

# Department of Physiology News

June 27, 2003

## New Chair-designate Appointed

**Meredith Bond, Ph.D.** has been appointed Chair-designate of the Department of Physiology. Dr. Bond will be assuming the role of Physiology Department Chair effective September 15, 2003. She will succeed Dr. Mordecai P. Blaustein, who has chaired the department for the past 24 years.

Dr. Bond was born in Sydney, Australia. She received her B.A. from Macquarie University in Sydney (1976) and her Ph.D. from the University of Pennsylvania School of Medicine (1984). She completed postdoctoral training (1984-1985), and was then appointed Research Associate (1985-1986) at the Pennsylvania Muscle Institute at the University of Pennsylvania School of

Medicine. In 1986 Dr. Bond was appointed as Assistant Staff in the Research Institute of The Cleveland Clinic Foundation. In 1992 she was promoted to Associate Staff, and in 2000 she was promoted to the rank of "Staff" in the Department of Molecular Cardiology in the Lerner Research Institute of The Cleveland Clinic Foundation.

Concurrently, in 1989 Dr. Bond was appointed Assistant Professor, then promoted to Associate Professor in 1994 and Professor in 2002 in the Department of Physiology and Biophysics at Case Western Reserve University.

Dr. Bond is widely known for her

studies on calcium homeostasis in the cardiovascular system. Her current research is focused on adrenergic stimulation and protein kinase A in cardiac failure and aging.



**Dr. Meredith Bond**

## Dana Yoo and Brian Petrich Receive Awards

**Dana Yoo**, Physiology Graduate Student, and **Brian Petrich, Ph.D.**, a 2003 Graduate of the Physiology program and a current postdoctoral fellow with the Physiology department, both recently received awards and recognition for their research.

Dana Yoo received first place in the Molecular Biology poster session, and Dr. Petrich was awarded second place in the Cell Biology Oral Session at the 2003 Graduate Research Conference held April 17, 2003 at the UMB campus. In addition, Brian Petrich and Dana Yoo both were selected to present at the Society for

Experimental Biology and Medicine – District of Columbia Chapter's Graduate Student Research Forum on April 3, 2003. Brian was awarded First Place for his presentation of his research "Targeted Activation of C-Jun N-Terminal Kinase in Ventricular Myocytes *In Vivo* Induces Cardiomyopathy and Myocardial Remodeling." Dana was awarded honorable mention for the presentation of her research "Serum Glucocorticoid Kinase Phosphorylation of ROMK Regulates Surface

Expression." Last but definitely not least, Dr. Petrich just learned that he has received the Graduate School Association's Dr. Arthur Schwartz Award. This competitive \$500 award is presented each semester to a student who has successfully defended his or her master's thesis or doctoral dissertation. The applications are evaluated by a committee of two faculty members and three students. Dr. Petrich's application received a score of 93.3 points out of a possible 100 points.

These are exceptional accomplishments!

***Congratulations Dana and Brian!***



**Dr. Paul Welling, Dana Yoo, Brian Petrich, and Dr. Yibin Wang (left to right)**

## Physiology Grad Students receive Degrees and attend Doctoral Robing Ceremony

The Annual Doctoral Robing Ceremony was held on May 22, 2003. During the ceremony, students who had been awarded their Ph.D.s were presented by their mentors and given their doctoral robes. The following Physiology graduate students received their doctoral robes at this year's ceremony:

**Robert E. Hoesch, Ph.D.**

Mentor: Dr. Joseph Kao

**Steve Ward M.D./Ph.D.**

Mentor: Dr. John Hamlyn

**Micah Sickel, M.D./Ph.D.**

Mentor: Dr. Margaret McCarthy

**Brian Petrich, Ph.D.**

Mentor: Dr. Yibin Wang

**Qianben Wang, Ph.D.**

Mentor: Dr. Robert Koos

**Xiaoling Xu, Ph.D.**

Mentor: Dr. Priscilla Furth



The Department of Physiology newsletter is published quarterly by the Department of Physiology, University of Maryland School of Medicine, Baltimore, MD.

Editor: Katherine Frankel

## Dr. Peg McCarthy Receives Special Recognition

This year the Graduate Students Association (GSA) awarded Dr. Margaret M. (Peg) McCarthy the Patricia Sokolove Outstanding Mentor Award. This award was founded by the GSA to recognize a faculty member who displays outstanding communication, dedication, knowledge and

mentorship to students. Stuart Amateau nominated Dr. McCarthy and she was selected by a committee of students representing all facets of the graduate school. She was presented the award at the 2003 Doctoral Robing ceremony.

*Congratulations Dr. McCarthy!*



Dr. Peg McCarthy and Stu Amateau, Ph.D.

## Faculty and Staff News

**Dr. Scott Thompson** recently became President of the Baltimore Chapter of the Society for Neuroscience and a permanent member of the NIH Study Section *Molecular, Cellular, and Developmental Neuroscience -1*.

**Dr. Yibin Wang** received a 4-year grant from NIH, NHLBI for \$1,275,125 for his project "JNK Regulation of Cx43 Expression and Cardiac Remodeling."

**Dr. Mordecai Blaustein** has been elected FASEB Treasurer-elect for

FY2003. He will serve as Treasurer 2004-2006. Dr. Blaustein also will become Treasurer of the Biophysical Society, effective July 1, 2003.

On June 5, Blaustein delivered the Keynote Lecture at the Program in Neuroscience Retreat at the Antrim 1844 Inn in Taneytown, MD. His talk was entitled "Confessions of a Calcium Addict." (*Faculty news continued on page 3*).



Dr. Tony Scarpa, former FASEB Treasurer "passes the buck" to the new Treasurer.

## Faculty News *(Continued from page 2)*

**Dr. Aikaterini Kontrogianni-Konstantopoulos** has received a three year grant from the Muscular Dystrophy Association for \$135,000 total costs for her project "Proteins Organizing the Sarcomere and the SR of Skeletal Muscle."

**Dr. Robert Bloch** received \$14,700 from the American Society for Cell Biology Minority Affairs Committee for 2003 Visiting Professor Support for Dr. Anne Osano for her project "Protein Complexes Determining Membrane Architecture in Striated Muscle."

**Drs. Robert Bloch and Hugo Gonzalez** had an article published in April in *Exercise and Sport Sciences Reviews*, published by *The Journal of Applied Physiology*. They were invited to convert a cartoon of costameric structure into a cover illustration, which appeared on the cover of the journal. The title of their article was "Lateral Force Transmission Across Costameres in Skeletal Muscle."

**Drs. Djikolngar Maouyo, Scott Thompson, and Paul Welling** served as judges in the 25th Annual Graduate Research Conference.

**Dana Yoo, Bo Young Kim, Christina Campo, Latreece Nance, Amanda King, Dr. Djikolngar Maouyo, and Dr. Paul Welling** have an article entitled "Cell surface expression of the ROMK (Kir 1.1) channel is regulated by the aldosterone-induced kinase, SGK-1 and PKA" and is tentatively scheduled for a July issue of *The*

*Journal of Biological Chemistry*. It can be viewed epub ahead of print ([PMID: 12684516]).

**Dr. Paul Welling's** proposed symposium on Intracellular Trafficking in Polarized Epithelia Cells was selected for presentation at the Experimental Biology 2004 Meeting, sponsored by the renal section of American Physiological Society. Speakers will include Michael Caplan from Yale University, Enrique Rodriquez-Boulan of Weill Medical College of Cornell University, Paul A. Welling and Ora Weisz of Pittsburgh University School of Medicine.

**Dr. Barbara Hansen** is co PI on the North American Association for the Study of Obesity (NAASO) award. The proposal for the award, on behalf of that society, will be implemented with a symposium in October 2003.

**Dr. Barbara Hansen** was recently named a Fellow of the American Heart Association and the Council on Nutrition, Physical Activity and Metabolism.

**Jennifer Guy-Cain** had a book review published for *Dark Fiber: Tracking Critical Internet Culture* by Geert Lovink in Student Affairs On-Line (Winter 2003).

**Drs. Darrin Brager and Scott Thompson** published a paper entitled "Activity-dependent release of adenosine contributes to short-term depression at CA3-CA1 synapses in rat hippocampus," *J. Neurophysiol.*, 89:22-26, 2003.

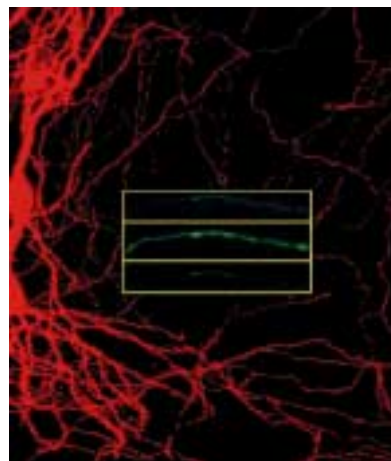
**Drs. Darrin Brager, Xiang Cai and Scott Thompson** recently had a paper published in *Nature Neuroscience* entitled "Activity-dependent activation of presynaptic protein kinase C mediates posttetanic potentiation," *Nature Neurosci.*, 6: 551-552, 2003. A figure from their paper is included below.

**The following three faculty members have received** University of Maryland School of Medicine Intramural grants for \$15,000 for 2003-2004:

**Dr. Djikolngar Maouyo** for his project: "The Role of Sorting Nexin 8 in the Regulation of Sodium Reabsorption in Kidney Cells."

**Dr. Robert Koos** for his project "Relaxin's Role in Breast Cancer."

**Dr. Gil Wier** for his project "Imaging Physiological Signal Transduction in Arteries."



**Dye filled CA1 pyramidal cell (red) inset: transient increase in axonal Ca<sup>2+</sup> during stimulation.**

## Welcome to the Department of Physiology

**Roberto Berra-Romani, Ph.D.**, a new postdoctoral fellow from Italy, working in Dr. Blaustein's laboratory. Dr. Berra-Romani received his Ph.D. this year, in Biochemistry and Physiology of Membranal Systems from the University of Pavia, Department of Physiological and Pharmacological Sciences, Pavia, Italy.

**Maurizio Cavalli**, a visiting graduate research assistant in Dr. Blaustein's laboratory. He is a graduate student in the International Pharmacology Program at the University of Padua, Italy.

**Moo Yeol Lee, Ph.D.**, a new postdoctoral fellow working in Dr.

Blaustein's laboratory. Dr. Lee received a Ph.D. in Toxicology from the College of Pharmacy, Seoul National University in Seoul, Korea. Since 1997, Dr. Lee has been working as a Research Fellow in the Research Center for New Drug Development in the College of Pharmacy at Seoul National University.

**Carl Clay, Ph.D.**, who will join Dr. Hansen's laboratory July 1 as a Postdoctoral Fellow. Dr. Clay received his Ph.D. in Molecular Medicine in 2002 from Wake Forest University School of Medicine.

**Richard Lovering, Ph.D.**, a new Postdoctoral Fellow in Dr. Bloch's laboratory. Dr. Lovering received his Ph.D. this year, in Physical Therapy from the UMB School of Medicine.

The following new Physiology graduate students who will be starting this summer:

**Amanda Mason, David Edwards, and Darryl Auston** - who are currently in the

M.D/Ph.D. program;

**Scott Burks**, who comes to our program from the University of New Mexico.

*Welcome to the Physiology Graduate Program!*

## Dr. Xenia T. Tigno Displays Outstanding Leadership

**Dr. Xenia T. Tigno**, Program Director of the Obesity and Diabetes Research Center, Department of Physiology, organized and ran the 5th Asian Congress for Microcirculation. The Asian Congress for Microcirculation was held in Manila, Philippines from

February 20-22, 2003. The theme of the congress was *Microcirculation: Bridging the Gap from Bench to Clinics*.

Dr. Tigno organized and ran the conference from Maryland with the help of her former staff in the

Philippines, and then went to Manila and gave multiple lectures and chaired symposia at the Congress.

*Congratulations on an Outstanding Accomplishment, Dr. Tigno!*

## Drs. Michael Selmanoff and Gloria Hoffman Co-organize 6th Annual Program in Neuroscience Symposium

**Dr. Michael Selmanoff** and Dr. Gloria Hoffman have co-organized the 6th Annual Program in Neuroscience Symposium entitled "Hormones and Higher Brain Function: Think About It" It was held on May 6, 2003 at the University of Maryland, Baltimore in the School of Nursing Auditorium. The symposium brought together internationally recognized researchers who apply

molecular, cellular and behavioral approaches. It featured rapidly developing neuroscience research regarding the neuroendocrinology of higher brain function. Speakers highlighted the interplay between basic and translational research in this area and presented studies utilizing experimental animals, non-human primates and human subjects. In essence, the Symposium explored how

hormones affect cognitive development, adult learning, memory and psychiatric disorders. One of the featured speakers was Physiology's Margaret McCarthy, Ph.D., who spoke on "New Models of Prenatal Brain Injury: Modulation by Gonadal Steroids."