

Brittany Seymour and Jane Barrow Receive Awards



Brittany Seymour, DMD, MPH, assistant professor of oral health policy and epidemiology, has received funding from the Consortium of Universities for Global Health, Dr. Thomas Hall Global Health Education

Grant, and the International College of Dentists U.S.A. Section Foundation. These grants will support her project “Competency Based Best Practices in Global Health for Dental Education: The Global Health Starter Kit.”



Jane Barrow, associate dean in the Office of Global and Community Health, is partnering with Ho Chi Minh City Medicine and Pharmacy University on a research project entitled,

“Vietnam Health Advancement Initiative: Competency-based Dental Education.” The HSDM faculty team is led by principal investigator, Dr. Brittany Seymour who will work directly with Ho Chi Minh City Medicine and Pharmacy University faculty on their dental curriculum reform in order to create, implement, and assess a new competency-based curriculum.

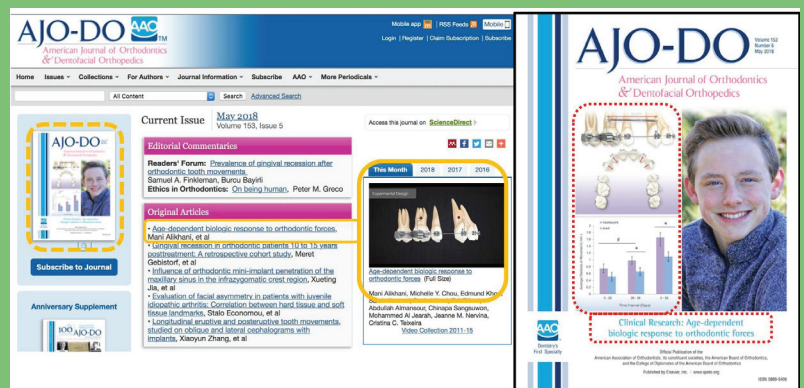
Mani Alikhani and Michelle Y. Chou Publish AJODO “Article of the Month”



Mani Alikhani, DDS, MS, PhD, and Michelle Y. Chou, DDS, MPH, DMSc, faculty in the Advanced Graduate Education Orthodontics program in the Department of Developmental

Niology, published, “Age-Dependent Biologic Response to Orthodontic Forces” in the *American Journal of Orthodontics and Dentofacial Orthopedics* (AJODO). The basis of this work was Dr. Chou’s HSDM DMSc research thesis, and was selected as the “Article of the Month” by the editorial board, and highlighted on the AJODO website with a video they invited Alikhani and Chou to produce.

This research showed that age is a significant variable contributing to the biologic response to orthodontic tooth movement. Adults exhibited a significantly higher level of cytokine and osteoclasts activity but, counterintuitively, had a significantly slower rate of tooth movement. **The publication and video may be found at <https://www.ajodo.org>.**



HSDM STUDENT RESEARCH AWARDS

Zahra Aldawood, DMSc Oral Biology 2018

Dr. Aldawood received The James H. Shaw Award in part for her research, “Harnessing Prx1-expressing cells for regeneration of calvarial bone defects” completed under the mentorship of Dr. Giuseppe Intini.

Martin Berger, Pediatric Resident 2018

Dr. Berger received The James H. Shaw Award and the NuSmile Graduate Student Award in part for his research project, “The microbiological and mechanical effects of caries arrest by silver diamine fluoride” completed under the mentorship of Dr. Rosalyn Sulyanto.

Benjamin Canary, MMSc Orthodontics 2018

Dr. Canary received The Joseph L. Henry Award in part for his research, “Heritability of the airway: Using twin study data to determine heritability estimates of airway dimensions” completed under the mentorship of Dr. Mohamed Masoud.

Christina Cho, MMSc Prosthodontics 2019

Dr. Cho received the 2018 Ralph Phillips Student Research Award for her project, “Comparative evaluation of composite resin restorations fabricated from CAD/3D printing and CAD/CAM technologies” completed under the mentorship of Dr. Hiroe Ohyama.

Sepehr Hashemi, DMD 2018

Dr. Hashemi received Honors in Research for his project, “Could the biological robustness of low level laser therapy impact its use in the management of mucositis in head and neck cancer patients?” completed under the mentorship of Dr. Stephen Sonis.

Heather Hong, MMSc Peridontology 2018

Dr. Hong received The American Academy of Implant Dentistry Post-Doctoral Dental Student Award in part for her research, “Socket preservation procedures revisited: A randomized controlled trial to evaluate dimensional changes with two different surgical protocols” completed under the mentorship of Dr. Eli Machtei.

Sara Rosenberg, DMD 2018

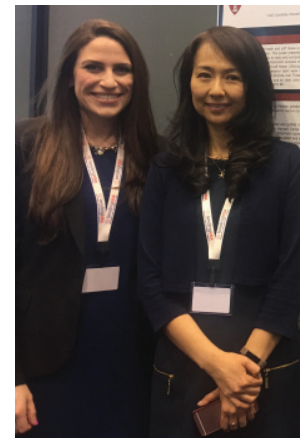
Dr. Rosenberg received the HEAPS Award from the American Academy of Cosmetic Dentistry for her project, “A comprehensive approach for color matching in the esthetic zone” completed under the mentorship of Dr. Shigemi Nagai.

Troy van der Groen, DMD 2018

Dr. van der Groen received Honors in Research for his project, “Minor salivary gland biopsy-an important contributor to the diagnosis of Sjögren’s syndrome” completed under the mentorship of Dr. Meredith August.



Zahra Aldawood and Giuseppe Intini



Sara Rosenberg and Hiroe Ohyama



Sepehr Hashemi



Mohamed Masoud and Benjamin Canary



Troy van der Groen



Martin Berger and Giuseppe Intini



Yasameen Pirooz, Christina Cho, Hiroe Ohyama, Luke Han

HSDM PUBLICATIONS

DEVELOPMENTAL BIOLOGY

Alikhani M, Alansari S, Hamidaddin M, Sangsuwon C, Alyami B, Thirumoorthy S, Oliveira S, Nervina J, Teixeira C. Vibration paradox in orthodontics: Anabolic and catabolic effects. *PLoS One* 2018;13(5):e0196540.

Alikhani M, Chou M, Khoo E, Alansari S, Kwal R, Elfersi T, Almansour A, Sangsuwon C, Al Jearah M, Nervina J, Teixeira C. Age-dependent biologic response to orthodontic forces. *American Journal of Orthodontics and Dentofacial Orthopedics* 2018;153(5):632-644.

Gamer L, Pregizer S, Gamer J, Feigenson M, Ionescu A, Li Q, Han L, Rosen V. The role of Bmp2 in the maturation and maintenance of the murine knee joint. *Journal of Bone and Mineral Research* 2018; Apr 17.

Loder E, Weizenbaum E, Giddon D. Migraine pain location and measures of healthcare use and distress: An observational study. *Pain Research and Management* 2018; April 5.

Pregizer S, Kiapour A, Young M, Chen H, Schoor M, Liu Z, Cao J, Rosen V, Capellini T. Impact of broad regulatory regions on Gdf5 expression and function in knee development and susceptibility to osteoarthritis. *Annals of the Rheumatic Diseases* 2018;77(3):450.

ORAL MEDICINE, INFECTION AND IMMUNITY

Almazayad A, Li C, Tapia R, Robertson J, Collette D, Woo SB. Primordial odontogenic tumour: Report of two cases. *Histopathology* 2018;72(7):1221-1227.

Baron R, Gori F. Targeting WNT signaling in the treatment of osteoporosis. *Current Opinions in Pharmacology* 2018;40:134-141.

Belstrøm D, Sembler-Møller M, Grande M, Kirkby N, Cotton S, Paster B, Twetman S, Holmstrup P. Impact of oral hygiene discontinuation on supragingival and salivary microbiomes. *Journal of Dental Research Clinical & Translational Research* 2018;3(1):57-64.

Idelevich A, Baron R. Brain to bone: What is the contribution of the brain to skeletal homeostasis? *Bone* 2018; May 16.

Komaba H, Lanske B. Role of Klotho in bone and implication for CKD. *Current Opinions in Nephrology and Hypertension* 2018; Apr 24.

Markey L, Shaban L, Green E, Lemon K, Mecas J, Kumamoto C. Pre-colonization with the commensal fungus *Candida albicans* reduces murine susceptibility to *Clostridium difficile* infection. *Gut Microbes* 2018; Apr 18.

Olsen I, Chen T, Tribble G. Genetic exchange and reassignment in *Porphyromonas gingivalis*. *Oral Microbiology* 2018;10(1):1457373.

Perera M, Al-Hebshi N, Perera I, Ipe D, Ulett G, Speicher D, Chen T, Johnson N. Inflammatory bacteriome and oral squamous cell carcinoma. *Journal of Dental Research* 2018;97(6):725-732.

Saxena D, Mahjour F, Findlay A, Mously E, Kantarci A, Trackman P. Multiple functions of lysyl oxidase like-2 in oral fibroproliferative processes. *Journal of Dental Research* 2018; May 1.

Steffens J, Santana L, Pitombo J, Ribeiro D, Albaricci M, Warnavin S, Kantarci A, Spolidorio L. The role of androgens on periodontal repair in female rats. *Journal of Periodontology* 2018;89(4):486-495.

Stojanov I, Mariño-Enriquez A, Bahri N, Jo V, Woo SB. Lipomas of the oral cavity: Utility of MDM2 and CDK4 in avoiding overdiagnosis as atypical lipomatous tumor. *Head Neck Pathology* 2018; May 10.

Woo SB, Menon R, Li CC. Characterization of features of bluntly invasive well-differentiated oral squamous cell carcinoma. *Modern Pathology* 2018; 31(2):490.

Zhou J, Yu Q. Anti-IL-7 receptor- α treatment ameliorates newly established Sjögren's-like exocrinopathy in non-obese diabetic mice. *Biochimica et Biophysica Acta* 2018;1864(7):2438-2447.

ORAL AND MAXILLOFACIAL SURGERY

Donoff B, Troulis M. The development of dual-degree programs in oral and maxillofacial surgery: Celebrating the 75th anniversary of the *Journal of Oral and Maxillofacial Surgery* and the 100th anniversary of our specialty. *Journal of Oral and Maxillofacial Surgery* 2018;76(6):1147-1149.

Haefes T, D'Amato L, Khawaja S, Keith D, Scrivani S. What variables are associated with the outcome of arthroscopic lysis and lavage surgery for internal derangement of the temporomandibular joint? *Journal of Oral and Maxillofacial Surgery* 2018; Apr 26.

Padwa B, Beck N, Resnick C. Hypertrophic mental tubercles of the mandible. *Journal of Oral and Maxillofacial Surgery* 2018; Mar 21.

Ji Y, Dodson T, Donoff R, He P. Medical malpractice litigation associated with anesthesia in oral and maxillofacial surgery. *Journal of Oral and Maxillofacial Surgery* 2018; Apr 19.

Ji Y, Peacock Z, Hupp J. Medicare in oral and maxillofacial surgery: Disparities in access: Part 1. *Journal of Oral and Maxillofacial Surgery* 2018; Apr 28.

Resnick C, Kim S, Yorlets R, Calabrese C, Peacock Z, Kaban L. Evaluation of Andrews' Analysis as a predictor of ideal sagittal maxillary positioning in orthognathic surgery. *Journal of Oral and Maxillofacial Surgery* 2018; Mar 22.

Resnick C, Genuth J, Calabrese C, Taghinia A, Labow B, Padwa B. Temporomandibular joint ankylosis after ramus construction with free fibula flaps in children with hemifacial microsomia. *Journal of Oral and Maxillofacial Surgery* 2018; May 28.

Susarla S, Tveit M, Dodson T, Kaban L, Hopper R, Egbert M. What are the defining characteristics of the most cited publications in orthognathic surgery? *International Journal of Oral and Maxillofacial Surgery* 2018; May 21.

MULTI-DEPARTMENTAL

Bakk L, Cadet T. Awareness of the medicare part d low-income subsidy among older non-hispanic blacks and hispanics. *Social Work Public Health* 2018; Apr 25:1-9.

Saffari S, Lambert R, Dang L, Pagni S, Dragan I. Integrating student feedback during "dental curriculum hack-a-thon". *BMC Medical Education* 2018; May 2;18(1):89.

Starr J, Huang Y, Lee K, Murphy C, Moscicki A, Shiboski C, Ryder M, Yao T, Faller L, Van Dyke R, Paster B. Oral microbiota in youth with perinatally acquired HIV infection. *Microbiome* 2018; 31;6(1):100.

ORAL HEALTH POLICY AND EPIDEMIOLOGY

Brown R, Razaque M. Phosphate toxicity and tumorigenesis. *Biochimica et Biophysica Acta* 2018; Apr 20.

Chandrupatla S, Ramachandra R, Dantala S, Pushpanjali K, Tavares M. Importance and potential of dentists' in identifying patients at high risk of diabetes. *Current Diabetes Review* 2018; May 31.

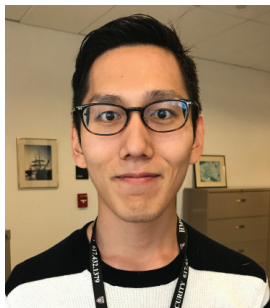
Heaton B, Gebel C, Crawford A, Barker J, Henshaw M, Garcia R, Riedy C, Wimsatt M. Using storytelling to address oral health knowledge in American Indian and Alaska native communities *Preventing Chronic Disease* 2018; May 24.

Simon L. Medical-dental integration. *Jouranal of the American Dental Association* 2018;149(6):409.

RESTORATIVE DENTISTRY AND BIOMATERIALS SCIENCES

Ohyama H, Lee C, Nagai S, Digital 3D technology for self-assessment in restorative dentistry. *Journal of Cosmetic Dentistry* 2018;33(4): 58-69.

Wang K, Wan R, Chiu L, Tsai Y, Fang C, Bowley J, Chen K, Shih H, Lai W. Effects of collagen matrix and bioreactor cultivation on cartilage regeneration of a full-thickness critical-size knee joint cartilage defects with subchondral bone damage in a rabbit model. *PLoS One* 2018;13(5):e0196779.

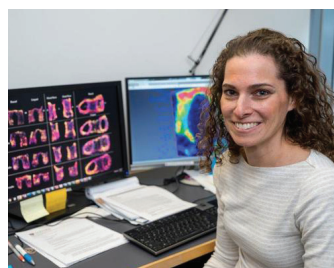


Yoshiki Ishida Joins the Nagai/Kim Lab

Yoshiki Ishida, DDS, PhD, joined the Nagai /Kim Lab in

April as a Visiting Assistant Professor in the Department of Oral Medicine, Infection and Immunity and will stay through March 2020. Ishida is Assistant Professor in the Department of Dental Materials Science at the School of Life Dentistry at Tokyo, Nippon Dental University, Tokyo, Japan where he also received his PhD in dentistry. His doctoral dissertation was entitled, “Dimensional Accuracy of Dental Casting Patterns Created by 3D Printers.” This work was published in the *Journal of Dental Materials* 2016; 35(2): 250-256. In the Nagai/Kim Lab, Ishida will research an algorithm of moving teeth using magnetic force and near-infrared light caries detection system.

Gili Naveh and Corneliu Sima Receive NIDCR R00 Research Awards

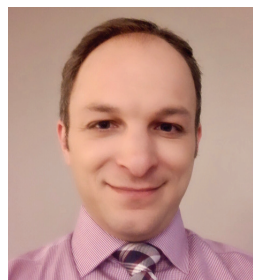


Gili Naveh, DMD, PhD, assistant professor of Oral Medicine, Infection and Immunity, received an R00 from NIDCR entitled, “Tooth Movement derived by PDL Cellular Manipulations.”

Naveh hypothesizes that intentional modifications in the periodontal ligament structure will trigger changes in tooth movement. She will investigate how loss of function or gain of non-physiological function affects the non-uniformity of the collagen networks in the periodontal ligament and their correlation to the stiffness levels. The final result of this project will enable controlling tooth movement through structural modification of the periodontal ligament. This novel approach will generate tooth movement with only minimal, or no external forces, and thus dramatically transform the orthodontic discipline as well as benefit other medical disciplines.

AJODO (CONT).

Contributors to this study include investigators from the Consortium for Translational Orthodontic Research (CTOR), which is a nucleus for integration of basic science, clinical science, and industrial resources in the field of orthodontics, and a driving force in the dissemination of findings to the community and the advancement of the specialty. CTOR offers an open environment within which basic scientists and clinicians can interact, exchange ideas, select and pursue research in specific areas of craniofacial biology and orthodontics. **“Compared to other medical specialties, the orthodontic specialty suffers from a slow application of research findings into clinical therapies. We created CTOR with the objective of bridging the large gap between the science and the clinical practice. We want to elevate Orthodontics from an art to a science, and move our specialty into an evidence based practice built on solid biological principles.”** — Mani Alikhani, DDS, MS, PhD



Corneliu Sima, DMD, MSc, DSc, assistant professor of Oral Medicine, Infection and Immunity, received an R00 from NIDCR entitled, “Regulation of Inflammation in T2D-Associated Periodontitis.”

Sima hypothesizes that resolvin E1 through its receptor ERV1 can modulate circulating monocyte precursors of the macrophage to actively resolve un-regulated inflammation associated with type 2 diabetes mellitus and chronic periodontitis. The project will address specific questions on timing of patrolling monocyte recruitment and resolving mechanism in gingival tissues upon inflammatory stimulation, the impact of ERV1-RvE1 activation on gingival recruitment and activation of resolving macrophage, and the implications of monocyte/macrophage ERV1-RvE1 axis in mitochondrial respiratory function in obese adipose tissue and reverse cholesterol transport.

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