

NEURO NEWS

News from the Admissions Chair: Sabine Fuhrmann

It is my pleasure to welcome the incoming graduate students into the Program this fall:

Judd Cahoon (MD/PhD; University of Utah; Ambati lab)
Zachary Frenchek, (PhD; Carnegie Mellon University)
Andrew Haack (PhD; University of British Columbia)
Leonardo Parra (PhD; Catholic University of Valparaiso)
Rebecca Pfeiffer (PhD; University of New Mexico)
Nikko Ronquillo (MD/PhD; University of Toledo; Baehr lab)
Jeff Yarch (PhD; California State University, Chico)

I would like to thank the Admissions Committee for their excellent work in our recruiting efforts. This year, the Admissions committee reviewed more than 80 applications and 30 recruits were interviewed in person. The current Admissions Committee members are: **Alessandra Angelucci**, **Josh Bonkowski**, **Sabine Fuhrmann (Chair)**, **Tatjana Piotrowski**, **Richard Rabbitt**, **Sharif Taha** and **Ning Tian (Co-Chair)**. This year, **Gary Rose** is taking a sabbatical leave. **Maureen Condic**, **Yukio Saijoh** and **Kuby Balagurunathan** leave the committee with thanks for their invaluable service.

Our admissions and recruitment efforts would not run as smoothly without the help from many others: Many thanks to the graduate student committee chairs: **Scott Lauritzen (Marc Lab)**, **Elissa Pastuzyn (Keefe Lab)**, **Jared Nielsen (Lainhart lab)**, and **Kevin Breen (Vetter Lab)** who helped organize the recruitment days, along with all of our graduate students who helped escort students to and from the airport, around campus on interview day and help make sure that the recruitment effort went smoothly. Also, to our Neuroscience Program faculty who interviewed the candidates. Special thanks to our invaluable **Tracy Marble** for expert organizational help and other support. And I would like to thank those who presented posters at the recruitment reception.

Ed Levine (Ophthalmology Dept.) is the new recruitment chair to enhance our recruitment efforts in multiple ways. To reach out to a wider community of undergraduate students as potential applicants, several graduate students, **Renee Bend**, **Scott Lauritzen**, **Sean Flynn** and **Danielle Friend**, gave presentations about the Program at their Alma Mater in fall 2009.

I am also pleased to announce the Training Grant recipients of the current year:

Judd Cahoon, **Rebecca Pfeiffer**, **Zachary Frenchek** (1st year), **Kevin Breen**, **Jared Nielsen**, **Daniel Ryskamp** (2nd year).

Please, keep two important events in mind: We are having a welcoming reception at the JCC for the incoming graduate students on **Sept 16, 2010**. And the next Recruitment reception with dinner and poster presentation will be on **February 18th, 2011** at the JCC.

****SEMINAR SERIES 2010-2011****

October 19: Edwin R. Chapman, Ph.D., U of WI
 November 16: Aaron DiAntonio, M.D., Ph.D., Washington U SOM
 January 18: Kristin Baldwin, Ph.D., The Scripps Research Institute
 February 15: John L. R. Rubenstein, M.D., Ph.D., UCSF
 March 15: John Dani, Ph.D., Baylor College of Medicine
 April 19: Rachel Wong, Ph.D., University of Washington

see more details at:

<http://neuroscience.med.utah.edu/Meetings.html>

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****ALUMNI NEWS****

David Daberkow has accepted an Assistant Professor position in the Dept. of Biology at Eastern Washington University, Spokane WA.

Asim Beg and Georgina Nicholl had a baby girl named Tallulah Belle Nicholl Beg on March 17, 2010.

Asim was named a 2010 Alfred P. Sloan Fellow in Neuroscience. He was awarded a Basil O'Connor Starter Scholar Grant from the March of Dimes. Asim was also awarded The Hartwell Foundation Individual Biomedical Research Award.

Dr. Beg is actively looking for postdocs interested in neural circuits and synapse development. Interested applicants can contact:

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Ben Albeni: G.L. Odero, K. Oikawa*, K.A.C. Glazner, D. Grossman, J. Thiessen, J. Schapansky, N. Ge, M. Martin, G.W. Glazner, and **B.C. Albeni.** (2010) Evidence for the Involvement of Calbindin D28k in the Presenilin 1 Model of Alzheimer's Disease. *Neuroscience*, 169:532-543. *This author is a co-first author.

K.A.C. Glazner, G. Odero*, D. Grossman, E. Anema, A. Motnenko, J. Schapansky, D. Oliver, G. Glazner and **B.C. Albeni.** (2010) Strain Specific Differences in Memory and Neuropathology in a Mouse Model of Alzheimer's Disease. *Life Sciences*, 86:942-950. *This author is a co-first author.

J. Thiessen, K.A.C. Glazner, Solmaz Nafez, A. Schellenberg, R. Buist, M. Martin, and **B.C. Albeni.** (2010) Histochemical visualization and diffusion weighted imaging in the TgCRND8 transgenic model of Alzheimer's disease. *Brain Structure and Function*, 215(1):29-36.

Koji Takahashi: Takahashi, D.K., Vargas, J.R., and Wilcox, K.S. (2010) Increased coupling and altered glutamate transport currents in astrocytes following kainic-acid-induced status epilepticus. *Neurobiol Dis*, Aug 4. [Epub ahead of print]

Arie Sitthichai Mobley and husband, Mike welcomed new family member Christina Somjai Mobley weighing in at 7 lbs 7 oz, 20 1/4 inches long on 8/24/10.

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Christina Celestino: was appointed/promoted to the position of Science Department Chair at Juan Diego Catholic High School.

****Other Important Dates****

Sept. 16: New Graduate Student Reception. Our annual reception devoted to welcoming the incoming Neuroscience graduate students will be held at the Jewish Community Center, 2 North Medical Drive, Thursday from 5:00-8:00 pm.

Sept. 28: Bioscience Symposium. University Marriott Park Hotel, 1:00-7:00pm. Dinner at 7:00pm. Pre-registration required. Registration deadline: **September 20th @ www.bioscience.utah.edu.** All Neuroscience students are encouraged to submit a poster and compete for the awards.

Oct. 22-23: Annual Neuroscience Program Symposium @ Snowbird
"Developmental and Cellular Mechanisms of Epilepsy - In Search of New Therapies"
<http://neuroscience.med.utah.edu/Snowbird>.

This year's invited speakers: **Martha J. Morrell, M.D.**, Columbia U., **Jack M. Parent, M.D.**, U. of Michigan, **Douglas A. Coulter, Ph.D.**, U. of Pennsylvania, **Karen S. Wilcox, Ph.D.**, U. Utah, **Harold Wolf, Ph.D.**, U. Utah, **H. Steve White, Ph.D.**, U. Utah, **Bradley Greger, Ph.D.**, U. of Utah.

Plan to submit a poster for the SfN Intermountain Chapter Poster session that will be incorporated into the Snowbird Symposium. \$\$\$Cash Prizes! Abstracts must be submitted by **Friday, September 17, 2010**, for consideration.

Nov. 13-17: The Society for Neuroscience Annual Meeting held this year in San Diego, CA.

****STUDENT AWARDS****

Adam McPherson (Dorsky lab) has been selected to participate as a predoctoral trainee in the NIH Developmental Biology Training Grant.

The Society for Neuroscience and the Membership & Chapters Committee, selected **Shaili Johri (Letsou lab)** as a recipient of the SfN Graduate Student Chapter Travel Award. She will receive \$1,000 and complimentary registration to Neuroscience 2010.

ACADEMIC DEFENSES

Since the last issue of NeuroNews, the Neuroscience Program congratulates the following students on successfully defending their dissertations: **Fred Federer (Angelucci lab)**, and **Pei-Wen Chu (Fleckenstein lab)**.

Also, since the last issue of NeuroNews, the Neuroscience Program congratulates the following students on successfully passing their qualifying exams: **Eerik Elias (Maricq lab)**, **Elissa Pastuzyn (Keefe lab)**, **Danielle Friend (Keefe lab)**, **Patrick Gordon (Levine lab)**, **Adam McPherson (Dorsky lab)**, **Caitlin Mencio (Balagurunathan lab)**, and **Jason Cooperrider (Lainhart lab)**.

and dissertation proposals; **Rob Duncan (Piotrowski lab)**, **Rebecca Parker (Greger lab)**, **Elliot Smith (Greger lab)**, **Scott Lauritzen (Marc lab)**, **Coni Stacher-Hörndli (Chien lab)**, **Christina Rossi (Dudek lab)**, and **John Gaynes (Chien lab)**.

NEWS WORTHY

2009-2010 Interdepartmental Neuroscience Program Review Update by Mary Lucero, Director

Overall, the Neuroscience Program was ranked as excellent and we received enthusiastic commendations on our training, administration, collaborative environment, positive interactions with the Brain Institute, and the stellar track record of our graduates. The Program also received 6 recommendations which I addressed in a wrap-up meeting with the VPs and Deans of the Medical and Graduate Schools. A brief summary of the ensuing Memorandum of Understanding (MoA) is provided here: **1) Faculty and Student Diversity:** The plans to increase diversity include evaluating diversity as a positive factor during recruitment of students and faculty, annual reports by the Recruitment Committee to the Graduate Council describing diversity recruitment status, and inviting at least 50% women/minorities for upcoming seminars and symposia. **2) Teaching Requirement:** As suggested, the Program has implemented a teaching requirement for incoming 2010 students which will include feedback and a faculty mentor. **3) Replacement of Faculty in Administrative and Teaching Positions:** The Program plans to implement 3 year terms for committee and teaching positions as well as annual evaluation of faculty

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membership in the program. The process has begun with the appointment of Dr. Kristen Keefe as the new Program Director in July of 2011. The plan is to turn over 1/3 of the positions each year. **4) Formalized Evaluation and Feedback of Graduate Student Presentations:** implementation has begun and I encourage all to continue to provide thoughtful constructive feedback during student presentations. **5) Interplay between Program, Departmental, and University Administrative Structure:** the Directors of the three Interdepartmental Programs will develop a document to inform participating departments of the obligations to students and indicate relationships between departments and programs. **6) Relation between the Neuroscience Program and Brain Institute (BI):** To facilitate coordination between Neuroscience and the BI, the Directors now serve on each other's executive committees. A memorandum of understanding of the relationship between the Program and the Institute will be transmitted to the Graduate School when completed.

Changes in Neuroscience Program Administrative Structure

As a result of the Program Review and submission of the NIH T32 Neuroscience Training Grant Renewal, we made a few changes to the existing administrative structure. In its previous form, the Program was comprised of a Director, a three member Directorate, and separate Chairs for Admissions, Curriculum and Advising. A disconnect existed between the Directorate and the Chairs. In the new structure, the Chairs of each committee, the Director-elect, and the Director will form the Directorate. As recommended by the Program Review, the Director of the BI will participate in Directorate meetings as a non-voting member. Presently, these positions are held by the following faculty members: **Director:** Mary Lucero, Physiology; **Director-Elect:** Kristen Keefe, Pharm/Tox; **Admissions Chair:** Sabine Fuhrmann, Ophthalmology; **Advising Chair:** Rich Dorsky, Neurobiology & Anatomy; **Curriculum Chair:** Franz Goller, Biology; **Recruitment Chair:** Ed Levine, Ophthalmology and **BI Director:** John White, Bioengineering. We believe this new structure will better facilitate communication within the Program.

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RECENTLY PUBLISHED

- Chu, P.W.**, Hadlock, G.C., Vieira-Brock, P., Stout, K., **Hanson, G.R.**, and **Fleckenstein, A.E.** (2010) Methamphetamine alters vesicular monoamine transporter-2 function and potassium-stimulated dopamine release. *J Neurochem*, Jul 23. [Epub ahead of print]
- Dudek, F.E.**, Pouliot, W.A., **Rossi, C.A.**, and Staley, K.J. (2010) The effect of the cannabinoid-receptor antagonist, SR141716, on the early stage of kainate-induced epileptogenesis in the adult rat. *Epilepsia*, Jul;51 Suppl 3:126-130.
- Fletcher, P.T., Whitaker, R.T., Tao, R., **DuBray, M.B.**, Froehlich, A., Ravichandran, C., Alexander, A.L., Bigler, E.D., Lange, N., and **Lainhart, J.E.** (2010) Microstructural connectivity of the arcuate fasciculus in adolescents with high-functioning autism. *Neuroimage*, Jul 1;51(3):1117-1125.
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- Hone, A.J.**, Whiteaker, P., Mohn, J.L., Jacob, M.H., and **McIntosh, J.M.** (2010) Alexa Fluor 546-Ar1B[V11L;V16A] is a potent ligand for selectively labeling alpha7 nicotinic acetylcholine receptors. *J Neurochem*, Aug;114(4):994-1006.
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- Kellis, S., Miller, K.J., Thomson, K., Brown, R., House, P. and **Greger, B.** Decoding spoken words using local field potentials recorded from the cortical surface. *Journal of Neural Engineering*, provisionally scheduled for September 2010.
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- Stewart, K.A.**, **Wilcox, K.S.**, **Fujinami, R.S.**, and **White HS.** Theiler's virus infection chronically alters seizure susceptibility. *Epilepsia*, in press.
- Takahashi, D.K.**, Vargas, J.R., and **Wilcox, K.S.** (2010) Increased coupling and altered glutamate transport currents in astrocytes following kainic-acid-induced status epilepticus. *Neurobiol of Dis*, in press.
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- Wan*, Y., Otsuna*, H., **Chien, C.B.**, and Hansen, C. (2009) An interactive visualization tool for multi-channel confocal microscopy data in neurobiology research. *IEEE Trans. Vis. Comput. Graph.*, 15:1489-1496. *equal contributions. PMC2874972.
- Wyatt, C., Ebert, A., Reimer, M., Rasband, K., Hardy, M., **Chien, C.B.**, Becker, T., and Becker, C. (2010) Analysis of the *astray/robo2* zebrafish mutant reveals that degenerating tracts do not provide strong guidance cues for regenerating optic axons. *Journal of Neuroscience*, in press.
- Xu, H.P., Chen, H., Ding, Q., Xie, Z.H., Chen, L., Diao, L., Wang, P., Gan, L., Crair, M.C., **Tian, N.** (2010) Immune molecule, CD3 ζ , is required for the development of neural circuit in retina. *Neuron*, 65:503-515.

*Do you have something to submit in the next issue of NeuroNews?
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