RESEARCH AWARDS

Bjorn R. Olsen, MD, PhD, professor of developmental biology at HSDM and Hersey professor of cell biology at HMS, received an R21 award from NIH-NIAMS entitled, “A Mechanism for Tyrosine Phosphorylation of Extracellular Matrix Proteins”

This study is based on the Olsen Lab finding that a secreted kinase variant of the transmembrane-spanning cell surface fibroblast growth factor receptor kinase FGFR2 is expressed in multiple tissues. The investigators have made several constructs for expression of the secreted kinase in cultured cells and they have generated mice that can be induced to express the kinase in specific cells and tissues. The results of the study have the potential for breaking new ground in understanding how cells communicate and interact with proteins in their extracellular matrix environment.

Chia-Yu (Jennifer) Chen, DMD, third year DMSc student in periodontology, received a research award from the Osseointegration Foundation for her research entitled, “Electrophoretic Fusion of Perpendicular Type I Collagen into Titanium Nanotube for the Future Peri-Implant Ligament.” The research focuses on utilizing a novel method to modify the titanium surface in order to facilitate a biomimetic restoration of peri-implant soft tissue. Chen is working in the Nagai Lab and her research mentor is Masazumi Nagai, DDS, PhD, research associate in oral medicine, infection, and immunity at HSDM. Additional faculty collaborating on this project include Shigemi Nagai, DDS, PhD and John Da Silva, DMD, MPH.

Harvard China Fund Award

In partnership with Associate Dean Jane Barrow, in the Office of Global and Community Health, Drs. Sang Park and Christine Riedy Murphy received a grant from the Harvard China Fund. Sang Park, MMSc, DMD, associate dean for dental education and associate professor of restorative dentistry and biomaterials sciences and Christine Riedy Murphy, PhD, chair and Delta Dental associate professor of oral health policy and epidemiology, are co-investigators on a recently-funded project from The Harvard China Fund. HSDM was awarded a grant to fund a conference to be held October 2018 at the Harvard Shanghai Center, entitled “Improving Population Health through Oral Health in China: Strengthening the Oral Health Delivery System and Building Workforce Capacity through Innovative Strategies in Education, Care and Research.”
STUDENT AWARDS & HONORS IN RESEARCH

Ali Shazib, DMD, DMSc student in oral medicine, received a resident research award from the American Academy of Oral Medicine, for his research entitled, “Toxicity Profile and Cost-Analysis of a Young and Low-Risk Cohort of Oral Cavity Squamous Cell Carcinoma Patients.” Shazib’s research mentor is Alessandro Villa, DDS, PhD, MPH, assistant professor of oral medicine, infection, and immunity at HSDM, and associate surgeon in the Division of Oral Medicine and Dentistry at Brigham and Women’s Hospital.

Yisi (Daisy) Ji, DMD class of 2018, will receive honors in research when she graduates in May. Ji has been involved in numerous research projects leading to twelve publications. Her honors project, “Management of Benign Pathology” was completed under the mentorship of Zachary Peacock, DMD, MD, associate professor of oral and maxillofacial surgery at HSDM. After graduation, Ji will join the residency program in the Department of Oral and Maxillofacial Surgery at Massachusetts General Hospital.

R. Frederick Lambert, DMD class of 2018, will receive honors in research when he graduates in May. His honors project, “Factors That Motivate Otherwise Healthy Young Adults Living with HIV to Access and Utilize HIV Services and Dental Services in Gugulethu, South Africa” was completed under the mentorship of Jessica Haberer, MD, associate professor of medicine and director of global health research at Massachusetts General Hospital and Catherine Orrell, PhD, associate professor at the University of Cape Town Desmond Tutu HIV Centre. After graduation, Lambert will pursue a master’s degree in public health at the Harvard T. H. Chan School of Public Health.

Carolynn T. Vuong, DMD class of 2018, will receive honors in research when she graduates in May. Her honors project, “Sealed Primary Molars are Less Likely to Develop Caries” was completed under the mentorship of Rosalyn Sulyanto, DMD, instructor in developmental biology at HSDM. After graduation, Vuong will join the residency program in the Pediatric Dentistry Division at the University of California, San Francisco.

Stephanie Lee, DMD class of 2018, will receive honors in research when she graduates in May. Her honors project, “A Vibration Device to Control Injection Discomfort” was completed under the mentorship of Jeffry Shaefer, DMD, assistant professor in oral and maxillofacial surgery at HSDM. After graduation, Lee will join the residency program at the Veteran’s Administration of Northern California Health Care System.
The objective of the proposed fellowship program is to provide in-depth, focused training for community dentists so that they are adequately prepared to manage cancer patients before, during, and after cancer treatment. The program will contribute to an overall improvement in community health by increasing the knowledge, ability, and engagement of the general practitioner. Graduates of the fellowship program will be expected to serve as community experts, providing a critical resource for oncologists, dentists, and cancer patients.

The Oral Oncology Fellowship Program is a one year, full-time training program for dentists who are committed to developing expertise in oncology and oral health and serving as community leaders. Candidates must possess a DMD, DDS, or equivalent degree. Completion of a hospital-based general practice residency (GPR) or equivalent is preferred. Applicants from countries in which English is not the primary language must provide an official Test of English as a Foreign Language (TOEFL) score report.

Trainees are appointed at HSDM, BWH, and DFCI. Clinical training is based at BWH and DFCI with additional rotations at other Harvard affiliated teaching hospitals as well as community health centers. Salary and benefits will be commensurate with HSDM Fellow Salary Scale. HSDM will offer one fellowship position per year. The admissions committee takes into account academic performance during dental school, personal statement, letters of recommendation, research experience, extracurricular activities, and prior postdoctoral clinical experience.

Oral Oncology Fellowship applications are due June 2018. Select candidates are invited for a mandatory interview in July 2018, and the Fellowship start date is October 2018. For additional information about the admissions process, please contact (age_admissions@hsdm.harvard.edu) or 617-432-1443. The Program Director is Alessandro Villa, DDS, PhD, MPH.
NEW RESEARCH INVESTIGATORS

Emily Moore, MS, PhD, joined the Yang Lab as a research fellow in the Department of Developmental Biology. Moore comes from Massillon, Ohio and received her BS and MS degrees in biomedical engineering from Case Western Reserve University. For her master’s degree, Moore worked in the Tissue Fabrication and Mechanobiology Lab at Case Western Reserve University with Dr. Ozan Akkus where she built a custom device to test the fatigue life of bone specimens. She received her PhD degree in biomedical engineering from Columbia University where she worked in the Cell and Molecular Biomechanics Lab in the Department of Biomedical Engineering with Dr. Chris Jacobs. In the Yang Lab, Moore will create transgenic animal models to investigate the role of Wnt and Hippo signaling in osteogenic precursors and dental pulp stem cells with regards to their ability to become bone-forming cells.

Bo Gao, joined the Yang Lab as a visiting graduate student in the Department of Developmental Biology. Gao is an MD/PhD candidate in spine surgery at Sun Yat-Sen University and the Sun Yat-Sen Memorial Hospital in Guangdong, China. In the Yang Lab, Gao will focus on studying the underlying genetic and pathogenic mechanism of scoliosis and the molecular investigation of spine development.

Zhenhua Gao, DDS, PhD, joined the Ionescu Lab as a visiting graduate student in the Department of Developmental Biology. Gao received his DDS from Weifang Medical University in Shandong, China and his PhD in Oral Maxillofacial Surgery from Capital Medical University in Beijing, China. Gao’s previous research focused on tooth development and regeneration. In the Ionescu Lab, Gao will focus on tempoal mandibular joint development and jaw bone regeneration using several gene-modified mouse models.

Corneliu Sima, DMD, DSc, MSc, has been appointed as assistant professor in the Department of Oral Medicine, Infection, and Immunity at HSDM. Sima earned his DMD degree in 2006 from the University of Medicine and Pharmacy Cluj-Napoca in Romania. He went on to study at the Boston University Goldman School of Dental Medicine, earning a DSc in oral biology and periodontology in 2010. He then received an MSc degree in periodontology from the University of Toronto in 2014 and was clinical instructor in periodontology from 2011–2014. In 2015, Sima joined the Forsyth Institute as an assistant clinical investigator, with an appointment in oral medicine, infection, and immunity at HSDM as a research fellow. Sima’s research focus is on translational investigation on the pathogenesis of type 2 diabetes and periodontitis, and on developing therapeutic means to modulate de-regulated inflammatory responses to subgingival biofilms.

Yara Halasa-Rappel, DDS, MS, MA, PhD, a dentist, health economist, and policy analyst, has been appointed as research fellow in the Department of Oral Health Policy and Epidemiology at HSDM. Prior to joining HSDM, Halasa-Rappel was a senior research associate at the Schneider Institutes for Health Policy at Brandeis University. She has over fourteen years of experience conducting research on health financing, costing of health care services, cost of illness, modeling, economic evaluation of health and health-related projects, and cost-effectiveness with a special focus on dengue, malaria, and oral health. Halasa-Rappel has a PhD in health policy from Brandeis University and has authored forty publications.
**Developmental Biology**


**Oral and Maxillofacial Surgery**


**Restorative Dentistry and Biomaterials**

**Oral Medicine, Infection, and Immunity**


**Oral Health Policy and Epidemiology**

Multi-Departmental


Deepti Shroff, DMD class of 2019, received the 2018 American Dental Association/Dentsply Student Clinician Research Program Award.

Shroff has been active in numerous research projects including one at Boston Children’s Hospital with Dr. Rosalyn Sulyanto, instructor in developmental biology, to assess parental perception and acceptance of silver diamine fluoride. This project was funded by the Samuel D. Harris Fund for Children’s Dental Health. Shroff also worked with Dr. Sang Park and colleagues on a project that was published in the *Journal of Dental Education* entitled, “A Reflection Curriculum for Longitudinal Community-Based Clinical Experiences: Impact on Student Perceptions of the Safety Net.” Additionally, Shroff worked on a project at Massachusetts General Hospital with Dr. Katherine Klein, instructor in oral and maxillofacial surgery and Dr. David Keith, professor of oral and maxillofacial surgery, evaluating the outcomes of TJR/orthognathic surgeries. Her research has resulted in four publications and several abstract presentations. The American Dental Association/Dentsply Student Clinician Research Program Award will support Shroff in attending and presenting her research at the next American Dental Association annual meeting.

A publication of the Office of Research
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