

# The Medical Scientist Training Program

School of Medicine & Dentistry - University of Rochester Medical Center

## MSTP Newsletter



VOLUME 3, ISSUE 2 UNIVERSITY OF ROCHESTER

SPRING/SUMMER, 2007

### Message from:

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MSTP Executive Committee

The University of Rochester Clinical and  
Translational Science Award: New  
Opportunities for MD/PhD Students

In October 2005, the National Center for Research Resources finally issued their first solicitation for Clinical and Translational Science Awards (CTSA). The CTSA Program is the flagship of the NIH Roadmap Initiative. This is to create academic homes for research which translates basic science to human studies (so-called bench to bedside or T1 research) or translates bedside studies to diagnostic or therapeutic modalities useful in clinical practice (so-called bedside to clinic or T2 research). The University of Rochester application was submitted in March 2006 with the School of Medicine & Dentistry Dean, David S. Guzick, MD, PhD, as Principal Investigator and myself as Co-Principal Investigator. Its approval and funding in the fall of 2006 made it the largest NIH grant in the history of the University of Rochester with over 40 million dollars to be spent on research infrastructure at URMCC over the next five years.

What impact does the CTSA Program have on the MD/PhD Program? First, the CTSA funds one or two MD/PhD program students in each of the four or so years of their graduate training. In the first year of the award, four MD/PhD students received

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stipend and tuition support, which would otherwise have been supplied by School of Medicine or other funds. These students are featured on page 8 of this newsletter. Second, the CTSA Program also funds other medical student research programs, such as the Academic Research Track. Each year this supports seven year-out medical students to do clinical or translational research.

Next, the CTSA Program is in the process of initiating three new graduate degree programs: a Master of Science in Clinical Investigation (MSCI); a Master of Science in Translational Biomedical Research (MSTR); and a new PhD in Translational Biomedical Science. The MSCI program is already approved by the New York Department of Education and the other two have an anticipated start in Fall, 2007. The PhD in TBS emphasizes multidisciplinary research and could be elected as the doctoral program for MD/PhD training, especially for those with interests in T1 research.

The CTSA Degree Programs will also create a number of new courses of potential interest to MD/PhD students. A new course

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in Health Informatics was offered this past fall semester. The MSTR Program will offer a course in Translational Research Methods and a second course in Experimental Therapeutics. New Skill-Building Workshops will be offered in Academic Career Development and one in Community Participatory Research. In addition, a URM-wide Clinical and Translational Science Seminar Series held on Tuesdays, 12:15 – 1:15 pm, features translational investigators from URM and other institutions.

The offerings of the CTSA are not limited to training. There are ten so-called Key Functions, which provide resources and expertise to investigators, including MD/PhD students. For example, there is a pilot studies program which includes a category for trainees, in which students can apply for funds to carry out those initial experiments which lead to new research projects. Another pilot-type grant offered entails novel clinical and translational methodology. This funds initiatives to create new laboratory tools to address previously unapproachable questions. Funds to acquire new technologies for URM researchers are also available. The General Clinical Research Center now provides Patient and Clinical Initiatives for the study of human subjects in both inpatient and outpatient settings. A Biomedical Informatics Key Function is developing the institute's capacity to access information and data more efficiently. Consultation services in Study Design, Biostatistics, and Research Ethics are supported. Finally, there is assistance with a variety of regulatory issues, such as Research Administration, Technology Transfer, Research Subjects Review Board, etc. All these resources are being developed to enhance the research environment at URM.

Another innovative aspect of the U of R CTSA Program is creation of an Upstate

New York Translational Research Network, consisting of 10 institutions in Upstate New York which perform biomedical research. A variety of activities are planned including facilitation of inter-institutional collaboration in translational research through funded pilot studies, an inventory of research resources in the region, etc.

Finally, the plans have progressed to literally create a new home for clinical and translational science at URM. Ground has already been broken for a new Clinical and Translational Science Building, planned for opening in 2009 with 150,000 square feet dedicated to CTSA-related programs.

The intent of the CTSA Program is to transform research at URM. As a program that traditionally emphasizes basic sciences translated to clinical medicine, the MD/PhD Program will be heavily involved. In this way, the CTSA is good news for MD/PhD training and for all types of research at the University of Rochester.

## Calendar of Events:

### **May 18, 2007**

- School of Medicine & Dentistry M.D. Commencement, Eastman Theatre

### **May 19**

- School of Medicine & Dentistry Ph.D. Commencement, Eastman Theatre

### **June 15-16**

- Annual MD/PhD Program whitewater rafting/camping trip, Black River, Watertown, NY

### **July 9**

- Instruction begins: MS3, MS4

### **July 26-29**

- Annual MD/PhD Program National Conference, Keystone, Colorado

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## Calendar of Events, Con't.

### **August 10**

- Annual MD/PhD Program Retreat, Steamboat Landing, Canandaigua, NY

### **August 13-17**

- SMD Orientation, First Year Medical Students

### **August 14**

- **MSTP Orientation Dinner, First Year Medical Students, Dr. Kerry O'Banion**

### **August 22**

- Orientation, First Year Graduate Students *(MSTPs exempt from overview of school services, but attendance at cluster/graduate program meetings is highly recommended)*

### **September 4**

- Classes Begin, First Year Graduate Students

**Scott Peslak** (M2) just announced his engagement to Laurie Wager. Laurie is beginning graduate studies at St. John Fisher College in Rochester for a master's degree in Math, Science, and Technology Education and plans to be a high school physics and chemistry teacher. Scott and Laurie are to be married in August 2008.



Laurie Wager and Scott Peslak

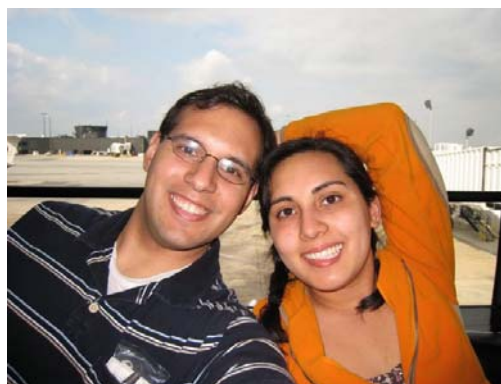
## Engagements

**David Meoli** (G3 in Pharmacology & Physiology in the Cardiovascular Research Institute; Jim White, M.D., Ph.D., advisor) became engaged to AnnMarie Ellie, RN, MS. AnnMarie grew up in Greece, NY and attended Our Lady of Mercy High School. She obtained her nursing degree at Georgetown University and her masters degree at the University of Rochester. AnnMarie works as a Clinical Nurse Specialist on the Neurology and Neurosurgery floors at Strong Memorial Hospital. A November 10, 2007 date has been set for the wedding.



AnnMarie Ellis and Dave Meoli

**Ana Tablante** (G2 in Pharmacology/Physiology; advisor is Mark Noble, Ph.D.) received a surprise proposal on a beach while vacationing in Goa, India! Very romantic...fiancé Daniel Nunes is a software specialist at SiteAdvisor, a small startup company. An August, 2008 wedding is planned, which hopefully won't conflict with the annual MSTP retreat!



Dan Nunes and Ana Tablante



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## Past Events

**Tomas Ganz, M.D., Ph.D.** kicked off the "Spring" MSTP Seminar Series on January 15, 2007. Dr. Ganz is Professor of Medicine and Pathology at UCLA, as well as Director of the Will Rogers Pulmonary Research Institute. His talk was titled "Give Chance A Chance: A Tale of Scientific Discovery".

**Kevin Makino**, G2 in health services research (Bruce Friedman, Ph.D., advisor) raised \$1,670.50 for the Special Olympics by diving into frigid Lake Ontario for the annual Polar Plunge on February 18, 2007. Very brave for a young man from Hawaii!



Kevin Makino at the Polar Plunge

**MSTP students, spouses, and friends had perfect winter conditions on 2/24/07 for the annual Ski Day held at Bristol Mountain.** Twenty students and guests sped down the powdery slopes on a sunny, crisp day and enjoyed Dinosaur BBQ for dinner!



Adam Dziorny and Owen Zacharias, webmaster

**Martin Zand, M.D., Ph.D.**, was the second seminar speaker of the semester on February 26, 2007. He spoke on "A Long and Winding Road: Academic Medicine, Research and an MD, Ph.D." Dr. Zand is Associate Professor of Medicine in the Nephrology Unit, Microbiology & Immunology and Medical Humanities and Medical Director of the Kidney and Pancreas Transplant Programs at the University of Rochester.

**The March MD/PhD Social Event was CURLING!** It was held at the Rochester Curling Club on March 2 (yes, there IS such a thing!). This Olympic sport was a big success and the many first-timers (including our director, Dr. Kerry O'Banion) who tried it want to make it an annual event.



Our MSTP Director in the curling act!

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**Melanie Wellington, M.D., Ph.D. and Damian Krysan, M.D., Ph.D.** both Assistant Professors in the Pediatric Infectious Disease Unit presented the third seminar on March 26, 2007. They shared their unusual stories of despair and deliverance with an emphasis on deliverance and were very inspiring to all students!

**March 30-31 was the annual MSTP Revisit for accepted applicants.** Six applicants participated in the elegant Friday evening dinner at the Rochester Academy of Medicine. On Saturday, MSTP students coordinated and participated in a housing tour, City of Rochester and world-famous Eastman House tours and an indoor rock climbing event at RockVentures. Finally to cap the two-day Revisit was a dinner at Bamba Bistro on Alexander St. attended by faculty, staff and students.

**James Hart** (G3 in chemistry) and **Kofi Mensah** (G2 in microbiology & immunology) represented the MSTP at the annual **American Physician-Scientist Association Conference in Chicago, Illinois April 13-15.** Jim presented a poster on "Improving RNA Secondary Structure Prediction with NMR Experimental Restraints". Kofi is the official UR MSTP representative for the APSA meetings. APSA is a student-organized association promoting careers for physician scientists. More information can be found at this website: <http://www.physicianscientists.org/>

**The Upstate New York MD/PhD Program Research Conference** was held Saturday, April 14, 2007 and hosted by SUNY Upstate Medical University in Syracuse, New York. Three MD/PhD Programs participate on a biannual basis: University of Rochester, SUNY Upstate Medical University and University at Buffalo. 2 students gave oral presentations and 3 presented posters. Twelve Rochester MSTP students represented our Program, as well as Dr. Kerry O'Banion, MSTP Director.

**Kate Eisenberg** (G2 in epidemiology; Edwin vanWijngaarden, Ph.D., advisor) attended the Physician-Scholars in the Social Sciences and Medical Humanities Conference April 20-22,

2007 in Chicago, Illinois. The main topic was "Rethinking Health, Culture and Society". The conference had an excellent line-up of speakers in various stages of their careers from across the country.

**The annual MSTP Graduation Party was held Sunday, May 6 to honor our two graduates, Matthew Bellizzi and Kuei-Cheng Lim at Mario's via Abruzzi restaurant.** An enormous brunch was enjoyed by 58 students, staff, friends and families. Congratulations, Matt and Kuei! Commencement ceremony was Friday, May 18 to make it official. See Page 7 for more details on Matt and Kuei's research and residency plans.



Kuei Lim, Matt Bellizzi & son Braden



(left to right: Kerry O'Banion, M.D., Ph.D., Kuei Lim, M.D., Ph.D., Cathy Senecal-Rice, Brigid Waterhouse at Graduation Party)



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**Goergen Hall for Biomedical Engineering and Optics, a five-story building on the River Campus, was dedicated on May 17, 2007. It is named after Robert B. Goergen, prime benefactor, University trustee and alumnus. Since the MSTP currently has 4 students in the BME Graduate Program, this is a very exciting event. Richard Waugh, Ph.D., Chair of Biomedical Engineering has been extremely supportive of MSTP students and served for many years on the MSTP Admissions Committee.**



**May 23, 2007 was the date of another major MD/PhD Program luncheon seminar presented by James Battey, M.D., Ph.D., Director of the National Institute on Deafness and Communications Disorders (NIDCD). Dr. Battey's seminar focused on physician-scientist career paths at NIH and was co-sponsored by the Department of Neurobiology & Anatomy and the MD/PhD Program. A great turnout of 30 enjoyed Mediterranean food and Dr. Battey's wonderfully informal style in giving advice on career development.**

The University of Rochester School of Medicine Graduate School Commencement and Dinner was held on Friday, May 23, 2007. Three MSTP students obtained their graduate degrees: Tara Arndt, Ph.D. in Toxicology, Solomon Shaftel, Ph.D. in Neurobiology & Anatomy, Christine Gorman Zanghi, Ph.D. in Microbiology & Immunology. Congratulations to all of you from the MSTP!



(left to right: Tara Arndt, Ph.D., Solomon Shaftel, Ph.D., Christine Gorman Zanghi, Ph.D.)

June 15-16, 2007 was the date for the MSTP whitewater rafting/camping trip. Eleven students, the MSTP Director, as well as families and friends attended. Splendid weather was provided for this fun social event with only two students falling overboard.



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## CONGRATULATIONS!

### *Medical Scientist Training Program Class of 2007*



Kuei-Cheng Lim, M.D., Ph.D. (left), Kellin King, M.D. (Matt's wife), Matt Bellizzi, M.D., Ph.D.

Two MSTP students have completed their tenure with us and are moving on effective May 18, the School of Medicine commencement at the Eastman Theatre.

**Matthew Bellizzi** matriculated in August, 1999 from Harvard University with a B.A. in biology (1996). He carried out research exploring the effects of HIV-associated inflammation on activity-dependent neural function in the Interdepartmental Graduate Program in Neuroscience. Matt's adviser was Handy Gelbard, M.D., Ph.D., Professor of Neurology, Pharmacology & Physiology, Pediatrics, Microbiology & Immunology and newly appointed Interim Director of the Center for Aging and Developmental Biology. Matt successfully defended his thesis on June 4.

Matt will be staying in Rochester with his wife Kellin, a 3<sup>rd</sup> yr. resident in Medicine/Pediatrics (also is an alumnus of the School of Medicine) and son Braden.

He will be entering the neurology residency program at Strong Memorial Hospital.

**Kuei-Cheng Lim** entered the MSTP in August, 1998 coming from Johns Hopkins University with a B.A. in a double science major. Kuei entered the lab of Dr. Howard Federoff in August, 2000. His research was also in the Interdepartmental Graduate Program in Neuroscience and focused on activity-dependent secretion, localization and proteolytic processing of nerve growth factor in hippocampal neurons. He defended in July, 2005.

Kuei will be pursuing an internship in preliminary medicine at NY Presbyterian Hospital followed by a residency in neurology at NYU School of Medicine.

We wish the best to both of them in their careers and hope they keep in close touch for more reasons than just to update us for the MSTP grant renewal!

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## STUDENT HIGHLIGHTS

### CTSA Grant Awardees

The Clinical and Translational Science Award (CTSA) was recently awarded to the University of Rochester in the amount of \$40 million, the largest ever in the history of the University. It provides support for pre-doctoral training in translational research leading to the PhD degree. In future years, the grant will support both PhD, and MD-PhD students who are doing translational research. In this first year, the grant provided support for these four MD-PhD students:

**Kate Eisenberg** is in her second year of graduate school in the Epidemiology graduate program. She is working under Edwin van Wijngaarden, PhD, Assistant Professor of Community and Preventive Medicine. Kate's research is on the epidemiology of lead exposure in recently-arrived refugee children in the United States. She is working with state refugee health programs and local refugee healthcare providers to collect blood levels and other data from refugee children just after they arrive in the U.S. and again 3-6 months later. Her goal is to determine the risk of lead exposure after refugee resettlement and the associations between behavior, culture, world region of origin, and lead exposure.



Kate grew up in Ithaca, New York, and graduated from Princeton University in 2002 with a degree in Ecology and Evolutionary Biology. She spent the year after graduation as an Emerging Infectious Disease Fellow at the New York State Department of Health in Albany, where she studied genetic variation in malaria vector mosquitoes. In 2003 she started in the MD/PhD program. Her research interests include infectious disease, epidemiology, medical ecology, and public health.

Since coming to the University of Rochester, she has participated in a variety of public health-related projects. In 2004 she received the Gilbert Forbes Prize in Pediatrics for her work on the effectiveness of the influenza vaccine in young children, and in 2005 she traveled to Johannesburg, South Africa to study the epidemiology of tuberculosis in an HIV primary care clinic. Kate and her husband have a daughter, Dylan, who was born in August 2006, as well as an enormous dog, Snuffy. Her other interests include outdoor sports, reading, and baking.



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**Kevin Makino** (G2, Health Services Research and Policy, Bruce Friedman, Ph.D., advisor) grew up in Mililani, Hawai'i, and graduated from Oberlin College in 1999 with a degree in Biopsychology and Psychology. After graduating, he spent two years working in Washington, D.C. as a Post-Baccalaureate Intramural Research Training Awardee, where he studied the role of omega-3 essential fatty acids in psychiatric disorders at the National Institute on Alcohol Abuse and Alcoholism. Kevin spent the next two years in northern California, where he worked as a substance abuse counselor at a long-term residential treatment facility.

The combination of his experiences as a basic scientist and as a counselor working with disenfranchised populations led Kevin back to academia, and eventually to the Division of Health Services Research and Policy, where he is currently in his second year of graduate studies under the advising of Bruce Friedman, PhD. His research is focused on health policy analysis and design in order to reduce disparities in health and health care among children in the United States. In his free time, Kevin plays Capoeira (an Afro-Brazilian fight-dance and game), spends time and money on the vortex that is home ownership, and publicly embarrasses himself for charity (see page 4 for more about this particular hobby.)



**Susan Lee** (G1 in Neuroscience, advisor is Loisa Bennetto, Ph.D., Assistant Professor of Clinical and Social Psychology). Susan was born in Seoul, Korea and immigrated at the age of seven. She grew up in Los Angeles, CA, and completed her undergraduate work at Pomona College, where she graduated with honors in Psychology. Prior to coming to Rochester, she spent a few years doing research at UCLA, where she studied the neural networks underlying language processing in children with autism using functional magnetic resonance imaging (fMRI).



Since her matriculation in the program, she has been working with Dr. Loisa Bennetto, Assistant Professor of Clinical and Social Psychology. Susan's research focuses on a class of visuomotor neurons first identified in the ventral premotor cortex of the macaque monkey. These neurons are activated while a macaque monkey performs goal-oriented actions or observes the same action being performed by others. An analogous "mirror neuron system" (MNS) has been demonstrated in humans, and it has been proposed that deficits in the MNS may lead to the cascade of impairments that are

characteristic of autism spectrum disorders (e.g., deficits in imitation, theory of mind, and social

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communication). Susan's goals are to use fMRI and behavioral assessments of children with and without autism to better understand the role of the MNS in biological motion processing and multimodal integration. MNS involvement will be tested in various functions, such as language and gesture comprehension, and anticipated results will have significant impact on behavioral therapy.

Susan has been in Rochester for three years now and her life has also been enriched by the addition of two adorable little kitties to her home. Her other interests include travel, movies, and dance.

**Kofi Mensah** (G1 in Microbiology & Immunology, advisor is Eddie Schwartz, Ph.D., Professor of Orthopaedics in the Center for Musculoskeletal Research) grew up in New York City and attended the Townsend Harris High School, whose alumni include such notables as Ira Gershwin, Eugene Lang and Jonas Salk. From there, he entered the University of Rochester Early Medical Scholars (REMS) BS/BA-MD program in 2000 where he received a bachelor of science in microbiology and immunology as well as a certificate in biotechnology. He maintained a sense of academic well-roundedness outside of the biological sciences by completing a minor in Spanish and a minor in health and society.



Kofi's research is on identifying biomarkers for inflammatory arthritis with Edward Schwarz, PhD and Christopher Ritchlin, MD. He will use cell and tissue samples from both murine models and human patients with inflammatory arthritic conditions to make comparisons and correlations. This work stems from clinical observations about differences in the presence of joint erosions seen with inflammatory arthritis between different autoimmune diseases like SLE and RA. The biomarkers that are elucidated from this work could serve as clinical tools to monitor disease status and the efficacy of anti-arthritic therapy. They could also clarify the role of various biological pathways in the development of autoimmune arthritis, which will lead to more effective medications.

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## HONORS AND AWARDS

**Thaddeus Carlson** (G5 in microbiology & immunology, Ben Segal, M.D., advisor) was honored by receiving the annual Whitaker Award at the Consortium of Multiple Sclerosis Centers annual meeting May 30-June 2, 2007. This award is given for outstanding research in the field of multiple sclerosis by a young scientist. In addition, Thad received a travel scholarship for having his abstract chosen to present at the meeting. The title of his Whitaker Research talk was "Polymorphonuclear Leukocytes Required for Target Organ Inflammation during Experimental Autoimmune Encephalomyelitis". **Michael Racke, M.D. (left) and Thad Carlson (right)**



**Yasser Elshatory** (G3 in neuroscience, Lin Gan, Ph.D., advisor) was awarded the highly competitive Agnes M. and George Messersmith Fellowship from the Vice Provost and University Dean of Graduate Studies, Bruce Jacobs, Ph.D. This Fellowship was established through a bequest from George Messersmith and is designated for graduate study in physics, chemistry, biology or preclinical medicine sciences. Yasser was nominated by his graduate department (neuroscience) and chosen from several outstanding candidates.

**Yasser** also received a Medical Student Fellowship Award from the Research to Prevent Blindness Foundation through the Ophthalmology Department. The award is scheduled to begin in Fall, 2007. **Yasser** presented his thesis proposal successfully on December 14, 2006. The proposal was entitled "Islet-1 as a Regulator of ON & OFF Visual Pathway Development and Cholinergic Phenotype Expression". Yasser's advisor is Lin Gan, Ph.D., Associate Professor of Ophthalmology in the Center for Aging & Developmental Biology.

**Yasser** was also selected from over 1500 applicants to receive the Association for Research in Vision and Ophthalmology's (ARVO) National Eye Institute Travel Grant. This grant funded Yasser's travel to the ARVO Annual Meeting in Ft. Lauderdale, FL May 6-10, 2007.

**Laurie Robak** (G4 in neuroscience) successfully proposed her thesis on "Class 5 Semaphorins as Modulators of Angiogenesis" on Friday, March 9. Laurie's advisor is Roman Giger, Ph.D., Associate Professor of Biomedical Genetics in the Center for Aging & Development Biology.

**Sarita Kishore** (G2 in neuroscience) successfully presented her thesis proposal on Thursday, April 26, 2007. Her proposal was entitled "Response Interactions in MST Neurons: Visual and Behavioral Influences". Sarita's advisor is Charles Duffy, M.D., Ph.D., Professor of Cognitive Behavioral Neurology, advisor to two MSTP alumni Michael Froehler and Mark Dubin.

**Nancy Ann Oberheim** (G4 in neuroscience; Maiken Nedergaard, M.D., Ph.D., advisor) presented a talk as well as received a travel award at the Glial Biology: Functional Interactions among Glia and Neurons" Gordon Conference in Ventura, CA. Her talk was entitled "Reactive Astrocytes Lose their Domain Organization Specifically in Seizure Pathologies". G.F. Tian, W.



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Peng, X. Han, T. Takano, B. Ransom and M. Nedergaard co-authored the abstract she presented.

**Solomon Shaftel** (G5 in neurobiology & anatomy), Kerry O'Banion, M.D., Ph.D. and John Olschowka, Ph.D., co-advisors) successfully defended his thesis on April 23, 2007. The title of his thesis: "The Role of Interleukin-1 beta (IL-1 $\beta$ ) in Chronic Neuroinflammation, Alzheimer's Disease and Leukocyte Recruitment to the Mouse Brain". Sol returned to third year medical school the following Monday! How's that for ambitious? Or just wanting to finish...

**Solomon** also is first author on a publication in the June 1 issue of *Journal of Clinical Investigation* (see **Publications** below for reference). The article was featured in a University of Rochester Press Release on 6/5/07. M. Kerry O'Banion, M.D., Ph.D., MSTP Director, was also featured in this article. <http://www.urmc.rochester.edu/pr/news/story.cfm?id=1533>

## PUBLICATIONS

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**Elshatory Y**, Deng M, Xie X, Gan L (2007). Expression of the LIM-homeodomain protein Isl1 in the developing and mature mouse retina. *Journal of Comparative Neurology* 503, 182-197.

Kyrkanides S, Fiorentino PM, Miller JN, Gan Y, Lai YC, **Shaftel SS**, Puzas JE, Piancino MG, O'Banion MK, Tallents RH (2007). Amelioration of pain and histopathologic joint abnormalities in the Col1-IL-1beta(XAT) mouse model of arthritis by intraarticular induction of mu-opioid receptor into the temporomandibular joint. *Arthritis Rheumatism* 56, 2038-2048.

Lankes HA, **Zanghi CN**, Santos K, Capella C, **Duke CM**, Dewhurst S (2007). In vivo gene delivery and expression by bacteriophage lambda vectors. *Journal of Applied Microbiology* 102, 1337-1349.

Santos K, **Duke CM**, Rodriguez-Colon SM, Dakwar A, Fan S, Keefer MC, Federoff HJ, Frelinger JG, Bowers WJ, Dewhurst S (2007). Effect of promoter strength on protein expression and immunogenicity of an HSV-1 amplicon vector encoding HIV-1 Gag. *Vaccine* 25, 1634-1646.

Wang, A. T., **Lee, S. S.**, Sigman, M., & Dapretto, M. (2007). Reading communicative intent in the face and voice: An fMRI study in children with autism spectrum disorder. *Archives of General Psychiatry*, 64(6), 698-708.

**Shaftel SS**, Kyrkanides S, Olschowka JA, Miller JH, Johnson RE, O'Banion MK (2007). Sustained hippocampal IL-1 $\beta$  overexpression mediates chronic neuroinflammation and ameliorates Alzheimer plaque pathology. *Journal of Clinical Investigation* 117, 1595-1604.

**Zanghi CN**, Sapinoro R, Bradel-Tretheway B, Dewhurst S (2007). A tractable method for simultaneous modifications to the head and tail of bacteriophage lambda and its application to enhancing phage-mediated gene delivery. *Nucleic Acids Research* 35, e59.

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## Alumni News



**Mark Burkard, M.D. ('02), Ph.D. ('00)** is the proud father of his **FOURTH** child! Finian Joseph Burkard came into the world on January 7, 2007. Mark and wife Karina (Ph.D. '01) have three other children, Nathaniel (5), Samantha (3), and Theodore (2). Mark is currently at Memorial Sloan-Kettering Cancer Center doing a hematology/oncology fellowship (research pathway).

**Ryan Hoefen, M.D. Ph.D.'05** (Pharmacology & Physiology in lab of Brad Berk, M.D., Ph.D., who is also an alum of the MD/PhD Program!) and wife, Makiko Ban (M.D. '05, also from University of Rochester) had their first child, a beautiful baby boy, Evan Hoefen on March 5, 2007 at 12:00 Noon! Evan weighed 8 lb., 2 oz. and was 22 inches long. He has Makiko's dark hair and Ryan's noble forehead.

Ryan is currently finishing the third year of internal medicine residency and will start a cardiology fellowship which begins in July, 2008 at Strong Memorial Hospital, University of Rochester.



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**Eugene Storozynsky, M.D. ('00), Ph.D. ('98)** completed a cardiology fellowship in June, 2006 at University of Rochester School of Medicine and is now a board-certified cardiologist. He is a Transplant Cardiologist at Strong Memorial Hospital in the Program in Heart Failure and Heart Transplantation. Eugene tells us "although I am currently a Senior Instructor in Clinical Medicine, I have been told that I am in line to be promoted to Assistant Professor in the next month or so. In addition to my responsibilities in the Transplant Program, I am also an Attending Cardiologist in the Echocardiography Laboratory as well as in the Cardiac Catheterization Laboratory where I perform Diagnostic Right Heart Catheterizations on the pre-transplant patients as well as endomyocardial biopsies on our post-transplantation patients."

Dr. Storozynsky and wife Carla Peracchia (MD '96) who is an internist at Clinton Crossings in Rochester are the proud parents of FOUR children! Maia, age 9; Siena, age 7; Roman, age 5.5; and Adrian age 2.5. The family celebrated Carla's grandmother's 100<sup>th</sup> birthday on May 4 when they visited her in Italy (see photo below)!





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## MD/PhD Alumni – Let us hear from you.

The MSTP competitive grant renewal for Year 33 is due in Spring, 2008. We now have 106 alumni and will be contacting each of you shortly asking you to update the information we currently have for you. Please help us eliminate the need to contact you repeatedly by responding as soon as possible to our inquiry. Thank you in advance for your help in this important process.

Our goal is to hear something from each graduate of the program. When we hear from you we will **bold** your name as a sign of acknowledgement. We encourage you to contact us and watch us **boldly** grow. **We need current e-mail addresses for names in RED.** Please contact Cathy Senecal-Rice, Administrator, MD/PhD Program at: [cathy\\_senecalrice@URMC.Rochester.edu](mailto:cathy_senecalrice@URMC.Rochester.edu)

Ackerman, Kurt D., M.D. 1991, Ph.D. 1990  
Adam, Jamie, M.D. 2001, Ph.D. 2000  
**Anolik, Jennifer H., M.D. 1996, Ph.D. 1994**  
**Arceci, Robert J., M.D. 1981, Ph.D. 1980**  
Bahler, David W., M.D., Ph.D. 1987  
**Bellizzi, Matthew, M.D., Ph.D., 2007**  
**Berk, Bradford C., M.D., Ph.D. 1981**  
**Bertuch, Alison A., M.D., Ph.D. 1993**  
**Bleicher, Paul A., M.D., Ph.D. 1983**  
**Bliss, Joseph, M.D., Ph.D. 1998**  
**Breneman, Stephen, M.D. 1998, Ph.D. 1996**  
**Brenner, Gary J., M.D., Ph.D. 1995**  
**Burkard, Mark, M.D. 2002, Ph.D. 2000**  
Burkat, Paul, M.D. 2003, Ph.D. 2001  
**Cheng, Shinta, M.D. 1995, Ph.D. 1994**  
Chin, Michael T., M.D. 1991, Ph.D. 1989  
**Colbert, Robert A., M.D. 1987, Ph.D. 1986**  
**Collins, Tucker O., M.D., Ph.D. 1981**  
**Dedon, Peter C., M.D., Ph.D. 1987**  
**Deng, Sophie, M.D., Ph.D. 2001**  
**DiLoreto, David, M.D. 1997, Ph.D. 1995**  
**DiPersio, John F., M.D., Ph.D. 1980**  
**Dragone, Leonard L., M.D. 1996, Ph.D. 1994**  
**Dubin, Marc J., M.D. 2004, Ph.D. 2002**  
Dunn, Michael G., M.D., Ph.D. 1983  
**Feulner, Lisa Kale, M.D., Ph.D. 1995**  
**Froehler, Michael, M.D. 2004, Ph.D. 2002**  
**Gallo, Richard L., M.D., Ph.D. 1986**  
**Gambello, Michael J., M.D., Ph.D. 1993**  
Goldstein, Barry J., M.D., Ph.D. 1982  
**Goldstein, Barry M., M.D. 1981, Ph.D. 1982**  
**Greene, James, M.D., Ph.D. 1998**  
Grimsrud, Christopher, M.D., Ph.D. 2000  
**Guillet, Ernest G., Jr., M.D., Ph.D. 1979**  
**Guillet, Ronnie B., M.D., Ph.D. 1980**  
Hall, Craig G., MD-PhD, 1984  
**Hallows, Kenneth R., M.D. 1995, Ph.D. 1994**

**Halterman, Marc, M.D. 2002, Ph.D. 2002**  
**Hoefen, Ryan, M.D., Ph.D. 2005**  
**Hsu, Lewis L., M.D., Ph.D. 1988**  
**Huang, Willis, M.D. 2005, Ph.D. 2003**  
Joseph, Luc, M.D. 1996, Ph.D. 1994  
**Junig, Jeffrey, M.D. 1987, Ph.D., 1986**  
Kasckow, John, M.D. 1987, Ph.D. 1986  
**Kenny, Alan, M.D. 2002, Ph.D. 2000**  
Kim, James, M.D., Ph.D. 1999  
**Kim, Jin, M.D. 2000, Ph.D. 1998**  
**Kimbrough, John, M.D., Ph.D. 2000**  
Koh, Sookyong, M.D. 1991, Ph.D. 1989  
**Kruse, John, M.D. 1990, Ph.D. 1989**  
**Kulas, Donald, M.D. 1997, Ph.D. 1995**  
**Lerner, Robert M., M.D. 1977, Ph.D. 1978**  
Lesser, Harold, M.D., Ph.D. 1989  
**Lichtman, Andrew H., M.D., Ph.D. 1981**  
**Lim, Kuei-Cheng, M.D., Ph.D., 2007**  
**Love, Paul E., M.D., Ph.D. 1987**  
**Malchoff, Carl D., M.D., Ph.D. 1978**  
Martin, Stephen S. M.D., Ph.D. 1981  
**Massa, Stephen M., M.D., Ph.D. 1984**  
**Mathews, David H., M.D. 2003, Ph.D. 2002**  
**Maytin, Edward V., M.D., Ph.D. 1985**  
**McAdam, Alexander J., M.D. 1995, Ph.D. 1994**  
**McFarland, Nikolaus, M.D. 2002, Ph.D. 2000**  
**Mendelsohn, Steven L., M.D., Ph.D. 1978**  
**Mendler, Jason, M.D. 2005, Ph.D. 2003**  
**Milano, Michael, M.D., Ph.D. 2000**  
Nasir, Adnan, M.D. 1995, Ph.D. 1994  
**Navon, Samuel E., M.D., Ph.D. 1989**  
**Nead, Michael, M.D., Ph.D. 1999**  
**Nguyen, Minh-Doan Thi, M.D. '02, Ph.D. 2000**  
**Nichols, Alan R., M.D., Ph.D. 1980**  
Nierenberg, Jay, M.D. 1997, Ph.D. 2001  
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Palmer, Edward, M.D., Ph.D. 1980

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**Peale, Franklin V., Jr., Ph.D. 1989, M.D. 1990**

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**Podell, David N., M.D., Ph.D. 1980**

Profenno, Louis, M.D., Ph.D. 1999

**Proweller, Aaron, M.D., Ph.D. 1998**

Querfurth, Henry W., M.D., Ph.D. 1983

**Ribes, Julie A., M.D., Ph.D. 1990**

**Richards, Julie, M.D. 2004, Ph.D. 2002**

**Roberts, Alice, M.D., Ph.D. 1999**

**Roda, Ricardo, M.D. 2005, Ph.D. 2003**

**Roshal, Mikhail, M.D. 2005, Ph.D. 2003**

**Rosier, Randy N., M.D., Ph.D. 1978**

Rubin, Edward M., M.D., Ph.D. 1980

**Rumbaugh, Jeffrey, M.D., Ph.D. 2000**

**Sandhu, Faheem A., M.D. 1995, Ph.D. 1994**

**Scully, Sean P., M.D. 1986, Ph.D. 1985**

Seed, Patrick, M.D., Ph.D. 1998

Senyk, Oksana, M.D., Ph.D. 1984

Shimamura, Akiko, M.D. 1991, Ph.D. 1990

**Snyder, Lawrence H., M.D., Ph.D. 1992**

**Storozynsky, Eugene, M.D. 2000, Ph.D. 1998**

Tan (Formerly Cheun), Jane E., M.D. 1995, Ph.D. 1993

Thertulien, Raymond, M.D. 1994, Ph.D. 1992

**Thom, Stephen R., M.D., Ph.D. 1981**

Toribara, Neil W., M.D. 1981, Ph.D. 1982

Waldman, David L., M.D., Ph.D. 1988

Williams, Joseph, M.D., Ph.D. 1989

**Williams, Marshall T., M.D., Ph.D. 1980**

Wilson, Robert E., M.D., Ph.D. 1989

Wingrove, Douglas E., M.D. 1987, Ph.D. 1986

**Winn, Virginia Dragone, M.D. 1996, Ph.D. 1994**

**Zambidis, Elias, M.D., Ph.D. 1998**

This Newsletter was designed and distributed with the direction and approval of the Medical Scientist Training Program Executive Committee. If you do not wish to receive future mailings, please e-mail this request to Catherine Senecal-Rice at: [cathy\\_senecalrice@urmc.rochester.edu](mailto:cathy_senecalrice@urmc.rochester.edu) and your name will promptly be removed from our distribution list.