

# NEURO NEWS

## News from the Director and Admissions Chair

### Mary T. Lucero, Ph.D., Director:

The Interdepartmental Neuroscience Program continues to grow. At the beginning of the 2008-2009 academic year we had 50 students and 80 faculty members from 14 different departments.

Through our NIH Training Grant and generous administrative support, we are able to provide full stipend, tuition and insurance for 21 students this year.

Some of the highlights from past fall were the Biosciences Symposium, our active participation as faculty judges, student mentors, and scientific contributors in the Society for Advancement of Chicanos and Native Americans in Science (SACNAS) meeting, Snowbird Mini-Symposium, the new student reception, and the monthly seminar series.

This spring we look forward to the Recruitment weekend starting February 13, Brain Awareness Week (March 16-22), and the Spring Student Symposium (TBA).

None of these activities would be possible without the active participation of our outstanding students and faculty. My thanks to all faculty members who serve on our various committees, teach in our courses, attend our seminars and socials, and mentor our students.

Thank you to students who contribute time and energy to the program. A special thank you goes to Tracy Marble who excels at 'herding cats' and is key to our program's success. The more people engaged, the stronger our program and less work for each individual. I strongly encourage our entire community to become even more involved in the program this upcoming year.

### Sabine Fuhrmann, Ph.D., Admissions Chair:

The success of our admissions and recruitment activities is highly dependent on the help and enthusiasm of the current graduate students who are hosting the student candidates. This year, **Andrea Schwager** and **Elliot Smith** will play a major role in hosting the student candidates.

Our committee members continue to be: **Shannon Odelberg** (Neurobiology and Anatomy), **Gary Rose** (Biology), **Alessandra Angelucci** (Ophthalmology and Visual Sciences), **Jeanne Frederick** (Ophthalmology and Visual Sciences), **Ray Kesner** (Psychology), and **Sabine Fuhrmann** - Chair (Ophthalmology and Visual Sciences). Joining the committee this year are: **Kuby Balagurunathan** (Medicinal Chemistry), and **Yukio Saijoh** (Neurobiology and Anatomy). A big thank you to **Bradley Greger** (Bioengineering), who rolled off the committee this year after serving for the past two years.

**This year our main admissions interview day will be Friday, February 13th and, as usual, there will be a reception at the Jewish Community Center, 2 North Medical Drive, on Friday evening from 6:00-9:00pm. Your participation at the reception is a crucial part for the success of all our admissions activities.**

We will be soliciting support during the reception again with a poster session. Neuroscience students who have received travel support \$\$ from the Neuroscience Program will be asked to bring a poster (as part of the travel \$\$ received) and we will be asking for others to help out by bringing posters from their labs. This was very successful last year and we are excited to do this again this year.

This gives candidates insight into the research activities and interests of the faculty, postdocs and students involved in the Program. If you would like to present a poster this year, please, send an e-mail to Tracy Marble ([tracy.marble@hsc.utah.edu](mailto:tracy.marble@hsc.utah.edu)).

## \*\*\*ALUMNI NEWS\*\*\*

**Mary Logan (Vetter lab):** Sean and Mary had a baby boy in September. Kye Logan Speese born September 3, 2008; Kye was 8lbs 3oz 20.5 inches long.

**Jerry Mellem (Maricq lab):** Natalie and Jerry had a new baby boy on October 30th. Quinn Scott Mellem, 6lbs, 8oz.

**Tim Simeone (Steve White lab):** became a father to Evan, who was born on August 5th, 2007. He married Kristina A. Fenoglio, Ph.D. on Jan. 3rd, 2009. Kristina and Tim have accepted Assistant Professor positions in the Dept. of Pharmacology at Creighton University in Omaha, NE. They both start at Creighton the beginning of February 2009.

**Stefan Leutgeb (Mizumori lab):** As of last fall, Stefan and his wife Jill moved back to the United States as Assistant Professors at UCSD in the same department. Contact info:

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**Arie Sitthichai Mobley (Lucero lab):** is the current recipient of the Yale Neurobiology Department's Training Grant Appointment. The appointment is for one year, it started Jul. 1, 2008.

**Matthew Schmolesky (Leventhal lab):** has been named President of the Society for Neuroscience Intermountain Chapter. He will be taking over for Ed Dudek beginning January 2009.

**Sen Wu (Capecchi lab):** Yuanyuan and Sen had a new baby girl: Sophie was born on Dec. 11, 2008. Mom and baby are both doing fine.

## \*\*\*Faculty News\*\*\*

**John White, Ph.D.** USTAR Professor of Bioengineering has accepted the position of Executive Director of the Brain Institute. He is replacing Dr. Tom Parks who recently became Vice President for Research. John is also teaching a new graduate course for titled "Neusc 6030 Computational Neuroscience".

## \*\*\*NEWS WORTHY\*\*\*



Two neuroscience grad students, **Molly DuBray** and **Jason Cooper-ridger**, and some other students with **Dr. Janet Lainhart** and **Dr. Temple Grandin**, author of many books and the most famous woman in the world with autism. She was recently in town to give a talk at the Spotlight on Autism conference and kindly agreed to allow us to scan her brain at 6:30am before the conference began. We collected 3Tesla structural MRI, DTI, and fMRI data and will be comparing Dr. Grandin's brain to 5 age and sex matched typically developing women. It was a wonderful experience for the students to meet her. She will be back in town on January 22, Thursday, to talk about and sign her newest book at the Kings English bookstore.

## \*\*\*Grad Student Opportunity\*\*\*

Ken Monson, Mechanical Engineering, is conducting research focused on vascular mechanics and traumatic brain injury. He is interested in the relationship between mechanics and biology. Along these lines, he has transferred a couple of projects with him from UC San Francisco that include animal experiments / surgery and some molecular biology. As a result, he is looking for someone who would be able to work in his lab to help accomplish these tasks. This would preferably be a PhD student who has interest in this area.

If interested, contact:  
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## \*\*\*NEW FACULTY\*\*\*

Since the last issue of NeuroNews we have added the following new faculty:

**Jun Yang, Ph.D., Assistant Professor of Ophthalmology & Visual Sciences.**

Research: Pathogenic mechanisms of retinal degenerative diseases and potential treatments.

**Jeffrey Anderson, M.D./Ph.D., Assistant Professor of Neuroradiology. Co-Student Advisor, Neuroscience Program**

Research: Neurophysiology of distributed brain networks, brain synchrony, functional connectivity. New fMRI, diffusion tensor, and magnetoencephalography methods for diagnosing and understanding neurological disorders such as multiple sclerosis, autism, and Alzheimer Disease.

**Sharif A. Taha, Ph.D., Assistant Professor of Physiology.**

Research: Neural control of reward-directed behaviors; role of opioid signaling in modulating food intake; impulsivity and alcohol consumption.

**Julie R. Korenberg, M.D./Ph.D., USTAR Professor of Pediatrics, Utah Brain Institute.**

Research: Neurobiology of human neurodevelopmental disorders, using mouse models and mapping gene expression in primate brain.

**Deborah A. Yurgelun-Todd, Ph.D., USTAR Professor of Psychiatry, Utah Brain Institute.**

Research: Application of MR imaging methods to understand emotional processing and cognitive changes associated with behavioral disorders.

**Perry F. Renshaw, M.D./Ph.D., USTAR Professor of Psychiatry, Director of Magnetic Resonance Imaging, Utah Brain Institute.**

Research: In vivo neurochemical changes associated with mood and drug abuse disorders; natural products as novel treatments.

## \*Neuroscience NIH Training Grant Update\*

We are in the middle of the third year of our T32 NIH Training Grant. Thus far, 16 students have been at least partially supported by the grant. Congratulations to our past and current trainees, who have received additional intramural and/or extramural funding including **Molly DuBray**, and **James Anderson**. The deadline for applications for year four (2009-2010) will be on Monday, May 11, 2008. An application form will be provided and selection will be based on academic performance, service to the Neuroscience Program, an abstract of proposed thesis work including publications, and a letter of support from the faculty mentor. Future second year students who are selected for next year's Training Grant will serve as a tutor for one of our core neuroscience courses (Cell & Molecular Neuroscience, Neuroanatomy, or Systems Neuroscience). We are looking forward to a strong group of applications.

## \*\*\*ACADEMIC DEFENSES\*\*\*

Since the last issue of NeuroNews, the Neuroscience Program has had the following students successfully defend their dissertation: **Kerry-Ann Stewart (H.S. White lab)**, **Eric Veien (Dorsky lab)**, **Prachee Avasthi (Baehr lab)**, and **Matthew Riedy (Keefe lab)**.

Since the last issue of NeuroNews, the Neuroscience Program has had the following students successfully pass their qualifying exam: **Randi Rawson (Jorgensen lab)** and dissertation proposal; **Molly DuBray (Lainhart lab)**, **Renee Bend (Chien lab)**, and **Hideaki Tomita (Capecchi lab)**.

## \*\*\*\*STUDENT AWARDS\*\*\*\*

**Molly DuBray (Lainhart lab)** is the recipient of an NRSA award from the National Institutes on Deafness and Other Communication Disorders (NIDCD).

**Andrew Zayachkivsky (Dudek lab)** has been awarded an Epilepsy Foundation Fellowship.

**Michelle Stamm (Lucero lab)** won a poster prize at the Bioscience Symposium, September 23, 2008. She received a \$50 gift certificate to The Gateway.

## \*\*\*\*\*POTPOURRI\*\*\*\*\*

Misty Smith (Senior Laboratory Specialist, ADD Program) just got engaged. His name is Malcolm (Trey) MacKay, III. They are planning a small ceremony here in the Salt Lake City area this spring.

## \*\*\*\*Important Dates\*\*\*\*

**Feb. 13: Neuroscience Program Recruitment.** Our annual reception devoted to recruiting student candidates for the upcoming academic year will be held at the Jewish Community Center, 2 North Medical Drive, Friday, February 13th from 5:00-9:00pm. There will be, of course, the usual amounts of food and drink.

**March 16-22: National Brain Awareness Week.** **Rebecca Parker** (parker.becca@utah.edu), and **Shaili Johri** (shaili.johri@gmail.com) are the co-chairs on the committee this year.

They will be needing volunteers to help with all of the events that will be scheduled during that week. Please keep that week open to help us educate the Wasatch Front on the importance of brain safety and research.

**April (TBA): Annual Neuroscience Student Symposium**  
Student organizer: **Sean Flynn**

## \*\*\*The Intermountain Chapter for the Society of Neuroscience\*\*\*

The Intermountain Chapter for the Society for Neuroscience member roster is in great need of updating. If you are currently a member, or would like to join (no annual dues), please send the following information to: [IM\\_Chapter\\_Members@unite.utah.edu](mailto:IM_Chapter_Members@unite.utah.edu)

Full name, position, work mailing address, email address, and phone number.

Also, note that the chapter will soon be

- a) taking nominations to elect members to an Executive Committee and
- b) hosting the annual chapter meeting at the Utah Brain Institute (late March, 2009).

If you would like to be actively involved in either, please contact the Chapter President, Matthew Schmolesky ([mschmolesky@weber.edu](mailto:mschmolesky@weber.edu)), and the Chapter Representative, Amy Mozdy ([amy.mozdy@utah.edu](mailto:amy.mozdy@utah.edu)).

## \*\*\*\*\*Recently Published\*\*\*\*\*

Aman, A., and **Piotrowski, T.** (2008) Wnt/b-Catenin and Fgf signaling control collective cell migration by regulating chemokine receptor expression. *Dev. Cell*, Nov;15:749-61.

Bigler, E.D., Abildskov, T.J., Petrie, J., Johnson, M., Lange, N., Chipman, J., Lu, J., McMahon, W., and **Lainhart, J.E.** (2008) Volumetric and voxel-based morphometry findings in autism subjects with and without macrocephaly. *Developmental Neuropsychology*, accepted.

Cleavenger, H.B., Bigler, E.D., Johnson, J.L., Lu, J., and **Lainhart, J.E.** (2008) Quantitative magnetic resonance image analysis of the cerebellum in macrocephalic and normocephalic children and adults with autism. *J International Neuropsychological Society*, 14:401-413.

Hegg, C.C., Irwin, M., and **Lucero, M.T.** (2008) Calcium store-mediated signaling in sustentacular cells of the mouse olfactory epithelium. *Glia*, Oct 22. [Epub ahead of print]

Kilian, S., Brown, W.S., Hallam, B.J., McMahon, W.M., Lu, J., Johnson, M., Bigler, E.D., and **Lainhart J.** (2008) Regional corpus callosum morphology in autism and macrocephaly. *Developmental Neuropsychology*, 33:74-99.

Lange, N., Froimowitz, M., and **Lainhart, J.E.**, (2008) Effects of brain development and demography on IQ in a large representative sample of healthy children and adolescents. *Developmental Neuropsychology*, accepted.

Lee, J.E., Chung, M.K., Lazar, M., **DuBray, M.B.**, Kim, J., Bigler, E.D., **Lainhart, J.E.**, and Alexander, A.L. (2008) A study of diffusion tensor imaging by tissue-specific, smoothing-compensated voxel-based analysis. *NeuroImage*, Oct 11. [Epub ahead of print].

Mazefsky, C., Folstein, S.E., and **Lainhart, J.E.** Overrepresentation of mood and anxiety disorders in adults with autism and their first degree relatives: what does it mean? *Autism Research*, in press.

South, M., Ozonoff, S., Suchy, Y., **Kesner, R.**, McMahon, W., and **Lainhart, J.** (2008) Intact emotion facilitation for non-social stimuli in autism: is amygdala impairment in autism specific for social stimuli? *Journal of the International Neuropsychological Society*, 14:42-54.

*Do you have something to submit in the next issue of NeuroNews?  
Send your information to: Tracy Marble, Program in Neuroscience  
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