

Department of Physiology News

Dr. Mordecai Blaustein Named Research Lecturer of the Year

Dr. Mordecai Blaustein was selected as the Faculty Research Lecturer of the Year for this year's Founders Week Celebrations.

Each year, three awards are given: the Public Service Award, Teacher of the Year, and Faculty Research Lecturer of the Year.

Dr. Blaustein received his award during the Founders Day Gala on Wednesday, October 23rd. This year's gala was held at the Renaissance Harborplace

Hotel and was a black-tie affair. The awards were presented during the program.

As an award winner, Dr. Blaustein was a guest of President and Mrs. Ramsay.

As the Faculty Research Lecturer of the Year, Dr. Blaustein gave a lecture on Tuesday, October 22 at 4:00 p.m. in Davidge Hall. Dr. Blaustein's 45 minute talk, presented to colleagues, students and staff, was entitled "Cation Conspiracy:

Sodium, Calcium and Digitalis."



Mordecai P. Blaustein, M.D. presents the 2002 Distinguished Lecture on October 22, 2002 in Davidge Hall.

Joseph R. H. Mauban Receives Glaser Research Prize

Joseph R. H. Mauban, a Physiology graduate student who works with Dr. W. Gil Wier, was awarded the Edmund M. Glaser Research Prize on October 18, 2002 at the Membrane Biology Retreat in Harper's Ferry, WV.

The Edmund Glaser Research Prize was recently established as an award to be presented annually to a pre-doctoral fellow alternating with a post-doctoral fellow in alternate years. The award is based on a first-authored article of the trainee published during the preceding year, and is given for a research project involving imaging methods and their application in the

broadest sense. The Department solicits names of potential awardees from all of the primary and secondary faculty members.

Joe Mauban began working in Dr. Wier's lab during the summer of 1998. Dr. Wier quickly found out that Joe had exceptional skill in mechanics and optics when he asked Joe to help him work on a combined confocal and 2-photon microscope. Indeed, Joe was named as one of the authors in an article for *American Journal of Physiology*, in which Dr. Wier's group published the microscope's design and a study of its performance. Joe took all of the images published in that paper, and, as Dr. Wier stated in the nomination letter "was deeply involved in the quantitative analysis of its performance."

The awardee receives a monetary prize and a framed certificate, and his/her name is added to the Glaser Research Prize plaque that is displayed in the Barraclough/



Dr. Mordecai Blaustein, who presented the Glaser Award, Mr. Joseph Mauban, the recipient, and Dr. Edmund M. Glaser, for whom the award was named (left to right).

Channing Conference Room.

Congratulations to Joe for being our first recipient of the Glaser Research Prize!

New Graduate Students Welcomed at Party On September 27th

The Department of Physiology's new graduate students were welcomed at a party in their honor on Friday, September 27, 2002 in the Channing/Barraclough Conference Room. Pictures of several of our new students that were taken at the party are shown below. Following are our new Physiology Graduate Students:

Ph.D. Students

Adina Dumitrescu

Gang Lu

John Streicher

M.D./Ph.D. Students

Amber Bowie

Masters Students

Sergei Bhatta

Eric Payne

Jacob Wynes



New graduate student John Streicher, with Dr. Jim Wade (*left to right*).



New Master's student Sergei Bhatta, Dr. Scott Thompson, new graduate student Adina Dumitrescu, and Dr. Mordecai Blaustein (*left to right*).



Dr. Robert Bloch and new Master's student, Gang Lu (*left to right*).



Master's students Laura Recchi and Dominique Pichard (*left to right*).



Graduate Student Dana Yoo, Dr. Paul Welling and Dr. Djik Maouyo (*left to right*).

Other Departmental News

Dr. Robert Bloch was named a member of the Scientific Advisory Committee of the Muscular Dystrophy Association.

Dr. Darrin Brager and Ms. Jill Humphrey are the parents of a new baby girl, Sarah Devyn Brager, born on October 9, 2002. Sarah weighed 7 lbs. 9 oz. and was 21 inches long. Congratulations Darin and Jill!



Sarah Devyn Brager



Evan Mason Jacobs

Susanne Mason gave birth to a baby boy, Evan Mason Jacobs on October 20th. Evan weighed 7 lbs. 1 oz. and was 19.5 inches long. Congratulations Susanne!

Dr. Barbara C. Hansen lectured on “metabolic syndrome” in Japan at the “Complications of Diabetes” meeting held in Tokyo, October 2-13, 2002.

Dr. Hansen was the scientific advisor for “New Weapons to combat an ancient disease: Treating diabetes,” an article that was published in FASEB’s *Breakthroughs in Bioscience*.

Dr. Qianben Wang successfully defended his dissertation on October 10, 2002. The title of his thesis was “Identification of Novel Androgen Receptor (AR) Coactivator Complexes and A Molecular Examination of N-Terminal Glutamine Repeat Polymorphism on AR Function.” Dr. Wang is now working as a Postdoctoral Fellow with Dr. Joseph Fondell at the Robert Wood Johnson School of Medicine at the University of Medicine and Dentistry of New Jersey.

Welcome to New Members of the Department of Physiology

Lily Alemi— Lab Assistant working in Dr. Bloch’s Laboratory.

Greg Berg— Accounting Associate working in the Department of Physiology Business Office.

Kena Desai - Research Lab Assistant working in Dr. Thompson’s laboratory.

Phyllis Pope— Administrative Assistant II working in the Department of Physiology office.

Dr. Christian Reich—a Postdoctoral Fellow working in Dr. Alger’s Laboratory.

Xiang Cai— new Postdoctoral Fellow working in Dr. Thompson’s lab.

Latrecee Nance—Lab Assistant working in Dr. Welling’s laboratory.

Jennifer Cain— Academic Coordinator for the Physiology Graduate Program.

Justin Berning— Research Assistant in Dr. Hansen’s lab.

Shiyong Ding—Postdoctoral Fellow in Dr. Hansen’s Lab

Shuxun Ren, M.D.—Postdoctoral Fellow in Dr. Wang’s Lab

Cristina Caplinger—Word Processing Operator in Dr. Alger’s office.

Everyone in The Department of Physiology is glad to have all of you here!

New Faculty Publications

Drs. Christine Lamont and W. Gil Wier recently published a paper in *Circulation Research* entitled “Evoked and spontaneous purinergic junctional Ca^{2+} Transients (jCats) in rat small arteries. *Circul. Res.*, 2002; 91:454-456. The image to the right appeared in their article.

Figure Legend: Junctional Ca^{2+} transients in line-scan images, expressed as fluorescence pseudo-ratios (F/FO).

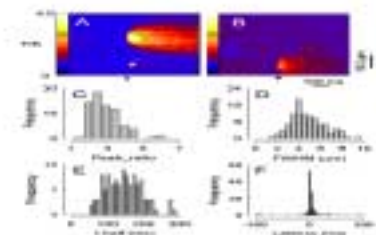


Fig. 2. Appearance of

Other Departmental News (continued)

Dr. Tami Kingsbury gave birth to a baby girl on October 27th named Jacqueline.

Dr. Keith Dilly, former graduate student who worked with Dr. Jon Lederer started a new position on October 21, 2002 as a postdoctoral fellow at Columbia University working in the laboratory of Robert Kass, Chair of the Department of Pharmacology.

Ashish Bagal, an MD/PhD student, recently ran the Baltimore Marathon and completed it in 3 hours, 50 minutes. Way to go Ashish! What an accomplishment!

Dr. Scott Thompson served on the NIH study section MDCN1 on October 17th.

Evelyn Elizabeth, a long time member of our department's staff, in Dr. Alger's group, has become a grandmother for the first time. Her granddaughter, Siobhan (pronounced Sheven), 8 lbs. 9 oz. and 21" tall, was born at 3:30 PM, November 26, 2002. Congratulations Evelyn!

Jimok Kim, a Neuroscience graduate student in Dr. Alger's laboratory, presented a thesis proposal on December 18, 2002, entitled "Muscarinic Regulation of Endocannabinoid Release in the Hippocampus."

Graduate students **Armina Kazi** (Physiology) and **Stu Amateau** (Neuroscience) were both recipients of research grants from the Women's Health Research Group. Armina's project is entitled "Estrogen Receptor Signaling and Vascular Endothelial Growth Factor." Stu's grant is entitled "Mechanism of Estradiol Action in the Developing Brain"

The 5th Annual Retreat on Reproductive Biology was held on October 23 at Benjamin Banneker Historical Park & Museum in Oella, Maryland. Included in the program were 20 minute presentations by Physiology doctoral students Genell Hilton and Armina Kazi. The keynote address for the Retreat was given by Dr. Erika Matunis of the Carnegie Institute of Washington, D.C. who spoke on "Control of Spermatogonial Stem Cell Renewal in Drosophila."

The 35th Annual Meeting of the Society for the Study of Reproduction (SSR) was held at the Baltimore Marriott Waterfront Hotel from July 28-31. Bob Koos, Chair of the Local Arrangements

Committee, reports that the meeting was a big success. The attendance of 1183, including scientists from 27 different countries, was a new record for the Society. The meeting also finished in the black, generating more than \$73,000 for the SSR. Many students and fellows from Physiology and other departments and programs made a major contribution to the meeting's success by serving as AV technicians for the all PowerPoint Program.

Eric N. Olson, Ph.D., Professor and Chairman of the Department of Molecular Biology at the University of Texas Southwestern Medical Center will present the Maryland Center for Health, Hypertension and Kidney Disease's Eighth Distinguished Lecture on Thursday, April 3, 2003 at 12:00 Noon in the MSTF Auditorium.

Christopher Miller, Ph.D., Professor, Department of Biochemistry, Brandeis University, will present the 13th Daniel A. Nachshen Lecture on Thursday, May 15, 2003 at 4:00 p.m. in the Dennis Auditorium of the VA Medical Center. A reception will be held in the classroom adjacent to the Dennis auditorium at 3:30 p.m. Dr. Miller is widely known for his research on ion channels and channel toxins.

Faculty Publications (continued)

(Continued from page 3)

Drs. Barbara Hansen and Stephen Angeloni recently completed a chapter for a book from the series "Frontiers in Animal Diabetes Research." The chapter will appear in Volume 5 of the series titled "Insulin Resistance and Insulin Resistance Syndrome" edited by Barbara Hansen and Eleazar Shafir. The book is published by Taylor and Francis, 2002. The title of their chapter is "Molecular Features of Insulin Resistance, Obesity, and Type 2 Diabetes in Non-Human Primates."

Dr. Hansen also has a chapter that published in D.J. Ekerdt (Ed.). The Encyclopedia of Aging, New York: Thomson Gale (3) 1018-1022, 2002.

Dr. Hansen and Heidi Ortmeyer have also recently published a paper in *Diabetes*, entitled "Skeletal muscle insulin resistance in obesity-associated Type 2 diabetes in monkeys is linked to a defect in insulin activation of protein kinase C- ζ/η ," *Diabetes*, 51:2936-2943, 2002.

Dr. Hansen was cited in *U.S. News and World Report* on August 19, 2002 concerning obesity treatment.

Drs. Vera Golovina and Mordecai Blaustein recently had a manuscript published in *AJP: Cell Physiol.*, entitled *Na⁺ Pump Alpha-2 Subunit Expression Modulates Ca²⁺ Signaling.*, *Am. J. Physiol., Cell Physiol.* **284**:475-486, 2003.

Drs. Jin Zhang, W. Gil Wier, and Mordecai Blaustein just published

an article in *American Journal of Physiology, Heart and Circulatory Physiology* entitled "Mg²⁺ blocks myogenic tone but not K⁺-induced constriction: Role for SOCs in small arteries" *Am. J. Physiol. Heart Circ. Physiol.* **283**: H2692-H2705, 2002.

New Grants Awarded in Physiology Department

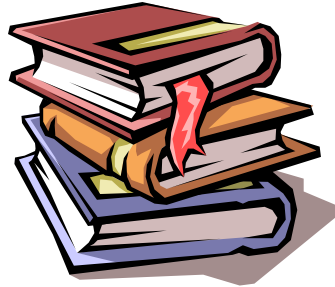
Dr. Vera Golovina received a two-year Grant in Aid from the AHA Mid-Atlantic Division for \$60,000 direct costs for her project "Store-Operated Calcium Entry in Vascular Smooth Muscle Cells."

Dr. James Wade received a three-year AHA National Center Grant in Aid for \$65,000 direct costs for his project: "Regulation of Renal Sodium Transporters."

Dr. Yibin Wang received a one-year supplement to his existing NIH grant for \$38,743 direct costs.

Dr. Wang is also PI of Project 3 of a program project grant recently awarded to Dr. Terry Rogers. It is a five year award. Dr. Wang's project is "Local Signals and Macromolecular Architecture in Heart."

Dr. Paul Welling received a new four-year NIH grant award for \$235,000 direct costs for his project "Polarized Trafficking of K⁺ Channels in the Kidney."



Dr. Barbara Hansen received a contract from GlaxoSmithKline for \$188,525 direct costs for her project "Efficacy study of GW834956 in Obese Hyperglycemic Monkeys."

Dr. Jennifer Jones, who is currently a postdoctoral fellow in the laboratory of Dr. Robert Koos, was recently unanimously selected by the MORE_WH Scholars Selection Committee for a BIRCWH Scholars Grant from the NIH.



SUPER BOWL CORNER!

The big game between the Raiders and Buccaneers is this Sunday. The pre-game kicks off at 4 p.m. Kickoff is scheduled for after 6. **DID YOU KNOW?**

San Diego, the home of this year's Super Bowl, is the avocado capital of America. California officials estimate 40 million pounds of guacamole, which is made from avocado, will be eaten during the Super Bowl game during parties. That would be enough to cover a field in five feet of guacamole.

No Doubt will join **Shania Twain** by performing live during halftime.

We polled 20 members of the Department of Physiology, faculty and staff, and asked which team they think will win Super Bowl XXXVII and the results were:

54% Raiders
46% Tampa Bay

You might enjoy a great party recipe for Super Sunday.

Bar Nuts

These nuts won The New York Press award for "best bar nuts in New York" from The Union Square Café Cookbook:

- 1/4 pound each peeled peanuts, cashews, brazil nuts, hazelnuts, walnuts, pecans, and whole unpeeled almonds
- 2 tablespoons coarsely chopped fresh rosemary
- 1/2 teaspoon cayenne
- 2 teaspoons dark brown sugar
- 2 teaspoons kosher salt
- 1 tablespoon butter, melted



Preheat the oven to 350 degrees F. Toss the nuts in a large bowl to combine and spread them out on a cookie sheet. Toast in the oven until they become light golden brown. In the large bowl, combine the rosemary, cayenne, brown sugar, salt and melted butter. Thoroughly toss the warm toasted nuts with the spiced butter and serve warm. ENJOY!