



## NEWSLETTER FROM THE DEPARTMENT OF ANATOMY AND NEUROBIOLOGY



*Boston University School of Medicine · Division of Graduate Medical Sciences*

### Welcome to Our New Graduate Students!

Linda Afifi  
Veronica Akle  
Kate Benincasa  
Kevin Bickart  
Daniel Caycedo  
Chad Farris  
Amelie Lanoue  
Sixto Medina  
Jon Rueckemann  
Patrick Scott  
Stephanie Soscia  
Joshua Steanik

### Volume 3, Issue 1

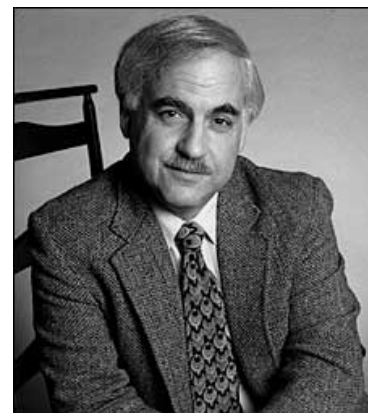
Summer 2006

#### Chairman's Report by Dr. Mark Moss

Over this past academic year, the Department of Anatomy and Neurobiology has continued its expansion and role in the medical school and university-at-large. The Department has continued on its course toward becoming one of the top tier Departments of Anatomy and Departments of Neurobiology/Neuroscience in the country. According to the most recent rankings by the NIH, the Department has moved up to 13th of all Departments of Anatomy nationally with over 11 million dollars in NIH funding - a level that places the Department 4th among all Departments of Neuroscience in U.S. Medical Schools. The

following captures some of the highlights for the Department this past year.

The Department continues to be a leader in the development of new programs and initiatives at the Medical School. The Department has created a new 36-credit Masters Degree program in Biomedical Forensic Science, the first advanced laboratory-based forensic degree program to emerge in the nation's medical schools and one of only a few such programs in the country. As part of this initiative, the Department successfully recruited Dr. Robin Cotton, a renowned forensic DNA expert, who will



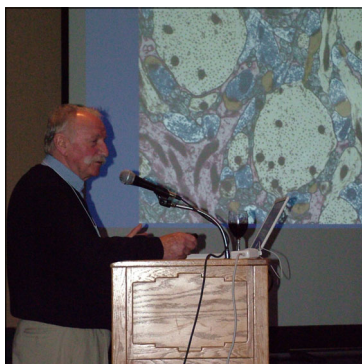
direct the program along with our Associate Director, Dr. Tara Moore, and newly recruited Assistant Director, Amy Brodeur. We anticipate an entering class of over 25 students for the initial year of the program starting this fall.

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#### Dr. Peters Gives Plenary Address at Spring Brain by Dr. Douglas Rosene



Dr. Alan Peters gave the Plenary Address "The Fine Structure of the Nervous System: A Personal and Biased History" at the 17<sup>th</sup> Annual Spring Brain Conference from March 15 -

18, 2006 in Sedona, Arizona. The Spring Brain Conference allows neuroscientists from across the country to learn about the most recent discoveries in neuroscience in a small intimate atmosphere that facilitates discussion. The Plenary Address is an invited one hour talk that often focuses on the history and development of neuroscience. It is a special honor to give this address. This year, Dr. Peters recounted the history of the first electron microscopic investigation of the nervous system as well as the early discoveries of unique

aspects of neuronal fine structure. These findings, which he made together with his colleagues Dr. Sanford Palay and Dr. Henry Webster, led to the publication of their definitive account of neuronal ultrastructure entitled "The Fine Structure of the Nervous System: Neurons and Their Supporting Cells". The talk provided unique insight into the excitement of the discovery of neuronal ultrastructural features.

*Dr. Alan Peters is a Waterhouse Professor of Anatomy and Neurobiology.*

## Student Achievement Day by Dr. Todd Hoagland

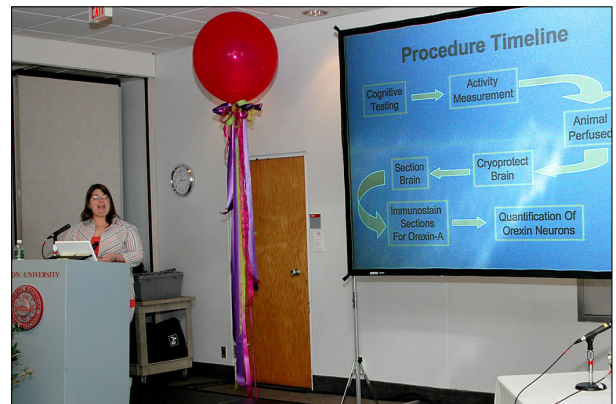
The twelfth annual Henry I. Russek (HIR) Student Achievement Day was held on May 5, 2006, and eighteen graduate students from the Department of Anatomy and Neurobiology submitted posters. The scope of research being accomplished in the Department is truly impressive. This occasion allows us to come together to celebrate the accomplishments of our gifted graduate students and faculty mentors. We are especially proud of the three graduate students who won the HIR awards: Debra Roberts, Michael Bowley, and Yu-Ming Chang. Additionally, we were honored this year to have the new President of Boston University, Robert Brown, give the opening remarks.

The day began with Dr. Shelley Russek welcoming all the faculty and students and thanking the Russek Foundation for their generous support of graduate student education at Boston University School of Medicine. The Foundation provides the funds to hold this achievement day each year and to support the monetary awards given to outstanding graduate students from various departments. The awards are based on characteristics that Henry Russek believed to be paramount to the success of scientists and clinicians. Dr. Russek was an

excellent mentor, and he encouraged his students to be outstanding in research, service (to a department, the school, and/or the university), and scholarship (academic achievement). It is no coincidence that these are also the hallmarks of successful junior faculty.

This year, the Department of Anatomy and Neurobiology had three outstanding candidates to apply for the HIR Student Achievement Day awards (Deb, Mike, and Yu-Ming). All three students are exceptional with many accomplishments in research and teaching. They all have perfect 4.0 GPAs, have published manuscripts in top-notch journals, and have been teaching assistants for multiple years. Combined, the three nominees are responsible for nine publications and 16 abstracts so far.

Another important metric that the HIR Award's Committee looks at when choosing the graduate student winners on Achievement Day is service. Dr. Russek believed strongly that for an institution to be truly exceptional it needed the support and service from dedicated faculty and students. When reviewing the applications of our three nominees, it is plain to see that they are all talented scholars, accomplished researchers, and have contributed a great deal in service to the Department and the School. Some examples of their service are: establishing the CNS interest group, participating as skilled teaching assistants, organizing the annual Guiseppina Raviola seminar, being mentors for junior graduate students, helping with graduate student recruitment, chairing the MD/PhD Student Committee, participat-

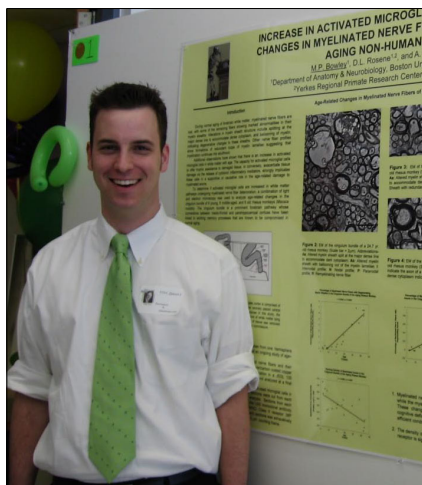


Debra Roberts, 1st place winner of the HIR award. (Photo courtesy of David Keough, BUSM Educational Media Center)

ing in the annual American Heart Association's Boston Heart Walk, giving lectures to the medical school class, tutoring, and much more.

It is clear that all three of our nominees are outstanding candidates who could easily earn the first place award from many other departments in the division of Graduate Medical Sciences, and it was difficult to choose. After much deliberation, Deb Roberts (primary advisor Dr. Doug Rosene) was chosen as our first place winner, and she gave a talk entitled "Orexin-A Immunoreactive Neuron Number Declines with Age in Male Rhesus Monkeys but is Preserved in Females". Deb delivered her presentation with the calm and confidence of a seasoned orator, and she along with all of our contributing graduate students deserve a round of applause for all their hard work and dedication.

Please congratulate our three awardees and all graduate students who submitted posters for this very important event. We had an excellent showing all around on Student Achievement Day, and our awardees set the bar awfully high for future students. I am confident the next generation will rise and meet this challenge. This was truly a proud day for our awardees and the Department of Anatomy & Neurobiology.



Michael Bowley, 2nd place winner of the HIR award. (Photo courtesy of Dev Agam)

## Department Introduces Two Masters Programs by Drs. Tara Moore and Itamar Ronen

### *Biomedical Forensic Sciences*

The Biomedical Forensic Sciences program, one of two new MS programs in the department, is designed to train individuals in forensic sciences with a complementary background in biomedical disciplines related to crime scene investigation and evidence analysis. This unique program is one of only two graduate forensic sciences programs in New England and one of the first programs that is based at a major medical center. We have been fortunate to recruit adjunct faculty for this program from local, state and federal law enforcement agencies and forensic laboratories, Brown University, Boston University's School of Law and Department of Psychiatry. In addition, Dr. Robin Cotton, a leading Forensic DNA Scientist, has been appointed Director of the program and will begin October 15, 2006. Ms. Amy Brodeur, M.F.S., a Criminalist with the Boston Police Crime Laboratory, has also been recruited to join our faculty and she will begin on campus on August 15th, 2006. Both Robin and Amy bring invaluable insight and experience in forensic sciences to this program and we are very fortunate to have such talented scientists as part of this

new program.

We currently have 20 students officially registered for classes and expect a class of 25 students to begin in the fall. In addition, we have 2 students who will begin classes in January 2007 and have already had more than 75 inquiries from students interested in applying for 2007-2009. Completion of this program will qualify our graduates to work as forensic scientists, criminalists, forensic DNA analysts, death investigators, crime scene responders and forensic investigators in local, state and federal laboratories, private laboratories, medical examiner and coroner's offices and sheriff's departments.

This program has added numerous new courses to the Division of Graduate Medical Sciences. Core courses in the program will include Forensic Biology, Forensic Chemistry, Trace and Pattern Evidence Analysis, Forensic DNA Analysis, Crime Scene Investigation, Forensic Pathology, and Criminal Law, Ethics and Mock Court. Elective courses, of which many will be open to all graduate students on campus, include Drug Analysis, Homicide

Investigation, Crime Scene Photography, Forensic Anthropology, Topics in Instrument Analysis, Forensic Psychiatry, Medicolegal Death Investigation, Forensic Toxicology, and Special Topics in Forensic Sciences. In addition, many of these courses will offer hands-on laboratory sessions where students will have the opportunity to use state-of-the-art equipment typically used in government and private forensic laboratories.

Overall, this program will bring many scientists and investigators from many scientific fields unique to our campus. We expect the program will grow quickly with the addition of newly developed elective courses, research projects and grants and a Ph.D. level program in the near future.



(Left to Right) Drs. Itamar Ronen and Tara Moore

### *Bioimaging*

The program of Master of Arts in Bioimaging is a multidisciplinary program, developed by the Departments of Radiology and Anatomy and Neurobiology with contributions from the department of Physiology and Biophysics. The program is jointly directed by Dr. Hernan Jara from the Department of Radiology and Dr. Itamar Ronen from the Department of Anatomy and Neurobiology. It is the first of its kind in the United States. The objective of the program is to train a

new breed of young professionals in all aspects of bioimaging from theory to practice. Program graduates will have the freedom to choose their future career pathways in academia, medicine, and industry.

The Masters Program in Bioimaging is a self-contained curriculum one-year program. It can also be completed in two years on a part-time basis. The curricular activities will consist of a combination of academic course work and direct hands on training, and will cover the broad areas of image acquisition, image processing, and image in-

terpretation. Special emphasis will be placed on direct experience with imaging instruments, the use of computers, and understanding through the study of imaging theory. The program is designed not only for post-baccalaureate students who wish to develop expertise in bioimaging, but also for residents and fellows who seek specialization in the "image" intense medical specialties (e.g. radiology, neurology, cardiology) and who wish to enhance their skills in the theoretical and practical applications of imaging to their clinical practice. Please visit the program's website at <http://www.bu-mbi.org>.



## Farewell to Joyce Resil by Laura B. Ngwenya



Upon entering the main office on the 10<sup>th</sup> floor of the L-building, it is difficult not to notice the absence of Joyce Resil's

warm, enthusiastic greeting. Joyce had been in the office of the Department of Anatomy and Neurobiology since November of 1987, when she began working as an administrative assistant. Her presence made visits to the department office productive and delightful experiences.

Joyce was initially hired to be the administrative assistant for the aging program project grant. In addition, she was responsible for typing manuscripts and correspondence. With time, Joyce's role in the Department changed, and she eventually gained the title of senior administrative assistant. Joyce's management of the aging grant decreased, and she became involved in the coordination of grant applications from different department members. However, of her new responsibilities, Joyce "enjoyed dealing with the students the most."

Joyce handled the registration, tuition, stipends, travel expenses, and grants of all of the students in the Department. Therefore, she had daily interaction with the graduate students. Joyce was always willing to take the extra time to ensure that all of the students remained as free of administrative hassles as possible. Hence, many of the students in the department have fond memories of Joyce as someone who was consistently available to give a friendly helping hand. In fact, Joyce still keeps in touch with some of the students whom she has helped and advised through the years.

Joyce has always enjoyed interacting with people and is often described as an easygoing person. Some of her fondest memories of the department involve "seeing people get together and relax and have fun." For that reason, she especially enjoyed the department's decompressions, holiday parties, and annual retreats. Joyce's sense of community and her jovial nature were infectious in the department. Joyce misses the lively and enjoyable encounters with department members.

Joyce left the Department in February 2006, but undoubtedly she is now enriching the lives of her new

neighbors in Florida with her easygoing and upbeat attitude. Joyce has relocated with her husband, who has been retired for three years, to Palm Bay, a rural-like area of Florida. She is currently enjoying the relaxing demeanor and warm weather of Florida. She has joined a choral group, and is active in her church. She also will be volunteering at the local hospital, yet Joyce has no plans to resume full-time work. Now that she lives in Florida, she intends to take many cruises and to travel extensively. She "like[s] to see different places and see how other people live." It has always been of dream of hers to go to Europe, and this fall she will be taking a month long trip to England, Germany, France, and Italy.

Although Joyce now lives in Florida, she frequents the Boston area. She has family and friends that live in Boston, some of whom work at BUMC. Hence, Joyce is not likely to become a stranger to the city, or the medical campus. Joyce dedicated over 18 years of service to the Anatomy and Neurobiology department. She speaks fondly of the department, is grateful to everyone who has been supportive to her over the years, and misses the department dearly, "especially the people."

## GMSSO Update by Linda Afifi and Adrian Oblak

This fall marks the third year of the Graduate Medical Sciences Student Organization (GMSSO). The goal of this organization is to bring students together from all departments and programs of the Graduate Medical Sciences to share ideas, address concerns, and pursue common student issues with a combined voice. This year's Department representatives are Linda Afifi and Adrian Oblak. With the help of Liz Jonak, former president of GMSSO and member of the Department, orientation for incoming graduate students was a huge success.

The current president, Courtney Sill from the Genetics and Genomics Department, has continued the efforts set forth by Liz through the organization of the Fall BBQ. The BBQ was an event that united PIs, the student body, Dean Karen Antman, and Dr. Carl Franzblau. Other GMSSO events have included a Mid-Term Study Break Lunch during the first week in December to alleviate the stress of finals. Currently, the GMSSO has representatives on the Steering Committee, the Student Affairs Committee, and the Executive

Committee. For more information, visit the GMSSO website at: <http://people.bu.edu/GMSSO>.



(Left to Right) Adrian Oblak and Linda Afifi

## Boston University Strides for Autism Research by Laura Stetser



\$10,000 dollars by September 25 – it seemed like an impossible amount of money for the team from the Lab of Developmental Cognitive Neuroscience, directed by Dr. Helen Tager-Flusberg, to raise for their participation in the National Alliance for Autism Research (NAAR)'s annual Walk F.A.R. for NAAR event. But team organizers Kristin Dame and Kristen Lindgren were determined to come up with creative strategies to meet this goal to give back to this organization that has made such contributions to the field of autism research. Their enthusiasm quickly spread among the lab members, who started off their fundraising efforts by setting up fundraising webpages and reaching out to family and friends to give to the cause.

This, however, was just the beginning of the lab's outreach. Drawing inspiration from other student and lab groups, Kristin and Kristen, with extra help from Nancy Shaffer, organized and publicized a labwide bake sale held in the Instructional Building lobby on September 21. Volunteers from the research team staffed a table overflowing with goodies baked by lab team members plus delicious muffins donated by nearby Christopher's Café. The reward? Numerous compliments and over \$900 towards the team's goal.

At the same time, team members distributed colorful fliers advertising Pizzeria Uno's partnership with the BU Making Strides team to contribute a portion of their sales the following Friday and Saturday nights to the Walk. Once again, lab members turned out and raised a slice to raise funds for NAAR, turning Friday night's partnership into a chance to have fun together as a group outside of the office. Then, several lab members returned the following night and brought their own guests to boost pizza sales.

Partnership in fundraising also came from DM-STAT, the lab's data management partner for both its CPEA autism program project and its STAART autism research center. DM-STAT staff not only collected funds among themselves, but also came on the day of the event to walk alongside the other members of the BU Making Strides team.

The morning of September 25 dawned clear and sunny as the first few lab members, sporting bright red t-shirts in honor of our school colors, began setting up tables and inflating balloons in the midst of the gathering crowds at Artesani Park. Soon, a sea of red shirts filled the area behind the table, handing balloons out to the many children walking with their

families, talking with interested parents about the lab's ongoing autism research studies, snapping pictures, and enjoying the day. Rhett, the BU mascot, made a special visit to the table to give a thumbs-up to the lab's show of support.

In all, 23 members of Dr. Tager-Flusberg's lab participated in raising funds to support the National Alliance for Autism Research as part of the Walk F.A.R. for NAAR event. It seemed impossible – but their efforts, combined with the funds contributed by DM-STAT, Pizzeria Uno, and the very successful bake sale, yielded over \$11,000 in all! These funds will support autism research projects across the country, including those in our own institution. NAAR sponsors two individuals in the Tager-Flusberg lab, a post-doctoral fellow, Dr. Ruth Grossman, and a pre-doctoral fellow, Kristen Lindgren, as well as a brain imaging study to investigate the connections between neural structures and language formation in young children with autism. We wish to thank everyone who worked so hard to bring this goal into reality, especially our dedicated team organizers! The funds raised help to bring the field closer to an understanding of the complex causes and neurobiological effects of autism, and our participation has also allowed us to reach out to new families who may now be able to take part in our studies here at BU.

The Lab of Developmental Cognitive Neuroscience will be walking again this fall on October 15, 2006 in the Greater Boston Walk for Autism Research along with members of the Blatt Lab for Autism Research in hopes of raising over \$12,000 for autism research. To visit our team page or to make an online contribution, please visit <http://www.autismwalk.org> and search for our team "Boston University Making Strides."

## Chairman's Report

*Continued from Page 1*

Also, in collaboration with the Department of Radiology, the Department has created a 36-credit Master of Arts Degree Program in Bioimaging that will start this fall. This program will train a new cadre of Masters level bioimagers in the theory, practice, and development of imaging technologies. These students will work in close collaboration with faculty from the Department of Radiology and the staff of the Bioimaging Center.

The Department has also continued to develop the Vesalius Program, a 6-credit module that emphasizes the development of teaching skills in the biomedical sciences. Enrollment continues to expand, and it is hoped that this program will be extended to other departments at the Medical School and the Charles River Campus alike. Similarly, the program in Mental Health Counseling and Behavioral Medicine, jointly developed with the Department of Psychiatry four years ago, has been very successful and this year will have an enrollment of over 50 students.

The Department has been instrumental in uniting the Medical School and Charles River Campuses for the first time by creating two graduate level courses in the Neurosciences. Students in the neurosciences at the CRC and those at the Medical School Campus enrolled in the 4-credit Systems Neurobiology course taught in the fall and in the 4-credit Cognitive Neuroscience course taught in the spring. Facilitated by the improved shuttle service, students met at the CRC on Tuesdays and at the Medical School Campus on Thursdays. Faculty from both campuses participated, and both courses were very successful. It is hoped that we can unify an additional core course in the Neurosciences next year.

In addition, the Department has expanded upon its efforts to introduce interdisciplinary approaches to neuroscience and related disciplines. With the resources from BU's first "Roadmap" grant, Dr. Peter Bergethon will be offering both short and full semester courses entitled "Introduction to Interdisciplinary Systems Science: Dynamic Modeling" this fall. Together with our two new program initiatives and the laboratory courses taught to 1<sup>st</sup> year medical, dental, and graduate students, the Department now mounts an unprecedented 20+ courses each year.

Stemming from the Departments' commitment to the belief that teaching as well as research form the foundation for excellence in a basic science department, the Department was again recognized for its excellence in teaching. Dr. Todd Hoagland was this year's recipient of the Instructor of the Year Award in the Preclinical Sciences. Over the past five years, the faculty from the Department have received over 15 teaching awards.

Despite this very large teaching portfolio, the Department continues its success in research funding. Of note, our Program Project entitled "Neural Basis of Age-Related Cognitive Decline" (AG-00001), the first ever awarded by the National Institute on Aging, was renewed with a priority score of 120 at the 0.8<sup>th</sup> percentile.

The faculty and the postdoctoral and graduate students have been actively writing up their research with over 60 research articles and chapters published in the past year. This includes a book surely to become one of the "bibles" of neuroscience, "Fiber Pathways of the Brain" by Drs. Jeremy Schmahmann and Deepak Pandya.

Members of the Department continue to be active in Medical School and University Committees and activities. Several of the faculty serve in the

Academy of Advisors and act as advisors to Masters students in the Graduate Medical Sciences. Dr. Todd Hoagland serves as the faculty advisor to the Student Committee on Medical School Affairs (SCOMSA), and Dr. Mark Moss serves as the faculty advisor to the Clinical Neuroscience Society and to the Graduate Medical Science Student Organization (GMSSO). This year, Dr. Julie Sandell will assume the role of President of the Faculty Council.



Finally, towards an effort to retain a closer connection with our former students and as part of our "full circle" mentoring program, Dr. Liz Jonak (Ph.D., 2006) has

offered to serve in the newly created position of Director of Alumni Relations for the Department. Liz will help create a list-serve for our former students and faculty and will help organize a series of alumni-centered activities. We are all very appreciative of Liz's previous contributions to the department and look forward to her contribution in this new role.

***Congratulations on passing  
your qualifying exam!***

**E. Lela Giannaris**

**Christopher Holland**

**Kristen Lindgren**

**Patrick Mabray**

**Fred Powell**



## Grants and Awards



**Dr. Todd Hoagland** was selected as the 2006 Educator of the Year in the Preclinical Sciences. This award was established to recognize, honor, and reward BUSM faculty who give special effort to ensure the best education for BUSM students. The recipients are characterized by their excellence in teaching, mentoring, and devotion to students.



**Dr. Peter Bergethon** has received a U.S. patent (7,024,238) for a new method of detecting ischemia within the brain of a patient suffering a stroke in the field. This technique provides a "potential of injury" reading much like the electrocardiogram does for the heart.



**Dr. Marlene Oscar Berman** has been awarded a competing continuation for 4 years (Years 19-22) for her ongoing research from NIAAA entitled "Affective and Cognitive Changes in Alcoholism." This support will continue her research to study emotional and memory abnormalities in long-term sober alcoholic subject and controls using neurobehavioral tests as well as structural and functional MRI and DTI techniques.

Dr. Berman has also been awarded a 4-year Merit Review Program and Research Career Scientist Award from the U.S. Department of Veterans Affairs entitled "Alcoholism and Brain Functions."



**Dr. Gene Blatt** has been awarded a two year grant from Cure Autism Now entitled "Alterations in specific subtypes of glutamate receptors in autism: An autoradiographic and molecular study in the cerebellar cortex." Dr. Jean-Jacques Soghomonian is a collaborator on this project.



**Dr. Jennifer Luebke** has been awarded an R01 award from NIA/NIH entitled "Age-Related Changes in Monkey Cortical Pyramidal Cells."



**Dr. Daniela Plesa Skwerer** has been awarded an R03 award from NIH/NICHD (HD 051943) entitled "Development of Social-Emotional Functioning in Children with Williams syndrome." Dr. Helen Tager-Flusberg is a Co-Principal Investigator on this project.



**Dr. Helen Tager-Flusberg** has been awarded a competing renewal of her R01 from NIH/NICHD (HD 33470) entitled "Social Cognition in Williams Syndrome." She has also been awarded a pilot grant from NAAR/Autism Speaks entitled "Identifying Neurobehavioral Markers of ASD in High Risk Infants."

***Congratulations for completing  
your thesis defense!***

**Elizabeth Jonak**

**Jason Kass**

**Laura Ngwenya**



**Kristen Lindgren** and **Christopher Holland** have been awarded Ruth L. Kirschstein National Research Service Award - Individual Fellowships for M.D./Ph.D. students (F30) from NINDS. Their grants are entitled "Autism: the Neural Substrates of Language in Siblings" (NS 055511) and "Anatomical Distribution of Pathology in MS" (NS 049808), respectively.

Christopher has also been awarded a one year Clinical Pilot Grant from the Harvard Center for Neurodegeneration and Repair entitled "Evaluating Continuous Arterial Spin Labeling in the Investigation of the Role of Perfusion in the Evolution and Repair of White Matter Lesions in Multiple Sclerosis."

## Recent Publications

- Chang, Y. M., Rosene, D. L., Killiany, R. J., Mangiamele, L. A., & Luebke, J. I. (2005). Increased action potential firing rates of layer 2/3 pyramidal cells in the prefrontal cortex are significantly related to cognitive performance in aged monkeys. *Cerebral Cortex*, 15, 409-418.
- Hale, C. M., & Tager-Flusberg, H. (2005a). Brief report: The relationship between discourse deficits and autism symptomatology. *Journal of Autism and Developmental Disorders*, 35, 519-524.
- Hale, C. M., & Tager-Flusberg, H. (2005b). Social communication in children with autism: The relationship between theory of mind and discourse development. *Autism*, 9, 157-178.
- Joseph, R. M., McGrath, L. M., & Tager-Flusberg, H. (2005). Executive dysfunction and its relation to language ability in verbal school-age children with autism. *Developmental Neuropsychology*, 27, 361-378.
- Joseph, R. M., Steele, S. D., Meyer, E., & Tager-Flusberg, H. (2005). Self-ordered pointing in children with autism: Failure to use verbal mediation in the service of working memory? *Neuropsychologia*, 43, 1400-1411.
- Luyster, R., Richler, J., Risi, S., Hsu, W. L., Dawson, G., Bernier, R., et al. (2005). Early regression in social communication in autism spectrum disorders: A CPEA study. *Developmental Neuropsychology*, 27, 311-336.
- Ngwenya, L. B., Peters, A., & Rosene, D. L. (2005). Light and electron microscopic immunohistochemical detection of bromodeoxyuridine-labeled cells in the brain: Different fixation and processing protocols. *Journal of Histochemistry and Cytochemistry*, 53, 821-832.
- Pessina, M. A., Hoyt, R. F., Jr., Goldstein, I., & Traish, A. M. (2005). Differential effects of estradiol, progesterone, and testosterone on vaginal structural integrity. *Endocrinology*.
- Plesa Skwerer, D., Verbalis, A., Schofield, C., Faja, S., & Tager-Flusberg, H. (2006). Social-perceptual abilities in adolescents and adults with Williams syndrome. *Cognitive Neuropsychology*, 23, 338-349.
- Santacruz, K., Lewis, J., Spires, T., Paulson, J., Kotilinek, L., Ingelsson, M., et al. (2005). Tau suppression in a neurodegenerative mouse model improves memory function. *Science*, 309, 476-481.
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- Tager-Flusberg, H. (2005). Designing studies to investigate the relationships between genes, environments, and developmental language disorders. *Applied Psycholinguistics*, 26, 29-39.
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- Zucker, C. L., Nilson, J. E., Ehinger, B., & Grzywacz, N. M. (2005). Compartmental localization of gamma-aminobutyric acid type b receptors in the cholinergic circuitry of the rabbit retina. *Journal of Comparative Neurology*, 493, 448-459.

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### **Anatomy & Neurobiology Newsletter**

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*Special thanks to Dr. Mark Moss for his help and guidance.*