HSDM OFFICE OF RESEARCH

B U L L E T I N

December 1, 2003

RESEARCH GRANTS & AWARDS:

Congratulations to **VICKI ROSEN, PhD**, Professor of Oral and Developmental Biology and Senior Member of the Staff at The Forsyth Institute for her recently funded R01 grant entitled, *"BMP-3 Signaling in the Formation and Regulation of Bone."* Although BMP-3 is the most abundant BMP in bone, little is known about how BMP-3 regulates bone mass. In the next several years, The Rosen Lab plans to investigate the role of BMP-3 in the skeleton through use of loss of function and gain of function models, and also dissect the BMP-3 signaling pathway. The Rosen Lab believes the information they obtain will be key to understanding how individual BMPs, alone and in combination with one another, function in skeletal patterning, one formation, and the maintenance of bone mass.

The American Association of Clinical Anatomists awarded **THEODOROS KAPOS** (HSDM 2005) an Outstanding Student Poster Presentation award at the 1st Joint Meeting of the AACA and the European Association of Clinical Anatomists in July in Graz, Austria. Congratulations to Theo!

Congratulations to **ZACHARY PEACOCK** (HSDM 2004) and **SUNGYONG BANG** (HSDM 2006) as they have been selected by AADR to compete in the 2004 IADR/Unilever Hatton Awards Competition for Junior Investigators in Honolulu, HI, March 10-13, 2004. Zack Peacock's project is, *"Salivary Response and Protective Effect of Intranasal Immunization with S. mutans Gbp-B peptide SYI."* Sung Bang's project is, *"Stability of Streptococcus Mutans Initial Colonizers in the Oral Cavity-The Genes that Play an Important Role in Competence and Biofilm Formation."*

RESEARCH FOCUS:

Sang E. Park, DDS, MMSc

Instructor in Restorative Dentistry and Biomaterials Sciences and Prosthodontist in the Faculty Group Practice

Dr. Park recently received a Dean's Award for Clinical Research and has a pending grant with IADR/AADR.

Dr. Park's research focuses on an innovative, conservative approach treatment to improve the oral health of society. The recommended solution to prevent the microbial adhesion to teeth, periodontium, and restorative materials is the application of a self-bonding polymer made of pure poly(dimethyl siloxane) as a protective coating. This coating provides an inert non-stick acid-resistant finish to protect the tooth surfaces from chemical attack and to discourage attachment and growth of dental plaque and other microorganisms.

The aim of Dr. Park's study is to investigate the clinical efficacy of a self-bonding polymer in reducing plaque attachment and subsequent gingival inflammation, as well as extrinsic stain level using three parameters: (1) Plaque (2) Gingivitis (3) Extrinsic stain.

Dr. Park is in the process of recruiting patients for a start date of January 2004. Patients with high plaque index and poor oral hygiene are preferable. The study consists of 5 visits in total, including a cleaning visit, and upon completion of the study, patients receive a free electric toothbrush.

If you are interested in participating in this study, please contact:

Dr. Sang Park
617-432-1472
sang_park@hsdm.harvard.edu

RECENT PUBLICATIONS: *Please note, if we have not captured your recent publications, please email (dawn_decosta@hsdm.harvard.edu). You can be assured they will be listed in the next Bulletin.*

Asakawa R, Komatsuzawa H, Kawai T, Yamada S, Goncalves RB, Izumi S, Fujiwara T, Nakano Y, Suzuki N, Uchida Y, Ouhara K, Shiba H, Taubman MA, Kurihara H, Sugai M. Outer membrane protein 100, a versatile virulence factor of Actinobacillus actinomycetemcomitans. *Mol Microbiol* 2003;50(4):1125-1139.

Ricard-Blum S, Feraud O, Lortat-Jacob H, Rencurosi A, Fukai N, Dkhissi F, Vittet D, Imberty A, Olsen BR, Van Der Rest M. Characterization of endostatin binding to heparin and heparan sulfate by surface plasmon resonance and molecular modeling. Role of divalent cations. *J Biol Chem* 2003;Oct 28.

Hung HC, Merchant A, Willett W, Ascherio A, Rosner BA, Rimm E, Joshipura KJ. The association between fruit and vegetable consumption and peripheral arterial disease. *Epidemiology* 2003;14(6):659-65.

Merchant AT, Hu FB, Spiegelman D, Willett WC, Rimm EB, Ascherio A. Dietary Fiber Reduces Peripheral Arterial Disease Risk in Men. *J Nutrition* 2003 Nov;133(11):3658-3663.

DID YOU KNOW?

Whether you are engaged in research, education, or clinical activities, you are creating records. The Archives and Records Management Program at Countway Library serves the administrators, faculty and staff of the Medical and Dental School Community.

- **"UNIVERSITY RECORDS"** means recorded information, regardless of physical form or characteristics, created, received, used, recorded, or filed in the course of University business.
- **"ARCHIVES"** is the repository for permanent University records and the University is responsible for these records. The **"DEPOSITORY"** is for the temporary storage of records destined for either the Archives or destruction. Records held in the Depository are the responsibility of the office that created them.
- **"SPONSORED PROGRAMS RECORDS"** must be retained for 4-6 years per NIH and HMS regulations. This period begins at the award close-out date. These records include email, computer-generated files, project data, and financial information.

The University has defined "records" and established policies on the retention, destruction, preservation, and use of records. Additional information, training and forms may be found at the Countway Library's Archives and Records Management website: http://www.countway.med.harvard.edu/archives/index.shtml

HSDM GRAND ROUNDS

WHO:
John B. Mulliken, MD
Director, Craniofacial Center, Children's Hospital; Senior Associate, Plastic Surgery, Children's Hospital; Professor of Surgery, Harvard Medical School

WHAT:
Repair of Bilateral Cleft Lip: Third and Fourth Dimensions

WHERE:
HMS Cannon Room

WHEN:
January 26, 2003
12:00PM-1:00PM

CONTACT:
Dawn DeCosta
HSDM Office of Research
617-432-1121 (or)
dawn_decosta@hsdm.harvard.edu

Dr. John Mulliken is an internationally recognized authority on the clinical diagnosis, assessment, and treatment of vascular anomalies. He is the originator of the internationally accepted classification system for vascular anomalies, and author (with A.E. Young) of a major textbook "Vascular Birthmarks - Hemangiomas and Malformations." We are pleased and honored to have such a distinguished Grand Round's speaker and we hope that you can join us on January 26th. Please note, a light lunch will be provided.

CONGRATULATIONS TO THE CLASS OF 2006 STUDENTS ADMITTED TO THE RESEARCH ACADEMY

(Mentors are listed in parentheses).

SUNG BANG (DR. DANIEL SMITH)
LIZZIE CHANENSON (DR. EDWARD PETERS)
AMY CRYSTAL (DR. STEPHEN SONIS)
ADAM GEACH (DR. TRACIE PAYNE-FERREIRA)
SOO KIM (DR. DONALD INGBER)
PRATHIMA PRASANNA (DR. DONALD GIDDON)
RABIE SHANTI (DR. THOMAS FLYNN)
SEENU SUSARLA (DR. THOMAS DODSON)

THE ANNALS OF THE RESEARCH ACADEMY

The HSDM Research Academy is currently accepting abstracts from predoctoral students for an inaugural, annual research competition for predoctoral dental students. Abstracts must be submitted via email **harvard_dental_research_academy@hms.harvard.edu** no later than December 12, 2003.The abstract solicitation is open to all dental students in an accredited dental school (or international equivalent). From the submitted abstracts, the HSDM Research Academy will select 10 finalists. These 10 will then submit a final written communication < 10 pages by February 20, 2004. From the 10 finalists, 3 manuscripts will be selected to receive a cash prize, a commemorative plaque and the opportunity to be published in *The Annals of the Research Academy*. For further information and/or questions, please email **harvard_dental_research_academy@hms.harvard.edu**.

To learn more about research activities at HSDM, have questions, comments, and/or suggestions for this Bulletin, please contact us or visit the HSDM website at . . .

http://www.hsdm.harvard.edu/asp-html/research.html

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October 2003 photo of the new research & and education building prior to the topping off celebration.