# Shigemi Nagai, DDS, PhD, Receives ITI Research Award



Dr. Shigemi Nagai, Associate Professor of Restorative Dentistry and Biomaterials Sciences and Director of Clinical Research at HSDM, received a research award from the International Team of Implantology (ITI)

entitled, "Novel surface treatments to develop biomimetic implant abutment." Nagai will collaborate with co-investigators, Dr. Mindy Gil and Dr. David Kim and consultants, Dr. German Gallucci and Dr. Masa Nagai to develop the mode-specific surface treatment for the restoration of the epithelial attachment to the implant abutment surface. The key innovation for the epithelial attachment will be the introduction of a comprehensive epithelial healing complex of platelets and the fibrin clot. Nagai and colleagues will identify platelet activating peptides from a peptide library and coat the implant abutment surface to provide a comprehensive wound healing complex for the regeneration of the epithelial attachment. The predicted end result will yield proper attachment of junctional epithelium which will be restored on a biomimetic abutment surface where platelet activation has been induced by peptides. In addition to this novel research project, this team plans to develop a "Peptide-Pen" to induce customized epithelial margin to compensate for individual anatomical variations.

# The Forsyth Institute News



The Forsyth Institute initiated a phase I and phase II clinical trial to assess the safety and preliminary efficacy of lipoxin analog BLXA4-ME oral rinse for the treatment of gingivitis. This project, funded by a grant from NIH-NIDCR, is being led by Principal Investigator, Dr. Hatice Hasturk, Associate Member of Staff,

Department of Applied Oral Sciences and Director, Center for Clinical and Translational Research at The Forsyth Institute. The primary objective of the trial is to evaluate the safety of an investigational compound, BLXA4-ME, topically applied as a daily oral rinse in adults with gingivitis.



The Investigational New
Drug Application with the
FDA is sponsored by Dr.
Thomas Van Dyke, Senior
Member of Staff and Chair of
the Department of Applied
Oral Sciences at The Forsyth
Institute, and Lecturer in
the Department of Oral
Medicine, Infection and
Immunity at the Harvard
School of Dental Medicine.

Dr. Van Dyke was recently named a Fellow of the American Association for the Advancement of Science (AAAS), an honor bestowed upon AAAS members by their peers. Dr. Van Dyke was also appointed member of the Oversight Committee for The Research Academy at HSDM and Forsyth joining Co-Directors, Giuseppe Intini, DDS, PhD and Beate Lanske, PhD, as well as Oversight Committee member, Floyd Dewhirst, DDS, PhD.

# **New Yang Lab Members**



Yunyun Jin, PhD, joined the Yang Lab as a postdoctoral fellow. Jin received her PhD in developmental biology from the Institute of Biochemistry and Cell Biology, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences. There she worked on

regulation of Hippo kinase activity and the role of Hippo pathway in regulating epigenetics in Lei Zhang's laboratory. In the Yang Lab, Jin is working on elucidating the roles of Enpp1 and Hedgehog signaling in osteoblast differentiation during embryonic bone formation, joint chondrocyte maintenance and survival, ectopic calcification and ossification and the effects of Gas signaling in regulating cranial facial bone formation.



Kun Yang, PhD, joined the Yang Lab as a postdoctoral fellow. Yang received her PhD in pathology from Brown University where she worked on skeletal development and osteoarthritis in Dr. Qian Chen's Lab in the Department of Orthopedics. In the Yang Lab, she

is working on planar cell polarity signaling in skeletal development.



Yiqun Zhang, from Changchun, Jilin Province, China, joined the Yang Lab as a Visiting Graduate Student. Zhang is a PhD student majoring in hand surgery at Jilin University, where he also received his master's degree in 2014. In the Yang Lab, Zhang is studying the etiology of carpal tunnel syndrome.



Peng A, from Chengdu, China, joined the Yang Lab as a Visiting Graduate Student. A is a PhD student at West China School of Stomatology, Sichuan University, studying the mechanisms of EZH2 in regulating pulp inflamation and regeneration. In the Yang Lab,

he is working on Wnt/PCP signaling regulation in osteoblasts and osteoclasts.

### **Student Awards**



Jae Young Kim, DDS, third year DMSc prosthodontics resident, received a research award from the American Academy of Implant Dentistry for his project entitled, "Effect of anti-sema 4D monoclonal antibody on bone formation around the Ti-implant in a mouse model."



Christine Lee, DMD, second year MMSc prosthodontics resident, received third place for her presentation at the American College of Prosthodontics New England Symposium entitled, "Considerations of a computerized approach for full mouth implant rehabilitation."



Joseph DePaola, DMD 2018 candiate, received an award from the Dental Trade Alliance Foundation for his commitment to community service. DePaola is the student coordinator for HSDM's *Give Kids A Smile* program.



Hannah Yoo, DMD 2018 candidate, received an award from the Harvard South Asia Institute for her research, "Analysis of Indian mothers' protective factors on child's oral and nutritional health." Yoo will work with Karen Sokal-Gutierrez MD, MPH,

India Smiles Program at UC Berkeley and Christine Riedy, PhD, Lecturer on Oral Health Policy and Epidemiology at HSDM.



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# Mohammed Masoud, DDS, DMSc, Receives Shore Fellowship



Mohammed
Masoud,
DDS, DMSc,
Lecturer on
Developmental
Biology and
Program
Director in
Orthodontics
at HSDM,
received the
Eleanor and
Miles Shore
Harvard

School of Dental Medicine fellowship in honor of Aina Auskaps, DMD. Masoud has been working on developing the use of 3D photogrammetry for orthodontic diagnosis, ultimately reducing dependance on radiographs for orthodontic diagnosis. This award will also help fund several orthodontic resident research projects to develop age and race specific standards for orthodontic patients. Masoud is pictured with Dean Flier of Harvard Medical School.

### Save The Date

# HSDM Continuing Education Course: Essentials for the Modern Dental Leader

May 2-4, 2016 — To be held at HSDM

This 18-credit hour course will bring today's dental leaders together to explore the meaning and purpose of clinical leadership; to better understand the knowledge, skills, and attributes required for effective leadership in dental organizations; to gain experience in leveraging the skills necessary to meet common challenges with proven techniques in conflict resolution and negotiation; to improve care delivery and practice success; and to gain a more thorough understanding of how to practically approach everyday ethical and legal issues in the dental practice. Additional information may be found at http://leadingindental.com.

### **HSDM Publications**

#### **MULTI-DEPARTMENTAL**

Jesin M, Rashewsky S, Shapiro M, Tobler W, Agarwal S, Burke P, Salama A. Predictors of mortality, hospital utilization, and the role of race in outcomes in head and neck trauma. *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology* 2015; Jul 23.

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#### ORAL HEALTH POLICY AND EPIDEMIOLOGY

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Kalenderian E, Tokede B, Ramoni R, Khan M, Kimmes N, White J, Vaderhobli R, Yansane A, Feilzer A, Walji M. Dental clinical research: an illustration of the value of standardized diagnostic terms. Journal of Public Health Dentistry 2015 Oct 30;.

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#### RESTORATIVE DENTISTRY AND BIOMATERIALS SCIENCES

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#### ORAL AND MAXILLOFACIAL SURGERY

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Guralnick W. From here to there; An academic journey. *Journal of Oral and Maxillofacial Surgery* 2015; (12S):S147-48.

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Misra S, Hass C, August M, Eberlin K. Delayed carotid dissection following lower lip revascularization in the setting of hyoid fracture-A case report and review of the literature. *Journal of Oral and Maxillofacial Surgery* 2015; Sep 25.

Peacock Z, Susarla S. Is the pyriform ligament important for alar width maintenance after Le Fort I osteotomy? *Journal of Oral and Maxillofacial Surgery* 2015; (12S):S57-66.

Ruggiero B, Padwa B, Christoph K, Zhou S, Glowacki J. Vitamin D metabolism and regulation in pediatric MSCs. *Journal of Steroid Biochemistry and Molecular Biology* 2015; Sep 15.

### **HSDM Publications**

#### DEVELOPMENTAL BIOLOGY

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#### ORAL MEDICINE, INFECTION AND IMMUNITY

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