University community.

Student Rights

Students at the University have the same rights and protections under the Constitutions of the United States and the State of Michigan as other citizens. These rights include freedom of expression, press, religion, and assembly. The University has a long tradition of student activism and values freedom of expression, which includes voicing unpopular views and dissent. As members of the University community, students have the right to express their own views, but must also take responsibility for according the same right to others.

Students have the right to be treated fairly and with dignity regardless of age, color, creed, disability, marital status, national origin or ancestry, race, religion, sex (including gender identity and gender expression), sexual orientation, or veteran status. The University has a long-standing tradition of commitment to pluralistic education. Accordingly, the University, through this Statement, will not discriminate on the basis of group status.

Students have the right to be protected from capricious decision-making by the University and to have access to University policies which affect them. The University has an enduring commitment to provide students with a balanced and fair system of dispute resolution. Accordingly, this Statement will not deprive students of the appropriate due process protections to which they are entitled. This Statement is one of the University's administrative procedures and should not be equated with procedures used in civil or criminal court.

Student Responsibilities

Along with rights come certain responsibilities. Students at the University are expected to act consistently with the values of the University community and to obey local, state, and federal laws. See the Policy in its entirety at: http://www.umich.edu/~spolicy/statementsstudentrights.html
Rackham Academic Dispute Resolution Policy and Procedures

Introduction

Rackham’s Academic Dispute Resolution Policy and Procedures are available to Rackham students who have a dispute or disagreement with faculty or staff about the equity and fairness of decisions or procedures that affect their academic standing and progress toward the degree. Such issues may arise regarding fair and equal treatment in the conduct of a class, in the grading or evaluation of academic work or research. Other issues may concern the equity and fairness of program, department or Rackham policies.

Academic dispute resolution is a means for resolving disputes and achieving a workable outcome for all parties, within the integrity policies of the University. Resolutions are not imposed, but result from agreement of all parties.

The Rackham Resolution Officer, Darlene Ray-Johnson, is responsible for managing this policy and may be reached at rayj@umich.edu.

Scope of the Policy

The Rackham Academic Dispute Resolution policy applies to disputes Rackham graduate students may have with faculty or staff regarding equity and fair treatment that may have an impact on grading or evaluation, or other treatment that affects academic standing. This policy may not be used to appeal grade-related or other academic sanctions imposed as a result of any action taken under any honor code or academic integrity policy.

Other University policies and procedures apply to allegations of faculty and staff misconduct; such matters will be governed by appropriate policies administered under other University units:

- Complaints that a member of the faculty or staff has engaged in research misconduct will be handled by the Office of the Vice President for Research.
- Complaints that a member of the faculty or staff has violated the University’s non-discrimination and harassment policies will be investigated by the University’s Office of Institutional Equity. Faculty and staff who are also students, or a student who also has a staff appointment, may be subject to procedures described in the “Statement of Student Rights and Responsibilities.”
- Claims that a member of the faculty or staff has violated employment contracts will be investigated by Academic Human Resources.

A graduate student who alleges misconduct by a faculty or staff member must pursue the complaint in the most appropriate forum; a student may not pursue the same allegation in different venues. Students who agree to have a dispute mediated under this policy agree not to pursue the same matter in any other forum within the University. Students should consult the Resolution Officer in their school or college to decide which avenue is best for their circumstances, and about counseling and University resources that may be appropriate.

Resolution Board

Schools and colleges participating in this dispute resolution process designate a member of the faculty or senior administrative staff to serve as the unit’s Resolution Officer. This person, in accordance with the principles and processes described below, oversees the mediation of disputes or disagreements covered under this policy. The Resolution Officers of the schools and colleges constitute the Resolution Board, which is convened by the Rackham Resolution Officer. The Rackham Resolution Board also includes four to five Rackham students who serve as Resolution Counselors for students. The Resolution Board keeps current with best practices for dispute resolution, provides mutual advice and support in the handling of disputes, and shares lessons learned with the Rackham Dean and the graduate programs about ways to improve policies,
practices and communication. The Resolution Board may seek advice from faculty and other University offices with expertise on mediation and conflict resolution.

**Dispute Resolution Principles and Responsibilities**

Adherence to principles of impartiality, confidentiality, timeliness, and effective communication are important to successful dispute resolution. The Rackham Graduate School works with the schools and colleges to ensure that these principles are understood and observed in the dispute resolution process.

1. **Impartiality**

   A Resolution Officer will remain impartial. A Resolution Officer will recuse him/herself for a conflict of interest. Such circumstances include if the Resolution Officer has a personal or professional relationship with any party in the dispute that would impede his or her impartiality. In such instances, the Dean of the school or college may ask another impartial and qualified staff or faculty member to handle the dispute resolution process, or may ask the Rackham Resolution Officer to ask another member of the Resolution Board to provide this service. A student with concerns about the impartiality of a resolution process within his or her school or college should seek advice from the Rackham Resolution Officer. If the Rackham Resolution Officer, in consultation with the Resolution Board, concludes that such concerns about the substance or appearance of impartiality are substantial, another member of the Board may be asked to take the case.

2. **Confidentiality**

   - A student may meet informally to discuss an issue with any Resolution Officer or Resolution Counselor. While these discussions will remain confidential to the extent permitted by law, confidentiality will not be maintained if the Resolution Officer or Resolution Counselor believes that disclosure is necessary to avoid an imminent risk of serious harm or is required by law.
   - All parties implicated in the complaint have the right to know the details of the issues that give rise to the dispute. A student may not anonymously request a formal dispute resolution process.
   - The Resolution Officer or Resolution Counselor may consult with the Rackham Resolution Officer and the Resolution Board, who will maintain confidentiality. Parties involved in a formal dispute resolution process are expected to maintain confidentiality so the process can be effective.
   - When the resolution process suggests how academic policies and their implementation may be improved, the Resolution Board may share this information as appropriate with other graduate programs, while maintaining the confidentiality of personal information.
   - Records summarizing the resolution of disputes will be archived by the Resolution Board and the Dean(s) of the relevant school or college. These records will be a resource for the Board. Personal information in these records will be kept confidential.

3. **Timeliness**

   Timely address to disputes is important for successful resolution. Normally, resolution conferences will be held within ten business days from the time the Resolution Officer receives the case. The academic calendar may make it difficult to always adhere to this schedule, but the conference should be convened within a reasonable time.

4. **Communication**

   Schools and colleges should maintain and make public dispute resolution procedures. Schools and colleges should also publicize these procedures to students, faculty and staff. Resolution Officers are available to speak with a student about the purpose and principles of these procedures, and the implications of proceeding with a formal dispute resolution conference, including potential outcomes. The student must be kept fully informed at every step and participate in reaching a resolution.
Resolution Conference

While prompt informal discussion within the unit where the parties are enrolled or appointed can often resolve most disputes, a more formal process may be necessary to address disagreements that may have greater complexity and consequence. The formal resolution of dispute takes place in a resolution conference. Through the resolution conference, the parties seek to reach a mutual understanding of the causes of the dispute and to produce a solution guided by academic policies. The purpose of the resolution conference is to allow parties to a dispute to present their viewpoints, to share information, to clarify concerns and issues, to resolve misunderstandings or interpersonal difficulties that may contribute to an issue, to evaluate options for resolving the problem, and to reach a formal agreement on an outcome intended to resolve the dispute.

The Academic Dispute Resolution Process

In many cases, academic disputes can be quickly and effectively resolved when addressed informally at the local level. Misunderstandings, miscommunications and disagreements often can be resolved through such conversations.

1. A student may talk with the Graduate Chair as an initial step. The student may also consult informally with the Resolution Officer of the school or college who can offer impartial advice and suggest steps to resolve the issue.
2. Students in LS&A, which does not have a Resolution Officer, may consult with the Rackham Resolution Officer.
3. All students are encouraged to seek information and advice from a Rackham student Resolution Counselor, who can offer neutral advice about how to address and resolve disputes.
4. If informal discussion does not resolve the disagreement, the student may seek a formal resolution conference within the school or college. With the exception of the LS&A, each school and college has a dispute resolution process and designates a faculty or staff member to serve as a Resolution Officer who will conduct this process according to the procedures of the school or college.
5. Some LS&A departments have dispute resolution processes; students in these departments should seek a formal dispute resolution conference within these programs. For LS&A students whose programs do not have formal procedures, the Rackham Resolution Officer will organize a dispute resolution conference.
6. The Resolution Officer of the school or college will notify relevant parties and the Resolution Board and include a summary of the issue at disagreement.
7. When an academic dispute arises between a Rackham student and a faculty member of another school or college, the Rackham Resolution Officer, in consultation with the Resolution Board and the relevant Deans, will determine where the resolution conference process will be held.
8. Through the dispute resolution process, the parties will develop a resolution plan to which the parties consent. The Resolution Officer will summarize the key points of the agreed resolution in a memo of understanding. The parties to the dispute will sign the memo of understanding, signaling their consent to the terms of the resolution. Copies of the memo will be shared with the relevant Deans and the Resolution Board.
9. In the event that the parties are unable to reach an agreed resolution, the Resolution Officer will notify the relevant Deans and the Resolution Board in writing that a resolution could not be reached. The Dean of the school or college will refer the matter to the Rackham Resolution Officer within five business days of receiving the school/college’s Resolution Officer’s report.
Reconsideration
A student may ask the Rackham Resolution Officer to reconsider the dispute if he or she believes that the resolution process at the school or college level did not meet standards of fundamental fairness or if substantial relevant new evidence or information has become available after the resolution conference.

1. The student must make this request in writing within ten business days after receipt of written notification of the outcome of the resolution conference process in the school or college.
2. The Rackham Resolution Officer will ask the Resolution Officer of the school or college to provide a written report of the resolution process, and may talk individually with the parties to the dispute.
3. If the Rackham Resolution Officer and the Resolution Board find that the grounds for reconsideration have been established, they may recommend to the Rackham Dean that the school or college be asked to consider the dispute again or, if circumstances make it difficult to ensure an impartial inquiry, ask that the Resolution Board convene a new dispute resolution conference.
4. If the Rackham Resolution Officer and the Resolution Board determine that the grounds for reconsideration have not been established, they will recommend to the Rackham Dean that the school/college outcome be upheld. The Rackham Dean will notify the student of the outcome. This ends the reconsideration process.

Rackham Dispute Resolution Process

At the request of the Dean of a school or college, or if a school or college does not have a dispute resolution process, or as the result of a request by a student for reconsideration, the Dean of Rackham may agree to convene a dispute resolution process.

1. Resolution conferences for new cases or reconsiderations will be held usually within ten business days of the initiation of the case.
2. The Rackham Resolution Officer will invite all parties to submit written statements. The Rackham Resolution Officer may interview other persons who may be able to contribute to an understanding of the dispute, or ask them to provide written statements.
3. For new cases only (i.e., not reconsideration cases), the Rackham Resolution Officer may determine that, on the basis of this inquiry, the claims of the student are without merit. In this case, no further action will be taken.
4. A resolution conference will be conducted for the purpose of understanding the causes of the dispute and for producing a solution.
5. The parties in the dispute have the right to respond to claims made by others, either in writing or at the conference itself.
6. The conference will not be recorded.
7. The parties will be encouraged to seek a resolution to the dispute by agreeing on a course of action. The Rackham Resolution Officer will summarize the key points of the agreed resolution in a memo of understanding. The parties to the dispute will sign the agreement, signaling their consent to the terms of the resolution. Copies of the agreement will be shared with the relevant Deans and the Resolution Board.
8. If the parties are unable to reach a resolution through the conference process, they will be asked to submit a summary statement no more than two pages in length. Upon review of the Rackham Resolution Officer’s report and of statements submitted by the parties, the Rackham Dean will determine a resolution outcome based on the preponderance of the information presented, and will communicate this to all parties and the Dean and Resolution Officer of the school or college.

Academic Dispute Resolution Board Member for School of Dentistry: Christopher Fenno

See complete Board membership at:
http://www.rackham.umich.edu/policies/dispute_resolution/academic_dispute_resolution/
Policy Statement on Academic, Scientific and Professional Misconduct
University of Michigan Horace B. Rackham School of Graduate Studies and the School of Dentistry

The conduct of research and participation in Ph.D. training require honesty. It is expected that students enrolled in the Oral Health Sciences Ph.D. Program in the School of Dentistry conduct themselves with a clear sense of academic honesty, scientific and professional responsibility that is fundamental to our scholarly community.

Each Rackham program has the discretion to set its own policies and procedures to address issues regarding Academic and Professional Misconduct. The Oral Health Sciences Ph.D. Program will address these issues within the School of Dentistry. All OHS Ph.D. students should also be aware of guidelines related to academic, scientific, and professional misconduct set forth through the Rackham School of Graduate Studies.

If an appeal to a decision is brought forward, the Rackham Appeals Committee will be utilized.

The complete Rackham policy can be located on the Rackham website:
http://www.rackham.umich.edu/policies/academic_and_professional_integrity/investigating_misconduct/

The Roles and Responsibilities of Graduate Students

As professionals in training, graduate students assume various roles, depending on the academic program. These include the roles of scholar/researcher, teacher, supervisor of employees, representative to the public (of the University, the discipline and/or the profession), professional colleague and even the role of provider of services to clients. Therefore, students are responsible for maintaining high standards of conduct while engaged in course work, research, dissertation or thesis preparation, and other activities related to academics and their profession. Because students take on multiple roles in multiple settings, some types of conduct are both academic and professional in nature --- hence, the inclusive nature of this policy.

Graduate training, like future academic and professional life, includes demands that might challenge a student’s standards of integrity. There are pressures on graduate students to achieve high grades, obtain financial support, meet research or publication deadlines, gain recognition from the scholarly community, and ultimately secure employment. Although faculty members can help students to maintain academic integrity despite these pressures, each student has final responsibility for maintaining integrity in his or her individual conduct.

Conduct that violates the ethical or legal standards of the University community or of one's program or field of specialization may result in serious consequences, including immediate disciplinary action and future professional disrepute. In support of the Graduate School's commitment to maintain high standards of integrity, this policy makes provisions for bringing forward and hearing cases of academic and professional misconduct.

Note: OHS Dual Degree students must comply with the standards set forth by each program they are enrolled in. Dual degree students are expected to be in good standing in both programs associated with their degree. Accusations of academic and/or professional misconduct that are brought forward will be investigated in consultation and coordination with both programs. The formal process will go forward in relation to the program where the incident occurred. Findings in one program will be communicated to both programs, and could affect the student’s standing in both programs.

In maintaining high standards of conduct, it is important for students enrolled in the School of Dentistry's Oral Health Sciences (OHS) Ph.D. Program to feel accountable first and foremost to the faculty members from whom they take classes and under whom they do research. It is equally important for those faculty members to monitor student behavior in this regard and to take action if they observe alleged misconduct.
In the event that an allegation of academic or professional misconduct is brought forward, the following is an outline of the process that would take place.

**Forms of Academic Misconduct:**
For the complete descriptions of academic misconduct, please go to the following link:
http://www.rackham.umich.edu/policies/academic_and_professional_integrity/statement_on_academic_integrity/#2A

**Forms of Professional Misconduct:**
For the complete descriptions of professional misconduct, please go to the following link:
http://www.rackham.umich.edu/policies/academic_and_professional_integrity/statement_on_academic_integrity/#2B

**Who can make a Complaint:**
Members of the University community as well as persons outside the University may report allegations of academic or professional misconduct by graduate students.

Allegations of academic and professional misconduct, regardless of their source, should be submitted in writing to the Oral Health Sciences Ph.D. Program Director or student’s academic advisor, by the source of the allegations or a third party, as soon as possible after the discovery of the alleged misconduct.

It is expected that any allegation of Academic or Professional Misconduct is brought forward in good faith.

**Review of Conduct:**
The OHS Program Director or a Member of the OHS Program Committee will first meet informally with the student to call the alleged misconduct to his or her attention and provide an opportunity to respond. If the offense is deemed to be minor or unintended, the Program Director will take informal remedial steps with the student to correct the infraction and avoid its recurrence. In such instances, no official response is required and no record need be kept.

If the violation is found to be more serious in nature a formal investigation will be required and will be referred to the OHS Program Committee. The Program Committee will appoint an ex-officio Chair and an Ad-hoc committee comprised of OHS Program Committee members and OHS Faculty members for the investigation.

**Investigation of Complaint:**
Allegations of academic and/or professional misconduct that require a formal investigation will be reviewed by the OHS Program Committee. When a case is referred to the Program Committee, the Committee’s task is to gather information about the case and, after considering all the facts and circumstances, to decide whether misconduct occurred and submit their findings to the Program Director and the Dean of the School or College. The Program Committee may be expanded by the addition of other OHS Program Faculty members for the investigation process.

**Hearing:**
If allegations of academic and/or professional misconduct are brought forward, the student will be notified of the allegations and given an opportunity to respond. During the hearing witnesses and documentation will be presented that either supports or denies the alleged allegations. The Committee will submit a report to the Program Director and the Dean of the School of Dentistry with their findings on: the group’s decision as to whether the student engaged in misconduct; a summary of the findings of fact and how those facts
contributed to the group's decision; the recommended sanctions, if any, and the rationale for the selection of those sanctions with respect to their being appropriate to the case.

Possible Sanctions:
Sanctions can be selected to achieve one or more aims: correct or compensate for the student's actions, educate the student, and/or discipline the student. Corrective actions, educational activities and/or sanctions against a student should be proportionate and relevant to the misconduct. They should also be fair not only to the person who has filed the allegation, but also to the student who has been charged with misconduct, to the other members of the University community, and to the professional community to which the student aspires to belong. Depending on the misconduct, sanctions can range from educational projects and community service to expulsion and rescinding of degree.

Appeals:
All appropriate appeals must be filed in writing within 15 days of original findings to the OHS Program Director who will forward the appeal to Rackham. A review will be done by The Rackham Appeals Committee. The Appeals Committee shall evaluate the allegations outlined in the appeal and be given access to the case file. The Appeals Committee shall communicate in writing to the Dean of the Graduate School both its recommendations and its rationale for having reached those recommendations. The Appeals Committee can recommend:

- that the decision and the sanctions should stand
- that the sanctions be revised and in what ways
- that the case should be re-heard.

Thereafter, the Dean of the Graduate School, in conjunction with the Dean of the School of Dentistry, may decide to:

- let all aspects of the original decision stand
- alter the earlier decision and/or sanctions
- conclude that the grounds for appeal warrant a re-hearing of the case.

The Deans will prepare a joint letter to the respondent outlining their decision and revisions to the sanctions, if any. Based on their need to know consistent with their official responsibilities, copies of the letter or parts thereof will be provided to the department representative, where applicable; the Office of the Vice President and General Counsel; the Resolution Officer; and to other offices and parties at the University.
Leaves of Absence Policy for Ph.D. Students

Ph.D. students are required to register each fall and winter term from the time that you begin your program until you complete your degree. The exceptions to this requirement include times that you are approved for a leave of absence or you are taking courses at another institution.

When you need to step away from being an active student for a full term or more, you may be eligible for a leave of absence. This means that you are not taking courses, doing research, interning, or making academic progress toward your degree while you are on a leave. If approved, the leave of absence preserves your place in your Ph.D. program. Rackham has a have a full section for Leave of Absence on the Rackham website, including checklists, flow charts, the Leave of Absence policy, and more. Below are some of the most frequently asked questions received so far:

Is the process to request a leave of absence complicated/des it take a long time?
It depends on the type of leave you are requesting. There are several required steps for all types of leave of absence and some types of leave require additional steps, which may take more time to process. If you are an international student, the International Center (IC) must enter a recommendation in our system as a part of the process. To get a better sense of what you’ll need to do, read the section on process on the Leave of Absence website.

What are the different types of leave of absence?
- Leave of Absence for Medical Reasons: For illness (either physical or mental) or injury
- Leave of Absence for Family Necessity/Dependent Care: To provide care or assistance for family or dependents
- Leave of Absence for Military Service: To meet military service obligations
- Leave of Absence for Personal Reasons: For other personal reasons not listed above (must be requested prior to the start of a term and is limited to one term only in your graduate career)

How does being on a leave of absence affect my insurance coverage?
While you are on leave, you are not an active student, so you are not eligible for University-provided health insurance coverage. You are eligible to continue existing coverage at your own expense (e.g., COBRA). Contact the Benefits Office for information about required paperwork and costs.

How does being on a leave of absence affect my funding?
While you are on leave, you are not an active student, so you are not eligible for funding from the University. If you have unused terms of funding from prior University commitments, you will have these commitments available to you when you return from a leave of absence, although the details of your funding may change. You should check with your funding source directly for any particular questions.

What happens if I want to take a leave in the middle of a term?
The answer to this depends quite a bit on your circumstances, including your source of funding, what point in the term it is, and what other options may be available to you. If you are considering leaving in the middle of a term, contact Natalie Bartolacci, Program Manager, Rackham Graduate School to talk through your individual situation and make the best decision for you based on your current situation. Her job is to help you understand this process and answer your questions, so please don’t hesitate to contact her @ rackham.loa@umich.edu or phone (734-647-2640).

To view the policy and procedures for Leave of Absence:
http://www.rackham.umich.edu/current_students/doctoral_students/phd_students/understanding_registration/leave_of_absence/#process
Graduate Student Parental Accommodation Policy

Introduction
In recognition of the challenges of balancing the demands of graduate study and parenting a new child, this policy aims to improve the environment for student parents. The Graduate Student Parental Accommodation Policy (GSPAP) assists graduate students immediately following the birth or adoption of a young child. The purpose of this policy is to make it possible for a student to maintain registered full time student status, along with all the benefits of such status, while facilitating the return to full participation in courses, research and teaching.

Eligibility
The Parental Accommodation Policy applies to full time, enrolled Rackham graduate students who are in good academic standing, and making satisfactory progress toward completion of their degree. Students must have completed at least one full time semester of their degree program to become eligible for coverage under this policy. The policy covers the situation of students who experience a child birth or the adoption of a child under the age of 6 for whom the student has parental responsibilities. These eligibility requirements cover all three provisions of the GSPAP.
See the Policy and forms in their entirety at: http://www.rackham.umich.edu/help/current_students/graduate_student_parental_accommodation_policy/

Continuous Enrollment Policy Overview
Updated June 18, 2010

The Dean and the Executive Board of the Rackham Graduate School have approved the adoption of a continuous enrollment requirement for Ph.D. students at the University of Michigan, to become effective in the Fall Term 2010. Once admitted to a Ph.D. program, students will register every fall and winter term until their degree is awarded, unless they are taking an official leave of absence. Requirements for registration in the summer will not change. Students will register in spring or summer terms only when they elect courses, take preliminary examinations, or defend their dissertations.
See the Policy in its entirety at: http://www.rackham.umich.edu/policies/continuous_enrollment/overview/

Continuous Enrollment Dispute Resolution Policy
The Continuous Enrollment Dispute Resolution (CEDR) process is available to Rackham Ph.D. students who have a dispute or disagreement with faculty or staff in their graduate program about the equity and fairness of decisions related to the Continuous Enrollment Policy.

Academic dispute resolution is a means for resolving disputes and achieving a workable outcome for all parties. The Rackham Resolution Officer, Darlene Ray-Johnson, is responsible for managing this process and can be reached at rayj@umich.edu.

The CEDR Board was developed at the request of Rackham Student Government and includes Ph.D. student representation. The process aims for resolution of disputes and we believe that in most cases disputes can be resolved informally. The process begins with a conversation between a student and the Graduate Chair in his or her own program. There are a variety of steps a student can pursue if the conversation is unsatisfactory. Resources are available in Rackham to assist students in using this process.

Rackham’s Academic Dispute Resolution Process is available if a student prefers to use a process that does not involve other students for a dispute related to the Continuous Enrollment Policy.
See the Policy in its entirety at: http://www.rackham.umich.edu/policies/continuous_enrollment/policies_and_resources/
The University’s Nondiscrimination Statement

The University of Michigan, as an equal opportunity/affirmative action employer, complies with all applicable federal and state laws regarding nondiscrimination and affirmative action. The University of Michigan is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, national origin, age, marital status, sex, sexual orientation, gender identity, gender expression, disability, religion, height, weight, or veteran status in employment, educational programs and activities, and admissions. Inquiries or complaints may be addressed to the Senior Director for Institutional Equity, and Title IX/Section 504/ADA Coordinator, Office of Institutional Equity, 2072 Administrative Services Building, Ann Arbor, Michigan 48109-1432, (734) 763-0235, TTY (734) 647-1388. For other University of Michigan information call (734) 764-1817. http://www.rackham.umich.edu/policies/discrimination_harassment/

The University’s policy on Discrimination (Sexual Orientation, Gender Identity or Gender Expression)

The University of Michigan believes that educational and employment decisions should be based on individuals’ abilities and qualifications and should not be based on irrelevant factors or personal characteristics which have no connection with academic abilities or job performance. It is the policy of The University of Michigan that no one should be subjected to discrimination or harassment based on their sexual orientation. For information about programs and services refer to the Spectrum Center.
Read: Sexual Orientation, Gender Identity or Gender Expression Policy at: http://spg.umich.edu/pdf/601.06.pdf

The University’s policy on Discriminatory Harassment

The University of Michigan strives to create a community of and for learning. To do so requires an environment of trust and openness. Discrimination, as defined in Regents’ Bylaw 14.06 and a Presidential Policy Statement issued in March 1984, is unacceptable on University of Michigan campuses. Such behavior threatens to destroy the environment of tolerance and mutual respect that must prevail if the University is to fulfill its purpose.

The University is firmly committed to these policies prohibiting discrimination. Discriminatory harassment is one form of discrimination. The University is prepared to act to prevent or correct discrimination and discriminatory harassment on the part of its faculty and staff. Although discriminatory harassment described and prohibited by this policy includes a wide range of behaviors, it does not include certain discriminatory conduct even though that conduct may be otherwise unlawful, offensive, or prohibited by University policy. For example, sexual harassment (see the University of Michigan Policy on Sexual Harassment by Faculty and Staff, SPG 201.89-0), unequal pay, and denial of access to educational programs based on gender are unlawful discrimination not addressed by this policy.

The University has a compelling interest in assuring an environment in which productive work and learning may thrive. At the same time, the University has an equally compelling interest in protecting freedom of speech and academic freedom and in preserving the widest possible dialogue within its instructional and research settings.

Definition of Discriminatory Harassment

The following types of behavior are discriminatory harassment and are subject to discipline: Verbal or physical conduct by a member of the faculty or staff that is based upon race, color, creed, religion, national origin, sex, sexual orientation, gender identity, gender expression, ancestry, age, height, weight, marital status, disability or Vietnam-era veteran status and that:
Definition of Discriminatory Harassment (cont.)
- adversely affects a term or condition of an individual’s education, employment, housing or participation in a University activity; or
- is used as the basis for a decision that adversely affects an individual’s education, employment, housing or participation in a University activity; or
- has the purpose or effect of creating an intimidating, hostile, or offensive environment for academic pursuits, employment, housing, or participation in University activities.

Read: Definition of Discriminatory Harassment at: [http://spg.umich.edu/pdf/201.89](http://spg.umich.edu/pdf/201.89-1.pdf)

Sexual Harassment Policy

It is the policy of the University of Michigan to maintain an academic and work environment free of sexual harassment for students, faculty, and staff. Sexual harassment is contrary to the standards of the University community. It diminishes individual dignity and impedes equal employment and educational opportunities and equal access to freedom of academic inquiry. Sexual harassment is a barrier to fulfilling the University's scholarly, research, educational, and service missions. It will not be tolerated at the University of Michigan.

Sexual harassment violates the University's long-standing policy against discrimination on the basis of sex. Sexual harassment is also illegal. It is prohibited in the employment context by Title VII of the 1964 Civil Rights Act, in the education context by Title IX of the Educational Amendments of 1972 and, in both employment and education contexts, by Michigan's Elliot-Larsen Civil Rights Act, adopted in 1976.

A claim under this policy may be brought by the University or by a faculty, staff or student member of the University community based on the conduct of any University employee. Complaints based on conduct by students who are not also employees of the University are addressed in the Interim Policy on Discrimination and Discriminatory Conduct by Students in the University Environment, which is administered by the Office of Student Services.

Sexual harassment can be a very serious matter having far-reaching effects on the lives and careers of individuals. Intentionally false accusations can have similar impact. Thus the charge of sexual harassment is not to be taken lightly by a charging party, an accused party, or any member of the University community. A person who knowingly and intentionally files a false complaint under this policy is subject to University discipline.

See the Policy in its entirety at: [http://www.umich.edu/~spolicy/facstaffhass.html](http://www.umich.edu/~spolicy/facstaffhass.html)
Faculty-Student Relationships Policy

The teacher-student relationship lies at the foundation of the educational process. As a matter of sound judgment and professional ethics, faculty members have a responsibility to avoid any apparent or actual conflict between their professional responsibilities and personal relationships with students.

Romantic and/or sexual relationships between a faculty member and a student have the potential to pose risks to the faculty member, the student, or third parties. In such relationships, voluntary consent by the student is suspect because of the inherently unequal nature of the relationship. A romantic and/or sexual relationship between a faculty member and a student can lead to a complaint of sexual harassment when the student feels that he or she has been exploited. In addition, other faculty members, staff members, or students may express concerns about undue access or advantage, favoritism, restricted opportunities, or unfavorable treatment as a result of the relationship. These concerns are damaging whether the favoritism is real or perceived. They also arise in cases where the relationship between the faculty member and the student remains amicable, as well as in cases that lead to accusations of exploitation. For all these reasons, the University strongly discourages romantic and/or sexual relationships between faculty members and students.

In spite of these warnings, the University recognizes that sometimes such relationships occur. If a romantic and/or sexual relationship occurs or has occurred between a faculty member and a student for whom the faculty member has supervisory responsibility, an inherent conflict of interest arises. When a conflict of this nature occurs, the faculty member must disclose the relationship so that a resolution to the conflict can be sought.

This policy applies to any University or University-sanctioned teacher, mentor, or supervisor of students. This includes, but is not limited to, regular instructional faculty, clinical faculty, supplemental and research faculty, postdoctoral fellows, graduate student instructors, graduate student research assistants, preceptors, and graders. Throughout this policy, the term “faculty member” is used to refer to all regular instructional faculty and to all other individuals with supervisory responsibility for students in an educational setting.

See the Policy in its entirety at: http://www.umich.edu/~spolicy/facstudentrelationships.html

Faculty Allies for Diversity

Faculty allies for diversity in graduate education work with the Rackham Graduate School at the program level on issues of recruitment, admissions, retention and completion. The following faculties are also contacts on diversity issues for students within their own program.

School of Dentistry Faculty: Jan Hu
Research Regulatory and Compliance Guidelines

Basic Lab Safety Information

- In Case of Emergency
- Chemical Spills
- Use of Sharps
- OSEH Contact Info
- Basic Required Training
- Proper Lab Attire
- Shipping with Dry Ice
- Acceptance Checklist for Dry Ice 2012

Erik McClellan, School of Dentistry OSEH Representative
(734) 936-3039
mcclel@umich.edu
In Case of Emergency

Accident/Injury Reporting

When an employee is injured in the workplace, the following procedure should be followed. If the employee is in need of emergency medical attention, call 911 immediately.

**EMPLOYEE:**
- Report incident to your supervisor immediately.

**SUPERVISOR:**
- Complete the WorkConnections Illness/Injury Report Form and fax immediately to (734) 936-1913. Forms are available on the WorkConnections Web site: www.workconnections.umich.edu
- If the employee requires medical treatment, the supervisor will refer the employee to one of the University’s designated treatment facilities. See Treatment Facilities Section on WorkConnections Web site: www.workconnections.umich.edu
- Send a copy of the form with the employee as authorization for medical treatment.

**TREATMENT FACILITIES:**

**U-M Occupational Health Services -- Campus Employees**
Mon-Fri 7:30 am - 4:30 pm
After hours - go to UM Hospital Emergency Dept. – Urgent Care Clinic
C380 Med Inn building
1500 East Medical Center Drive, Ann Arbor (734) 764-8021

**Employee Health Services -- UMHS Employees Only**
Mon-Fri 7:30 am - 4:30 pm Closed 12-1 pm
C380 Med Inn Building, Ann Arbor (734) 764-8020

**University Health Services -- University students (non-life threatening conditions)**
Mon-Fri 8 am – 4:30 pm, Sat 9 am – 12 pm
Contact for current hours as they may vary
207 Fletcher Street, Ann Arbor (734) 764-8320

**UMHS Emergency Department -- after clinic hours or on weekends**
1500 East Medical Center Drive, Ann Arbor, (734) 936-6666
Chemical Spill Control Information

An accidental spill can occur at any time while transporting chemicals. What you do to control or manage the clean-up can be the difference between a minor or a major incident. Lack of proper instruction can complicate the clean-up, create property damage, and increase the risk to personal safety. The following information will assist with the safe clean-up of a chemical spill.

Report large chemical spills (greater than 1 liter) in corridors or common areas (hallways, elevators, eating areas, rest rooms, offices, etc.) to the Department of Public Safety at 763-1131.

1. When transporting chemicals in your facility, don’t attempt to carry more bottles than you can handle. Larger quantities of chemicals should be transported on carts. Use safety carriers to protect against accidental bumping. Don’t transport open containers or overcrowd the cart with bottles that can be spilled.

2. When a spill occurs, personal safety should always come first. Alert and clear everyone in the immediate area where the spill occurred. Identify the material that was spilled. Your familiarity with the risks and safety precautions associated with the material can alert you to the potential dangers associated with the clean-up. Below are three categories of commonly used chemicals in labs and their potential hazards.

- **Corrosives** - Direct contact with corrosives can cause severe burns. Corrosives can be very damaging to metals and other materials. Vapors from these substances can result in damage to eyes, nose and the respiratory system.

- **Flammable Solvents** - Flammability is determined by flash point. Solvents with flash points below 100 degrees Fahrenheit are flammable. Direct contact with many solvents may cause skin irritation, dryness or even destruction of tissue. Inhalation of vapors may cause dizziness, nausea, and respiratory irritation.

- **Reactive Substances** - A spill involving a reactive substance may be a fire hazard. Reactive materials should contain cautionary labeling.

3. Assume that all solvent spills are flammable. Extinguish all ignition sources and open all doors and windows when possible to reduce the
vapor build-up in the immediate area. This will minimize the health hazard and danger of ignition.

4. Corrosive spills should be confined to the immediate area. The area should be restricted so that others are not exposed. Doors leading to adjacent laboratories and corridors should be closed.

5. Minimum protection while cleaning a spill should include: gloves, goggles, and a laboratory coat. If a corrosive material is spilled wear acid-resistant gloves and apron.

6. A dry sorbent material should be used to clean up liquid spills.

**Guidance on the Use of Sharps**

A significant number of injuries from "sharps" occur in research labs each year, many of which go unreported. A high percentage of these injuries are avoidable. Anyone who uses a sharp is personally responsible for its correct use and for its safe disposal. A needle-stick injury with a contaminated sharp may introduce organisms directly into the bloodstream or subcutaneous tissue. It is likely that a smaller number of organisms are required to initiate an infection when they are introduced in this way than would be required from a splash exposure.

**OSEH Contact Information**

Occupational Safety & Environmental Health
University of Michigan
1239 Kipke Drive
Ann Arbor, MI 48109-1010
Phone: (734) 647-1143
FAX: (734) 763-1185

**OFFICE HOURS:** 7:30am - 4:30pm

**After hours emergency contact through Department of Public Safety at (734) 763-1131 or from a campus phone 911.**

http://www.oseh.umich.edu/index.shtml
Lab Safety Training

Prior to beginning any work in a laboratory, everyone must attend the OSEH Comprehensive Lab Safety training course. See the following spreadsheet for basic courses. Additional training may be required dependent on the type of protocol you are working on. Always check with your lab manager or mentor to confirm required training.

Animal Use Research Training

The UM is mandated by federal regulations to provide a program for education and training of animal care and use personnel. All personnel must be trained in the proper methods and techniques prior to beginning any procedures involving the use of animals. To register for training, students must be listed on a current approved protocol or show that an addendum has been submitted showing approval to work with animals. All training must take place PRIOR to working with animals.

ULAM Training: http://www.ulam.med.umich.edu/services/training_course.html

UCUCA Training: http://www.ucuca.umich.edu/train.htm; ulam-trainingcore@med.umich.edu

Note: You do not need to be on a UCUCA protocol to register for:
- Orientation for Animal Care and Use at the University of Michigan (Lecture)

The following steps must be completed in the order presented:

1. Your name must be added to the current approved protocol of the respective laboratory and laboratory project.
2. Once you are added to the protocol, you must take the appropriate UCUCA training that is dictated by the work that is listed in the research protocol.
3. Once the first two steps are completed, you are now eligible to take the “ULAM Animal Room Procedural Courses” required in order to obtain a PIN # for access to the animal core.

Institutional Review Boards (IRB): Human Subject Research

The purpose of an IRB is to protect the rights and welfare of human subjects in research. Guiding this process is the application of federal and state laws, university policies, ethical principles; particularly those articulated in the Belmont Report. (http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.htm)

- Investigators should not commence research involving human subjects until the IRB MED or IRB-HSBS has approved the study or has determined it is exempt. All Students must have a faculty mentor listed as Principal Investigator on all IRB applications.

- All 'key personnel' must complete basic human subjects education in PEERRS prior to IRB approval of a study. For details please go to the PEERRS Website at: http://my.research.umich.edu/peerrs/

- Read: UM Policy for Research with Human Participants at http://spg.umich.edu/pdf/303.5.pdf

IRB Health Sciences and Behavioral Sciences: http://www.irb.umich.edu/

IRB MED: Clinical Dentistry and FDA-regulated research: http://www.med.umich.edu/irbmed/

Please refer to the attached spreadsheet for basic training information.
<table>
<thead>
<tr>
<th>Training</th>
<th>Course Number</th>
<th>Resource Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Safety (OSEH / MyLink)</td>
<td>Online or Instructor Led</td>
<td><a href="http://www.oseh.umich.edu/osehtraining/Default.aspx">http://www.oseh.umich.edu/osehtraining/Default.aspx</a></td>
</tr>
<tr>
<td>Comprehensive Laboratory Safety Training</td>
<td>BLS009 REQUIRED</td>
<td>A new hire training program to address requirements outlined in the Bloodborne Pathogen (BBP), Laboratory Safety (LSS) and Personal Protective Equipment (PPE) Standards. The training addresses employee orientation to these standards and provides an overview of employee rights and responsibilities. BLS025W and BLS101W can be taken as a web-based alternative to BLS009. Both courses must be taken to be equivalent to BLS009. Course Length: 2.5 hours. Course Frequency: Required once; refresher recommended every three years.</td>
</tr>
<tr>
<td>Use and Care of Animals in Research (UCUCA)</td>
<td>Online or Instructor Led</td>
<td><a href="http://med.umich.edu/ulam/services/training_course.html">http://med.umich.edu/ulam/services/training_course.html</a></td>
</tr>
<tr>
<td>ULAM Animal Room Procedures (required for badge access to ULAM managed Facility such as School of Dentistry or LSI)</td>
<td>Part 1: on line; Part 2 instructor Led</td>
<td>This is a 2 part course for users of mice and rats in ULAM animal facilities. Topics addressed include: structure of ULAM husbandry staff; rodent caging, food, water and transport; Identification of animals; animal identification methods, methods of communication in the animal room, veterinary care, and micro-isolation techniques. Part 1 is entirely web-based, and Part 2 is an instructor led wet-lab that demonstrates important procedures and techniques. Satisfactory completion of Part 1 and associated quiz is required before users can register for Part 2.</td>
</tr>
<tr>
<td>Orientation to Animal Care and Use at the University of Michigan (Required)</td>
<td></td>
<td>Do not need to be on UCUCA protocol to register. A two part online module is now available to replace the instructor led lecture course. To choose this option complete the online modules ULAM-10004 and 10005 instead of registering to attend the lecture course ULAM-10001.</td>
</tr>
<tr>
<td>Other animal use training available as needed per animal protocol. For assistance, please contact the UCUCA Training Core @ 763-8039 or <a href="mailto:liludwig@umich.edu">liludwig@umich.edu</a> (Lisa)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Subjects in Research</td>
<td>Online</td>
<td><a href="http://my.research.umich.edu/peerrs/">http://my.research.umich.edu/peerrs/</a></td>
</tr>
<tr>
<td>PEERRS</td>
<td>PEERRS training fulfills the NIH requirement for human subjects training.</td>
<td>Re-certify every 3 years</td>
</tr>
</tbody>
</table>
Proper Lab Attire

Research faculty must provide a safe research and educational environment for staff and students. While it is impossible to create a zero-risk environment in a research laboratory, the Department of Occupational Safety and Environmental Health (OSEH) provides faculty the guidance listed below to assist them in providing a research environment free of recognized safety deficiencies:

- Provide lab coats, safety glasses, and gloves to all lab users and aggressively ensure that they are used. Ensure proper clothing is worn in the lab. Shorts, sandals, and other attire that leave the legs exposed are not allowed; hair should be secured. During summer months, encourage staff to bring or leave a pair of long pants and closed-toe shoes to change into at the beginning of the workday. Do not permit unsafe behaviors in the lab to go unchallenged. Support lab members who wear proper safety equipment and challenge those who do not.

For more information about lab safety, visit http://www.oseh.umich.edu/.

UMMS Regulatory Affairs, June 2012
Proper Lab Attire

KEEP YOUR COAT ON

HAZARDOUS

SAFE

Wrong

Right

Wrong

Wrong

Right
Training: Anyone who ships or assists in preparing packages must have training.

- My Link: [http://www.oseh.umich.edu/research/dryiceshipping.shtml](http://www.oseh.umich.edu/research/dryiceshipping.shtml)
- Note: Online refresher required every two years.

Supplies:

- Dry Ice: Check within your department or contact the Biomedical Research Store: [http://www.brcf.med.umich.edu/biomedical-store/index.htm](http://www.brcf.med.umich.edu/biomedical-store/index.htm) (LSI is the closest)

  They have everything one would need for all categories of shipping biological materials/chemicals.

- OSEH will supply certified shipping systems for labs who have limited or occasional shipping needs. A short code is required for ordering. [http://www.oseh.umich.edu/pdf/UNCertifiedBiologicalShippingSystems.pdf](http://www.oseh.umich.edu/pdf/UNCertifiedBiologicalShippingSystems.pdf)

Process: (Transfer of package from preparer to shipper)

- Avoid shipping on Fridays or Holidays.
- Packages ready by 4pm (No pick-ups after 5pm)
- Do not leave packages containing dry ice unattended by drop-boxes

Shipping Vendor Information:

UPS and FedEx will ship packages with dry ice. We follow International Air Transportation Association (IATA) standards. The UPS blue label is not adequate by itself. You must also use the Class 9 label and the UN1845 label. If you don’t have the 1845 label, that label information can be hand written on the package or on the class 9 label.

- UPS (At time of set-up, be sure to communicate you will be shipping with dry ice) Account set-up, supplies, and pick-up information: [http://www.finance.umich.edu/procurement/howtobuy/universitycontracts/ups](http://www.finance.umich.edu/procurement/howtobuy/universitycontracts/ups)

- FedEx (At time of set-up, be sure to communicate you will be shipping with dry ice) Account set-up, supplies, and pick-up information: [http://www.finance.umich.edu/procurement/howtobuy/universitycontracts/fedex](http://www.finance.umich.edu/procurement/howtobuy/universitycontracts/fedex)

For assistance in setting up a UPS or FedEx shipping account, please contact:

Elizabeth Rodriguez: [earostrig@umich.edu](mailto:earostrig@umich.edu) or 734/764-1530
Room 3228C (3rd floor Research Tower)

Other resources:

OSEH: 647-1143
Office of Research: Manette London, 763-3388
Contacting other labs with questions can serve as a great resource.

See Attached Dry Ice Checklist: 2012
2012
ACCEPTANCE CHECKLIST FOR DRY ICE (Carbon Dioxide, solid)
(For use when a Shipper's Declaration for Dangerous Goods is not required)

A checklist is required for all shipments of dangerous goods (9.1.4) to enable proper acceptance checks to be made. The following example checklist is provided to assist shippers and carriers with the acceptance of dry ice when packaged on its own or with non-dangerous goods.

Is the following information correct for each entry?  

YES NO* N/A

The Air Waybill contains the following information in the "Nature and Quantity of Goods" box (8.2.3)
1. The UN Number “1845”, preceded by the prefix “UN” ..........................................................  
2. The words “Carbon dioxide, solid” or “Dry ice” ...................................................................  
3. The number of packages of dry ice (unless these are the only packages within the consignment) .......  
4. The net quantity of dry ice in kilograms ...................................................................................  

Note: The packing instruction “954” is optional.

Quantity
5. The quantity of dry ice per package is 200 kg or less [4.2] ..........................................................  

Packages and Overpacks
6. The number of packages containing dry ice delivered as shown on the Air Waybill  ...................  
7. Packages are free from damage and in a proper condition for carriage .......................................  
8. The packaging conforms with Packing Instruction 954 and the package is vented to permit the release of gas .................................................................................................................................  

Markings & Labels (Packages and Overpacks)
9. The UN number “1845” preceded by prefix “UN” [7.1.5.1(a)] ..................................................  
10. The words “Carbon dioxide, solid” or “Dry ice” [7.1.5.1(a)] ....................................................  
11. Full name and address of the shipper and consignee [7.1.5.1(b)] ..............................................  
12. The net quantity of dry ice within each package [7.1.5.1(d)] ....................................................  
13. Class 9 label affixed [7.2.3.9] .................................................................................................  
14. Irrelevant marks and labels removed [7.1.1(b); 7.2.1(a)] .........................................................  

Note: The Marking and labelling requirements do not apply to ULDs containing dry ice

State and Operator Variations
15. State and operator variations complied with [2.8] ......................................................................  

Comments: ..................................................................................................................................  

............................................................................................................................................  

Checked by: .................................................................................................................................  

Place: ................................................................. Signature: .........................................................  

Date: ................................................................. Time: ..............................................................  

* IF ANY BOX IS CHECKED “NO”, DO NOT ACCEPT THE SHIPMENT AND GIVE A DUPLICATE COPY OF THIS COMPLETED FORM TO THE SHIPPER.

53rd EDITION, 1 JANUARY 2012
You may safely use it in your lab every day, but...

**DRI Y IC E SHI PPI NG IS FEDERAL L Y REGUL ATED AS HAZARDOUS**

Improper packaging and labeling puts you and others at risk of injury, and can result in hefty fines.

OSEH Dry Ice Training – BLS204
www.oseh.umich.edu/research/dryiceshipping.shtml

Anyone who ships hazardous materials, including dry ice, must be trained to properly pack, mark, and manifest them. Get trained to ship safely!

For further details, contact your Department Administrator, or Occupational Safety and Environmental Health at 7-1143, or the Office of Regulatory Affairs at 4-6730
Example of Proper Labeling and Marking of Infectious Substance Package

- Proper shipping name, technical name, and UN number of infectious substance
- Class 6.2 (infectious) label
- Dry Ice Name, UN number, and quantity label (if applicable)
- Class 9 (dry ice) label (if applicable)
- Orientation marks on 2 opposing sides of box
- UN compliant packaging certification mark
- Shipper info and phone number of person responsible for the Class 6.2 shipment
- Consignee info and phone number
- Note: Biohazard symbol required on diagnostic specimen package
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Office</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Jan Hu</td>
<td>OHS Program Director</td>
<td>G306E</td>
<td>763-6769</td>
<td><a href="mailto:janhu@umich.edu">janhu@umich.edu</a></td>
</tr>
<tr>
<td>Kimberly Smith</td>
<td>Administrative Assistant</td>
<td>G306</td>
<td>615-1970</td>
<td><a href="mailto:kimbsmit@umich.edu">kimbsmit@umich.edu</a></td>
</tr>
<tr>
<td>Manette London</td>
<td>Administrative Coordinator</td>
<td>G306A</td>
<td>763-3388</td>
<td><a href="mailto:manette@umich.edu">manette@umich.edu</a></td>
</tr>
<tr>
<td>Patricia Schultz</td>
<td>Research Projects and PhD Training Manager</td>
<td>G306B</td>
<td>764-4726</td>
<td><a href="mailto:pschultz@umich.edu">pschultz@umich.edu</a></td>
</tr>
<tr>
<td>OHS PhD Student Study Room</td>
<td>Mailboxes and MOHSSA Office</td>
<td>B387</td>
<td>936-9299</td>
<td><a href="mailto:DentOHStudents@umich.edu">DentOHStudents@umich.edu</a></td>
</tr>
<tr>
<td>Horace H. Rackham</td>
<td>School of Graduate Studies</td>
<td>915 E. Washington St. 1070</td>
<td>764-8119</td>
<td><a href="http://www.rackham.umich.edu/">http://www.rackham.umich.edu/</a></td>
</tr>
<tr>
<td>International Center</td>
<td></td>
<td>603 E. Madison 1370</td>
<td>764-9310</td>
<td><a href="http://internationalcenter.umich.edu/">http://internationalcenter.umich.edu/</a></td>
</tr>
</tbody>
</table>
Robert M. Bradley, MSD, PhD
Professor Of Dentistry & Physiology, Biologic and Materials Sciences
6223 Dent - 763-1080
Research: neurophysiology of central taste circuits; central integration of taste and salivary functions; functional regeneration of sensory nerves through implanted electrodes

Daniel J. Chiego, Jr., MS, PhD
Associate Professor, Cariology, Restorative Sciences, and Endodontics
5207 Dent - 763-4258
Research: role of nerves in maintenance and repair of mineralized tissues; neural control of salivation

Brian H. Clarkson. BCHD, LDS, MS, PhD
Professor, Cariology, Restorative Sciences, and Endodontics
2391 Dent - 763-4209
Research: effects of non-collagenous dentin and enamel matrix proteins on dentin and enamel (re)mineralization; and the regeneration of dentin and enamel using dental pulp stem cells and ameloblast lineage cells

Alexandre F. DaSilva, DDS, DMSc
Assistant Professor of Prosthodontics, Biologic and Materials Sciences
1014A Dent - 763-5280
Research: neuroimaging and neuromodulatory approaches in chronic trigeminal pain disorders, including temporomandibular joint disorder, primary headaches and trigeminal neuropathic pain

Nisha J. D’Silva, BDS, MSD, PhD
Donald A. Kerr Endowed Collegiate Professor of Oral Pathology
Associate Chair, Division of Oral Medicine/Pathology/Radiology
Associate Professor, Department of Periodontics and Oral Medicine
5217 Dent - 615-1414
Research: molecular and cellular mechanisms of signaling in normal and malignant keratinocytes

Stephen Feinberg, DDS, MS, PhD
Professor of Surgery, Associate Chair and Director of Research, University of Michigan Health System, 2010 Dent - 764-1542
Research: ex vivo development of a human full-thickness oral mucosal tissue that is suitable for intraoral grafting procedures and for in situ transmucosal delivery of recombinant immunomodulatory proteins

J. Christopher Fenno, PhD
Associate Professor, Biologic and Materials Sciences
4205 Dent - 763-3331
Research: molecular biology of oral spirochete bacteria; interactions between oral bacteria and host tissues
Renny T. Franceschi, PhD
Professor of Dentistry, Department of Periodontics and Oral Medicine
Professor of Biological Chemistry, Medical School
Professor of Biomedical Engineering, College of Engineering
3328 Dent - 763-7381
Research: signals regulating differentiation and function of osteoblasts, and gene therapy approaches for bone regeneration

Jian-Guo Geng, MD, PhD
Associate Professor, Biologic and Materials Sciences
A323 MSRB III - 763-7073
Research: adhesion and migration of leukocytes, platelets, endothelial cells, tumor cells and cranial neural crest cells in inflammation, thrombosis, carcinogenesis, dental and craniofacial development

Geoffrey E. Gerstner, DDS, MS, PhD
Associate Professor, Biologic and Materials Sciences
B383 Dent - 763-7717
Research: neuromotor and evolutionary mechanisms in oral function

William V. Giannobile, DDS, DMSc
Chair, Department of Periodontics & Oral Medicine
Najjar Endowed Professor of Dentistry and Biomedical Engineering
Director, Michigan Center for Oral Health Research
3397 Dent - 736-2105
Research: gene delivery strategies for oral and periodontal tissue engineering, signal transduction mechanisms during oral wound repair, and clinical trials relevant to oral microfluidic diagnostics

G. Rex Holland, BSc, BDS, PhD
Professor, Cariology, Restorative Sciences, and Endodontics
2217 Dent - 763-3703
Research: oro-facial nerve injury and the structural basis of pain from teeth

Jan Hu, BDS, PhD
Director, Oral Health Sciences PhD Program
Professor, Biologic and Materials Sciences
G306E Dent - 763-6769, Dental Research Lab, Eisenhower Plaza - 975-9315
Research: characterization of genes and gene products involved in normal and abnormal tooth development
Vesa Kaartinen, PhD
Associate Professor, Biologic and Materials Sciences
2305 Dent - 615-4726
Research: molecular reasons behind craniofacial and cardiac birth malformations, such as, cleft palate, cleft lip and cardiac valve and septal anomalies; growth factor signaling in normal development in order to understand reasons that often lead to a failure in th

Sunil Kapila, BDS, MS, PhD
Robert W. Browne Endowed Professor and Chair, Orthodontics and Pediatric Dentistry
1004 Dent - 764-1522
Research: molecular, cellular and in vivo mechanisms of hormonal modulation of cartilage degradation; bioengineering of heterogenous fibrocartilaginous tissues using mechano-biologic stimulation of mesenchymal stem cells; periodontal osteolysis mediated by matrix metalloproteinases

Yvonne Kapila, DDS, PhD
Professor, Department of Periodontics and Oral Medicine
5223 Dent - 615-2295
Research: extracellular matrix regulation of periodontal pathogenesis and oral cancer; apoptosis signaling

David H. Kohn, MSE, PhD
Professor
Biologic and Materials Sciences
2213 Dent - 764-2206
Research: biomineralization and biomimetics; focus on biomechanics of mineralized tissues and biomaterials to support replacement/ regeneration of mineralized tissue

Paul Krebsbach, DDS, PhD
Professor and Chair
Biologic and Materials Sciences
1034 Dent - 736-5280
Research: cell and molecular biology of mineralized tissue

Eric Krukonis, PhD
Assistant Professor, Biologic and Materials Sciences
3209 Dent - 615-6424
Research: bacterial pathogenesis; regulation of bacterial virulence in response to environmental cues
<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Affiliation</th>
<th>Contact Information</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenichi Kuroda, PhD</td>
<td>Assistant Professor, Biologic and Materials Sciences</td>
<td>2223 Dent - 936-1440</td>
<td><strong>Research:</strong> <em>peptidomimetic design and mechanism of antimicrobial polymers and their applications in dentistry</em></td>
</tr>
<tr>
<td>Peter X. Ma, MS, PhD,</td>
<td>Professor, Biologic and Materials Sciences</td>
<td>2211 Dent - 764-2209</td>
<td><strong>Research:</strong> <em>stem cell-biomaterials interactions; 3D microenvironments to direct cell fate; biomolecule delivery; bone, dental, cartilage and vascular tissue regeneration</em></td>
</tr>
<tr>
<td>Laurie K. McCauley, DDS, MS, PhD</td>
<td>The William K. and Mary Anne Najjar Professor, Department of Periodontics and Oral Medicine</td>
<td>3305 - 763-2105</td>
<td><strong>Research:</strong> <em>hormonal controls of bone remodeling at the molecular, cell and tissue level and in particular the therapeutic roles of parathyroid hormones in bone, and their pathophysiologic roles in cancer</em></td>
</tr>
<tr>
<td>Yuji Mishina, PhD</td>
<td>Associate Professor, Biologic and Materials Sciences</td>
<td>4222A Dent - 763-5579</td>
<td><strong>Research:</strong> <em>functions of BMP signaling during bone development/remodeling and craniofacial development, using genetically altered mouse lines to conditionally decrease or increase levels of BMP signaling; models are of interest in understanding the pathogenesis of bone tumors</em></td>
</tr>
<tr>
<td>Charlotte M. Mistretta, MS, PhD</td>
<td>Associate Dean for Research, Professor, Biologic and Materials Sciences</td>
<td>G306C - 647-3911</td>
<td><strong>Research:</strong> <em>developmental neurobiology of taste organs, oral sensory ganglia and neural circuits; pattern formation in taste papillae</em></td>
</tr>
<tr>
<td>Jacques E. Nör, DDS, MS, PhD</td>
<td>Donald A Kerr Professor, University of Michigan Dental School, Professor of Otolaryngology, University of Michigan Medical School, Professor of Biomedical Engineering, University of Michigan College of Engineering</td>
<td>2309 Dent - 936-9300</td>
<td><strong>Research:</strong> <em>cellular and molecular mechanisms of angiogenesis; regulation of endothelial cell apoptosis; anti-angiogenic therapies to control the progression and metastasis of oral tumors</em></td>
</tr>
</tbody>
</table>
Mathilde Peters, DMD, PhD, FADM
Professor, Cariology, Restorative Sciences, and Endodontics
2343 Dent - 763-3366
Research: cariology; modification of caries risk; (international) clinical studies with emphasis on minimally invasive caries management and bioactive materials

Brian Pierchala, PhD
Assistant Professor, Biologic and Materials Sciences
3211 Dent - 763-3394
Research: mechanisms of action of neuronal growth factors in the development and maintenance of the peripheral and craniofacial nervous systems

Peter J. Polverini, DDS, DMSc
Dean, U-M School of Dentistry, Professor of Oral and Maxillofacial Pathology
1234 Dent - 763-3311
Research: mechanisms of oral carcinogenesis; angiogenesis in oral tumor formation

Helena Ritchie, MS, PhD
Associate Professor, Cariology, Restorative Sciences, and Endodontics
2393 Dent - 763-3746
Research: molecular and biochemical mysteries of the dentin protein phosphoprotein

James Simmer, DDS, PhD
Professor, Biologic and Materials Sciences
DRL* - 975-9318 or 975-9326
Research: genetic and biochemical mechanisms of tooth development, particularly dental enamel formation

Russell S. Taichman, DMD, DMSc
Professor of Dentistry and Director of University of Michigan Scholars Program in Dental Leadership, Department of Periodontics and Oral Medicine
3307 Dent - 764-9952
Research: interactions between bone and hematopoietic cells, bone marrow metastasis, chemokines, growth factors, adhesion molecules, mechanisms of bone metastasis
## ORAL HEALTH SCIENCES PhD PROGRAM
### Program Graduates

<table>
<thead>
<tr>
<th>Student</th>
<th>Current Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jacques Nör</td>
<td>Professor Department of Cariology, Restorative Sciences and Endodontics School of Dentistry Professor, Department of Biomedical Engineering College of Engineering University of Michigan</td>
</tr>
<tr>
<td>Esam Tashkandi</td>
<td>Faculty College of Dentistry King Saud University Riyadh, Saudi Arabia</td>
</tr>
<tr>
<td>Hongjiao Ouyang</td>
<td>Assistant Professor School of Dental Medicine School of Medicine University of Pittsburgh</td>
</tr>
<tr>
<td>Somjin Ratanasathien</td>
<td>Faculty of Dentistry Prince of Songkhla University Songkhla, Thailand</td>
</tr>
<tr>
<td>Erika DeBoever</td>
<td>Lead Clinical Scientist Glaxo SmithKline Collegeville, Pennsylvania</td>
</tr>
<tr>
<td>Hen-Li Chen</td>
<td>Faculty Yang-Ming University Taipei, Taiwan</td>
</tr>
<tr>
<td>Solaiman Al-Hadlaq</td>
<td>Assistant Professor College of Dentistry King Saud University Riyadh, Saudi Arabia</td>
</tr>
<tr>
<td>Andre (Hamed) Haerian</td>
<td>Private Orthodontics Practice Sylvania Ohio Adjunct Faculty Orthodontics and Pediatric Dentistry School of Dentistry University of Michigan</td>
</tr>
<tr>
<td>Christopher Kazor</td>
<td>Clinical Associate Professor Temple University Philadelphia, Pennsylvania</td>
</tr>
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Updated 8/2012
### ORAL HEALTH SCIENCES PhD PROGRAM

#### Program Graduates

<table>
<thead>
<tr>
<th>Name</th>
<th>Degree Conferred:</th>
<th>Advisor</th>
<th>Position</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keni Gu</td>
<td>2003</td>
<td>Bruce Rutherford</td>
<td>Pathologist</td>
<td>University Health</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Augusta, Georgia</td>
</tr>
<tr>
<td>Domenica Sweier</td>
<td>2004</td>
<td>Dennis Lopatin</td>
<td>Clinical Assistant Professor</td>
<td>Department of Cariology, Restorative Sciences and Endodontics</td>
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<td></td>
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<td></td>
<td>School of Dentistry</td>
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<td></td>
<td>University of Michigan</td>
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<tr>
<td>Ting Wang</td>
<td>2004</td>
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<tr>
<td>Elliott Hill</td>
<td>2004</td>
<td>Charlotte Mistretta, David Mooney</td>
<td>Assistant Professor</td>
<td>Department of Biologic and Materials Sciences</td>
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<td></td>
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<td>School of Dentistry</td>
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<td></td>
<td>University of Michigan</td>
</tr>
<tr>
<td>Darnell Kaigler</td>
<td>2004</td>
<td>David Mooney, Paul Krebsbach</td>
<td>Assistant Professor</td>
<td>Department of Periodontics and Oral Medicine</td>
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<tr>
<td></td>
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<td>School of Dentistry</td>
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<td>University of Michigan</td>
</tr>
<tr>
<td>Abraham Schneider</td>
<td>2004</td>
<td>Laurie McCauley</td>
<td>Assistant Professor</td>
<td>Department of Oncology &amp; Diagnostic Sciences</td>
</tr>
<tr>
<td></td>
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<td>Dental School</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>University of Maryland, Baltimore</td>
</tr>
<tr>
<td>Andrew Fribley</td>
<td>2005</td>
<td>Cun-Yu Wang</td>
<td>Assistant Professor</td>
<td>Wayne State University</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Detroit, Michigan</td>
</tr>
<tr>
<td>Elisabeta Karl</td>
<td>2006</td>
<td>Jacques Nor</td>
<td>Research Consultant</td>
<td>Santa Cruz, Inc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ketchum, ID</td>
</tr>
<tr>
<td>ZhuoRan Zhao</td>
<td>2006</td>
<td>Renny Franceschi</td>
<td>Private Practice Dentist</td>
<td>California</td>
</tr>
<tr>
<td>Bradley Henson</td>
<td>2008</td>
<td>Nisha D'Silva</td>
<td>Assistant Professor</td>
<td>Western University of Health Sciences</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pomona, California</td>
</tr>
<tr>
<td>Yong-Hee Chun</td>
<td>2009</td>
<td>James Simmer, Jan Hu</td>
<td>Assistant Professor</td>
<td>University of Texas Health Sciences Center</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>San Antonio, Texas</td>
</tr>
</tbody>
</table>

Updated 8/2012
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree Conferred</th>
<th>Advisor(s)</th>
<th>Position/Program/University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathleen Neiva</td>
<td>2009</td>
<td>Jacques Nör</td>
<td>Adjunct Clinical Assistant Professor Department of Endodontics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>College of Dentistry</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of Florida</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Gainesville, Florida</td>
</tr>
<tr>
<td>Zhao Lin</td>
<td>2010</td>
<td>William Giannobile</td>
<td>Student Advanced Graduate Education Program in Periodontology</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Harvard University</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cambridge, Massachusetts</td>
</tr>
<tr>
<td>Yuhe Lu</td>
<td>2010</td>
<td>Jan Hu and James Simmer</td>
<td>Student Orthodontics and Dentofacial Orthopedics Program</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Boston University</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Boston, Massachusetts</td>
</tr>
<tr>
<td>Chad Novince</td>
<td>2011</td>
<td>Laurie McCauley</td>
<td>Student Periodontics Specialty Training University of Washington</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Seattle, Washington</td>
</tr>
<tr>
<td>Erica Scheller</td>
<td>2011</td>
<td>Paul Krebsbach</td>
<td>Student Oral Pathology Specialty Training University of Michigan</td>
</tr>
<tr>
<td>Sudha Krishnamurthy</td>
<td>2011</td>
<td>Jacques Nör</td>
<td>Postdoctoral Fellow M.D. Anderson Health Sciences Center Houston, Texas</td>
</tr>
<tr>
<td>Turki Alhazzazi</td>
<td>2012</td>
<td>Yvonne Kapila</td>
<td>Assistant Professor Oral Basic &amp; Clinical Sciences Department King Abdulaziz University, Saudi Arabia</td>
</tr>
<tr>
<td>Andres Quintero</td>
<td>2012</td>
<td>Geoffrey Gerstner</td>
<td>Currently Seeking Postdoctoral Position</td>
</tr>
<tr>
<td>Elizabeth Van Tubergen</td>
<td>2012</td>
<td>Nisha D'Silva</td>
<td>Currently Seeking Postdoctoral Position</td>
</tr>
</tbody>
</table>
MOHSSA Mission Statement

The Michigan Oral Health Sciences Student Association (MOHSSA) aims to enhance Oral Health Sciences PhD (OHS) student academic and scientific development, maintain OHS student representation and service within the University, and contribute to a positive student life environment within the OHS Program. Participation in various MOHSSA activities will help students build upon the foundation provided through regular program activities to develop into excellent future scientists and leaders. Gathering as a group will allow students to connect personally and learn from each other through discussion of PhD training experiences such as coursework, research rotations, Preliminary Examination preparation, and personal experiences. MOHSSA activities will also support social exchange to promote student cohesion and happiness in the Program. MOHSSA members will elect and serve as representatives within the University and the OHS Program on various committees as needed. MOHSSA will provide a mechanism for students to communicate with the OHS Program and leadership as a united body to ensure student interests continue to be represented.

MOHSSA will be led by a group of three Executive Officers whose responsibilities will include: convening the MOHSSA group; ensuring that MOHSSA goals and objectives are accomplished and reviewed periodically for revision; communicating with the OHS Program Director; preparing working summaries of MOHSSA meetings and events; preparing a budget for review with the OHS Program Administrator.

MOHSSA Goals and Objectives

Monthly Meetings
Meetings held monthly so that all members can stay updated on MOHSSA progress. Meetings will give an opportunity for all members to provide feedback and suggestions, and plan future events.

Organize Academic/Social Information and Resources
MOHSSA cTools website will be used by members to share and archive information on both academic and social resources within the university. CTools website will also be used to communicate with the group via email and chat about social and community service events within the University and Ann Arbor community.
(Goals and Objectives cont.)

Elect Student Representatives
MOHSSA members will elect representatives to lead MOHSSA and to various committees within the Program and University every fall semester. Committees include: OHS Seminar Committee, OHS Admissions Committee, and Rackham Graduate Student Forum. In addition MOHSSA will nominate potential representatives for service on the OHS Program Committee; the OHS Program Director makes the final appointment for this committee. MOHSSA representatives have the duty to report committee progress and activities to the group so all OHS students stay informed and engaged.

Plan Group Activities to Enhance Academic and Professional Development
Each month MOHSSA will host faculty members to attend informal lunch gatherings, to give students the opportunity to get to know faculty and hear their unique personal and professional stories. MOHSSA members will vote on a speaker to sponsor for the OHS Seminar Series and will organize and host the campus visit. MOHSSA members will vote to organize other events such as professional development workshops, learning about interviewing and job negotiations, workshops on public speaking, and information about laboratory management.

Provide Feedback to OHS Program as a Group
MOHSSA members will provide feedback about OHS courses during monthly meetings and MOHSSA leadership will communicate student feedback to the OHS Program Director.

Budget Preparation and Management
MOHSSA Executive Officers will prepare an annual budget request to present to the OHS Program Administrator for review and discussion. MOHSSA Officers will prepare an annual summary of the year’s expenditures to discuss with the OHS Program Administrator.
OVERVIEW OF MOHSSA CTOOLS WEBSITE

Home
- MOHSSA’s mission statement overview and recent announcements

Syllabus
- Posting of information about items to be discussed or voted on

Schedule
- Schedule of OHS and non-OHS events:
  - OHS Journal Club dates, OHS Seminar Series dates, other OHS meeting dates, External University of Michigan Seminar dates, MOHSSA meeting dates, and Social events
  **Google Calendars have been created for Seminar and Journal Club series and students are encouraged to subscribe through their umich calendar account.**

Announcements
- Announcements

Resources
- Resources OHS students may find helpful during their PhD studies
  - MOHSSA Meeting Agendas; MOHSSA Meeting Minutes; Big Sibs Mentoring Guidelines; CVs of OHS Faculty members invited for MOHSSA – OHS Faculty Lunches; OHS Forms; Free Stuff; Funding Opportunities; Lab and Study Resources; MOHSSA Mission Statement and Objectives; Need to relax??; Fun sports activities; Presentations and Templates; Social Activities; University of Michigan Career Resources; Volunteering Opportunities (inside the UM); Writing your Thesis; Writing a Review Article.

*Students are encouraged to contribute ideas and resources to be included in this section of the website.

Discussion
- Posting of general questions or information MOHSSA members would like to discuss at future MOHSSA meetings. A bulletin board is also available for posting in the OHS PhD room (B378).

Polls
- Site location where polls are carried out and results are posted. It is important that all members vote so that decisions are representative of all MOHSSA members. Please make sure your voice is heard!

Chat Room
- Live chat forum for MOHSSA members.

Site Info
- Listing of MOHSSA participants and their role in the MOHSSA website. Executive Committee Members administer website contents. Please send any suggestions or feedback regarding the website content to the Executive Committee or post ideas under Discussion section.

Help
- Information on how to use the c-tools website.
The MOHSSA Office is located on the basement level of the School of Dentistry in room B387. The purpose of this office is to provide the OHS students with a comfortable, secure, clean place to meet and study. It is particularly valuable to the precandidates who have yet to identify a dissertation lab and can access a dedicated room to secure personal items, use a computer and study.

The room is equipped with work stations, desk chairs, lounge furniture, refrigerator, microwave, computers, printer, student mailboxes, whiteboard, bulletin board and lockable storage cupboards. Precandidates are given priority to accessing keys to these limited cupboards.

The OHS PhD Office will supply the MOHSSA Office with basic office supplies that include printer paper, printer cartridges, tape, stapler, white board markers, and cleaning supplies. Other general use items may be requested.

It is important that OHS students respect that this space is for OHS students only and each student will be responsible for their own housekeeping. Custodial Services will empty the trash each night and clean counters and floors every two weeks. However, custodians will not dispose food items left on counters and floors. Please be mindful in keeping this office functional.

Maintenance issues should be reported to the OHS PhD Office, G306 or 615-1970.