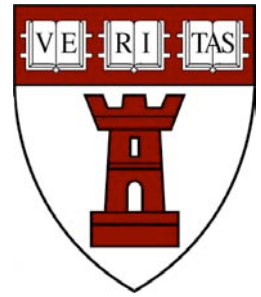


# HSDM OFFICE OF RESEARCH BULLETIN



Nov/Dec 2005

Bjorn Olsen, MD, PhD Dean for Research has established a new **PREDOCTORAL RESEARCH ADVISORY COMMITTEE**. These Faculty Advisors (listed below) will be responsible for working with DMD students to ensure they are meeting research requirements, selecting appropriate projects and mentors, and offering guidance as needed. Helpful *Research Mentor Guidelines* will be available to all faculty soon.

Malcolm Whitman, PhD, Chair  
Arkhat Abzhanov, PhD  
Peter Hauschka, PhD  
Taru Kinnunen, PhD  
Beate Lanske, PhD  
Chin-Yu Lin, PhD, DDS  
Yefu Li, PhD, MD  
Nachum Samet, DMD  
Daniel Smith, PhD

The Office of Research has compiled a **HSDM/HMS RESEARCH MENTOR GUIDE** which is available on eCommons. The guide lists mentors with their research interests/lab description, publications, HSDM students they have mentored in the past.



HARVARD SCHOOL OF DENTAL MEDICINE  
HARVARD MEDICAL SCHOOL

## RESEARCH MENTOR REFERENCE GUIDE

### Questions?

Please contact the HSDM Office of Research at 617-432-1121, or email [dawn\\_decosta@hsdm.harvard.edu](mailto:dawn_decosta@hsdm.harvard.edu). This is a work in progress and we welcome any edits and suggestions to this Reference Guide.



A VERY SPECIAL  
**THANK YOU TO**  
DR. CATHERINE  
HAYES WHO  
SERVED AS THE  
DIRECTOR OF  
PREDOCTORAL  
RESEARCH FOR  
THE PAST SEVERAL  
YEARS.

The **HSDM RESEARCH ACADEMY** under the direction of Drs. Malcolm Whitman and Bjorn Olsen have named the following HSDM students from the Class of 2008 to the Academy. **CONGRATULATIONS!**



### DAVID BAKER

Twist family of transcription factors during craniofacial development



### NATALIE MARTINEZ

The function of TGF $\beta$  receptors in beak patterning



### BATYA GOLDWASER

Risk factors associated with osteo-radio necrosis



### ESTHER HYUN

The regulation and effects of hypoxia

# RECENT PUBLICATIONS:

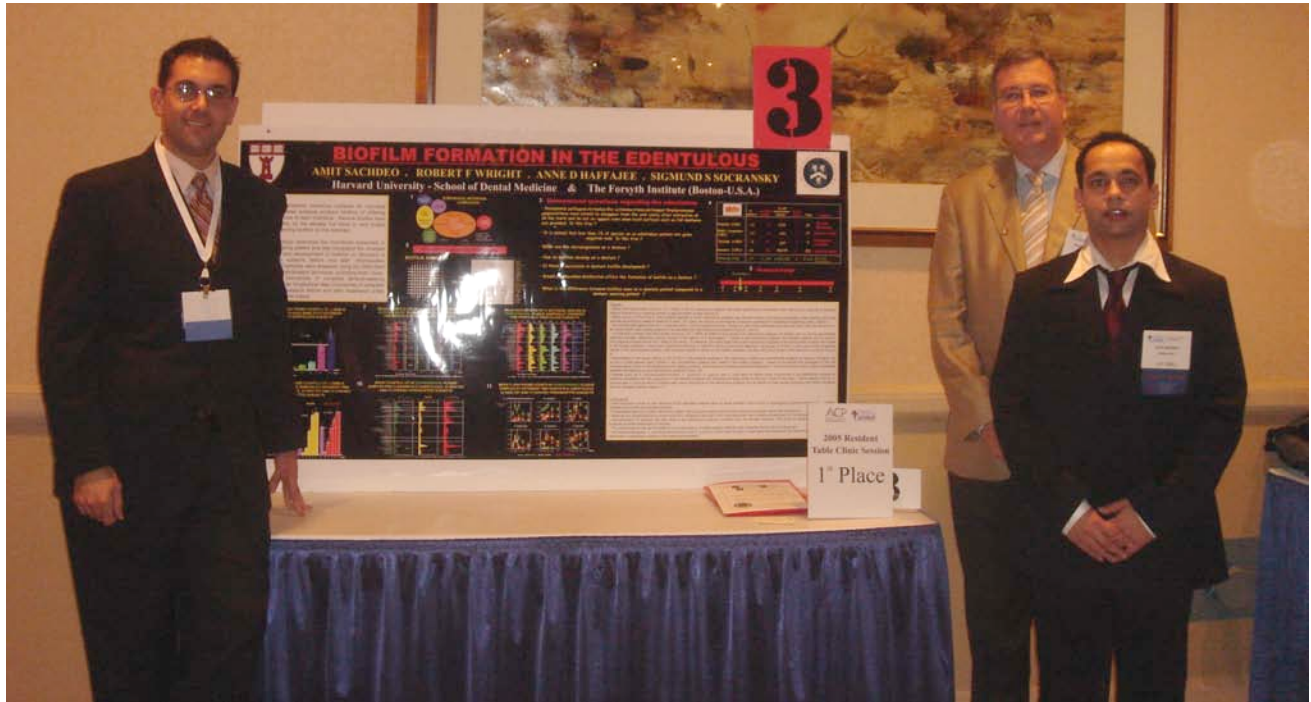
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- Bartlett JD. **Making the cut in dental enamel--The discovery of enamelysin (MMP-20).** J Dent Res. 2005;84(11):986-8.
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- Eklund L, Olsen BR. **Tie receptors and their angiopoietin ligands are context-dependent regulators of vascular remodeling.** Cell Res. 2005 Oct 11.
- Friedland, B, Katzman, E. **After-hours emergency coverage by private practitioners in Massachusetts.** J Mass Dent Soc 2005;5493:22-25.
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- Levi PA, Kim DM, Harsfield SL, Jacobson ER. **Squamous cell carcinoma presenting as an endodontic-periodontic lesion.** J Periodontol. 2005;76(10):1798-1804.
- Loukas M, Louis RG, Kapos T, Kwiatkowska M. **A case of a bilateral accessory digastric muscle.** Folia Morphol (Warsz). 2005;64(3):233-236.
- Marneros AG, Fan J, Yokoyama Y, Gerber HP, Ferrara N, Crouch RK, Olsen BR. **Vascular endothelial growth factor expression in the retinal pigment epithelium is essential for choriocapillaris development and visual function.** J Pathol. 2005;167(5):1451-9.
- Nogi T, Levin M. **Characterization of innexin gene expression and functional roles of gap-junctional communication in planarian regeneration.** Dev Biol. 2005 Oct 19.
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- Onuma Y, Takahashi S, Haramoto Y, Tanegashima K, Yokota C, Whitman M, Asashima M. **Xnr2 and Xnr5 unprocessed proteins inhibit Wnt signaling upstream of Dishevelled.** Dev Dyn. 2005 Sep 28.
- Pitiphat W, Gillman MW, Joshipura KJ, Williams PL, Douglass CW, Rich-Edwards JW. **Plasma c-reactive protein in early pregnancy and preterm delivery.** J Epidemiol. 2005 Oct 19.
- Razaque MS, Soegiarto DW, Chang D, Long F, Lanske B. **Conditional deletion of Indian hedgehog from collagen type 2alpha1-expressing cells results in abnormal endochondral bone formation.** J Pathol. 2005;207(4):453-461.
- Taubman MA, Valverde P, Han X, Kawai T. **Immune response: The key to bone resorption in periodontal disease.** J Periodontol. 2005;76(11-s):2033-2041.
- Troulis MJ, Ward BB, Zuniga JA. **Emerging technologies: findings of the 2005 AAOMS Research Summit.** J Oral Maxillofac Surg. 2005;63(10):1436-42.
- Yeh SW, Sami N, Ahmed RA. **Treatment of pemphigus vulgaris: current and emerging options.** Am J Clin Dermatol. 2005;6(5):327-42.
- Young CS, Abukawa H, Asrican R, Ravens M, Troulis MJ, Kaban LB, Vacanti JP, Yelick PC. **Tissue-engineered hybrid tooth and bone.** Tissue Eng. 2005;11(9-10):1599-610.

We are pleased to announce that **Charles N. Serhan, PhD**, will become Professor of Oral Medicine, Infection and Immunity and Head of the Department at the Harvard School of Dental Medicine as of January 1, 2006. Dr. Serhan is the Simon Gelman Professor of Anesthesia and Director, Center for Experimental Therapeutics and Reperfusion Injury at the Brigham and Women's Hospital. He will relocate to our new Research and Education Building while maintaining research activity at the Brigham and Women's Hospital. Dr. Serhan is the Director of and PI on NIH-sponsored awards within a Specialized Center for Oral Inflammation and Resolution and the Novel Lipid Mediators in Periodontal Disease Resolution Circuits. Recently he was honored for his outstanding contributions to inflammation research by being the 2005 Kreshover Lecture at the National Institutes of Dental and Craniofacial Research where he spoke on "The Role of Novel Anti-Inflammatory and Pro-resolving Lipid Mediators in Oral Inflammation and Resolution". Please join me in welcoming Dr. Serhan to HSDM.



# HSDM STUDENT AWARDS:

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**AMERICAN COLLEGE OF PROSTHODONTISTS 2005 Annual Session**  
(from left to right: Ryan Dunlop, Dr. Robert Wright, Dr. Amit Sachdeo)

**The Postdoctoral First Prize Table Clinic went to Dr. Amit Sachdeo (HSDM DMSc Prosthodontics Postdoc) for his project, Biofilm Formation in the Edentulous.**

Presenters: Dr. Amit Sachdeo & Dr. Robert Wright

Co-Authors: Dr. Sigmund S. Socransky & Dr. Anne D. Haffajee

*This study compares the changes in composition and development of the biofilms that form on the surfaces of dentures and on the oral soft tissues as well as in saliva of 60 edentulous subjects who do or do not receive soft tissue/denture disinfection. DNA samples from each individual tooth, 8 soft tissue locations and saliva, were taken for 7 days following soft tissue and denture disinfection for all the patients in the test group and all the patients in the control group who only received denture disinfection. The analysis in this investigation is revealing in that there is cross-sectional data (microbiota of complete denture-wearing subjects) as well as longitudinal data (microbiota of complete denture-wearing subjects before and after treatment) unlike any other study ever done before on edentulous subjects, and the importance of which cannot be emphasized enough.*

**The Predoctoral Award went to Ryan Dunlop (HSDM DMD Predoc) for his project, Current Application Trends for Advanced Education Programs in Prosthodontics.**

Presenter: Ryan Dunlop

Mentors: Dr. Robert Wright & Dr. Chester Douglass

**CONGRATULATIONS TO RYAN AND AMIT!**

## IMPORTANT DATES:

**December 2, 2005**

2PM- 3PM, REB Auditorium  
**HSDM RESEARCH SEMINAR SERIES**  
Drs. Qing Li & Mohammed Razzaque



**December 9, 2005**

2PM- 3PM, REB Auditorium  
**HSDM RESEARCH SEMINAR SERIES**  
Drs. Vicki Rosen & Laura Gamer

**December 12, 2005**

12PM- 1PM, REB Auditorium  
**HSDM GRAND ROUNDS**  
Dr. Rakesh Jain, Professor of Tumor Biology, HMS Director, Steele Lab for Tumor Biology, MGH will present, **Normalization of Tumor Vasculature and Microenvironment: An Emerging Concept in Antiangiogenic Therapy.**

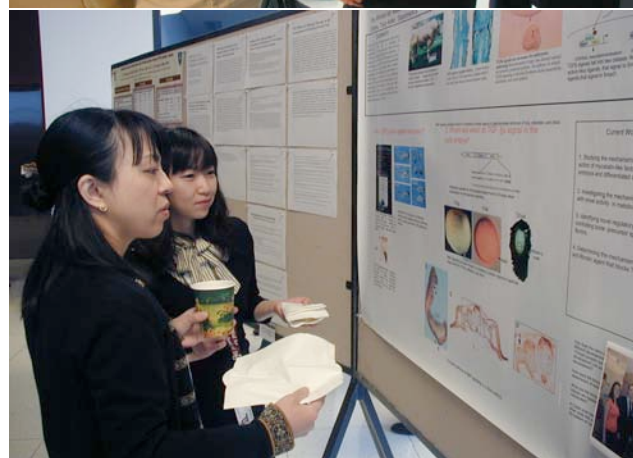
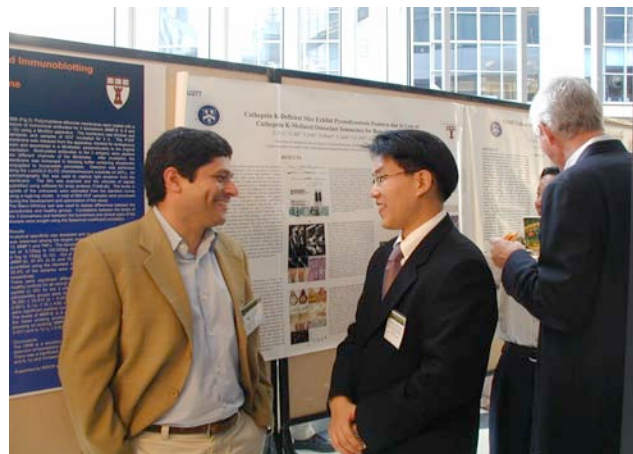
**December 16, 2005**

2PM- 3PM, REB Auditorium  
**HSDM RESEARCH SEMINAR SERIES**  
Bo Hou & Karen Cox

**April 7, 2006**

11AM – 7PM, REB Auditorium & Lobby  
**HARVARD FORSYTH RESEARCH SYMPOSIUM**  
**Bones & Teeth: Development, Growth and Repair** Speakers include: Drs. Martin Nweeia, Philip Stashenko, Maria Troulis, Pamela Yelick, and Malcolm Whitman. A predoctoral and postdoctoral student poster competition will be announced shortly.

## FACULTY POSTER DAY



### KEY RESEARCH CONTACTS @ HMS

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**Office of Technology Licensing:**

**KATHERINE GORDON, PHD**

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**DO YOU HAVE QUESTIONS ABOUT RESEARCH AT HSDM, RESEARCH EVENTS, OR INFORMATION IN THIS BULLETIN?**

If so, please contact Dawn DeCosta  
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