Volume 21, No. 2

NEURO NEWS

SPRING 2017

News from Richard Dorsky, Director Tom Parks Symposium and 30 years for the Neuroscience Program

Dear Members of the Interdepartmental Program in Neuroscience,

Thanks to everyone who helped with our Graduate Council Program Review last semester. The feedback from our internal and external review committees was very positive and constructive. Our response to the reviews is now with the Graduate Council, and we expect a final report to be issued soon.

We have had two changes to the membership of our Program Directorate. First, **Kristen Keefe** has rotated off, having completed her terms as Ex-Director and Training Grant PI. Thanks as always to Kristen for all the effort she has put into the Program! Second, **David Krizaj** has joined the Directorate and will serve as Program co-Director. We appreciate David's service and commitment to the Program in this new role.

Finally, the Program will be implementing two changes to the Curriculum for the 2017 entering class.
- Neuroanatomy and Developmental Neuroscience will be shortened to half-semester courses taught during fall semester.
- Students will participate in joint half-semester Literature Review and Grant Writing courses along with MB/BC students during spring semester.

A second set of proposed changes to exams and rotations is currently being discussed by the Directorate. Stay tuned for more updates.

Thanks and Best Regards,

Richard Dorsky
Program Director

Dear colleagues,

Dr. Tom Parks recently retired from the faculty at the University of Utah. He had a tremendous impact upon the neuroscience research community here, including Chairing the Department of Neurobiology and Anatomy, serving as Vice President for Research, co-founding NPS Pharmaceuticals, and co-founding the Interdepartmental Program in Neuroscience, which is celebrating 30 years!

We invite you to help us celebrate his contributions by attending:
A Celebration of Neuroscience at the University of Utah
A symposium in honor of Dr. Thomas N. Parks
and 30 years of the Interdepartmental Graduate Program in Neuroscience.

The symposium will feature speakers with links to the University of Utah Neuroscience program (which Tom co-founded) as well as to his field of auditory neuroscience.

Friday, March 24, 2017 from 1:00-5:30 pm
at the Utah Museum of Natural History, Swaner Forum.

See page 4 for the symposium program.

Please contact **Monica Vetter** (monica@neuro.utah.edu) for other symposium details.

Monica Vetter
Chair, Neurobiology & Anatomy

From the Recruitment Committee Chair - Megan Williams

The Neuroscience Program was well represented at several graduate fairs this fall. Thank you to all the students and staff who volunteered at SACNAS, ABRCMS, and the SFN grad fairs! The recruitment committee is currently working on ways to increase our presence on social media and the website. Any students or faculty interested in joining the recruitment/public relations committee should contact the Recruitment Chair, **Dr. Megan Williams**.

From the Admissions Committee Chair - Michael Deans

The Neuroscience Program admissions committee recently invited **Drs. Tom Lane** (Pathology), **Adrian Rothenfluh** (Psychiatry) to join our returning members: **Mike Deans** (Otolaryngology), **Hilary Coon** (Psychiatry), **Bryan Jones** (Ophthalmology), **Sungjin Park** (Neurobiology & Anatomy), **Skyler Jennings** (Communication Sciences), **Ayako Yamaguchi** (Biology), and **Jun Yang** (Ophthalmology). Previous committee members **Drs. Jason Shepherd** and **Chuck Dorval** have completed their commitments and we appreciate their service. Student committee chairs: **Joshua Barrios** and **Michelle Reed.**

The committee has been active and we have received a total of 98 applications from students across the US and world. **NP faculty and current students are invited to meet our top candidates at a dinner reception and poster session to be held at the JCC on February 10th--so save the date!**

****NEW FACULTY****

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

Adrian Rothenfluh, Ph.D., Associate Professor of Psychiatry. Research: Genetic and neural circuit mechanisms that guide behavior.

Christopher German, Ph.D., Research Assistant Professor of School of Dentistry. Research: The toxicity of abused stimulant drugs to monoamine neurotransmitter systems of the basal ganglia.

Marco Botolato, M.D., Ph.D., Associate Professor of Pharmacology & Toxicology. Research: Development of novel therapeutic agents for neurodevelopmental disorders, including pathological aggression, Tourette syndrome, and autism spectrum disorders.

Anna R. Docherty, Ph.D., L.P., Assistant Professor of Psychiatry. Research: Biometrical and molecular genomic approaches to examining neuroimaging phenotypes.

****Other Important Dates****

Feb. 10: 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 10th from 6:00-9:00pm. There will be, of course, the usual amounts of food and drink **AND chocolate fountain!**

March 13-19: National Brain Awareness Week. Patrick Parker and Evan Ratzan are the co-chairs of the committee this year.

May 17: Annual Neuroscience Student Symposium
Student organizer: Tyler Hanak

October 27: Annual Snowbird Symposium
Student organizer: Andrew Moran

****SEMINAR SERIES 2016-2017****

Remaining seminars for this year:

January 17: Baljit S. Khakh, Ph.D., David Geffen SOM, UCLA

February 21: John Huhuenard, Ph.D., Stanford U SOM

March 21: John Mann, M.D., Columbia U

April 18: Peter W. Kalivas, Ph.D., Medical U of So Carolina

see more details at:
http://neuroscience.med.utah.edu/Meetings.html

ACADEMIC DEFENSES

Since the last issue of NeuroNews, the Neuroscience Program congratulates the following students on successfully passing their dissertation proposals; **Andrew Moran (Wachowiak lab), Pratyush Suryavanshi (Brennan lab), Andrew Taibi (Shepherd lab), Brent Young (Tian lab),** and **Pablo Maldonado (Maricq lab).**

and dissertation defenses; **Greg Remigio (West lab), Maryam Bijanzadeh (Angelucci lab), Daniel Epstein (Yurgelun-Todd lab),** and **Jeff Yarch (Angelucci lab).**

****STUDENT AWARDS****

Joshua Barrios (Douglass lab) has been awarded an NRSA Fellowship.

****RECENTLY PUBLISHED****

Epstein, D., Legaretta, M., Bueler, E., **King, J.B.**, McGlade, E., and **Yurgelun-Todd, D.** (2016) Orbitofrontal cortical thinning and aggression in mild traumatic brain injury patients. *Brain and Behavior*, 6:1–10. e00581, doi: 10.1002/brb3.581

Ferguson, M.A., **Nielsen, J.A.**, **King, J.B.**, Dai, L., **Giangrasso, D.M.**, Holman, R., **Korenberg, J.R.**, and **Anderson, J.S.** (2016) Reward, salience, and attentional networks are activated by religious experience in devout Mormons. *Social Neuroscience*, 1-13. doi: 10.1080/17470919.2016.1257437
The Onion: http://www.theonion.com/americanvoices/religion-triggers-brains-reward-centers-54788

Lopez-Larson, M.P., Shah, L.M., Weeks, H., **King, J.B.**, Mallik, A.K., **Yurgelun-Todd, D.**, and **Anderson, J.S.** (2016) Abnormal functional connectivity between default and salience networks in pediatric bipolar disorder. Biological Psychiatry: *Cognitive Neuroscience and Neuroimaging*, doi: 10.1016/j.bpsc.2016.10.001

Yarch, J., Federer, F., and **Angelucci, A.** (2017) Local Circuits of V1 Layer 4B Neurons Projecting to V2 Thick Stripes Define Distinct Cell Classes and Avoid Cytochrome Oxidase Blobs. *The Journal of Neuroscience*, 11 January 2017, 37(2):422-436; doi:10.1523/JNEUROSCI.2848-16.2017 http://www.jneurosci.org/content/37/2/422.abstract

****ALUMNI NEWS****

Elliot Smith:
Smith, E.H., and Schevon, C.A. (2016) Toward a Mechanistic Understanding of Epileptic Networks. *Current Neurology and Neuroscience Reports,* 16:97.

Eric Bend:
Bend, E.G., Si, Y., Stevenson, D.A., Bayrak-Toydemir, P., Newcomb, T.M., **Jorgensen, E.M.**, and Swoboda, K.J. (2016) NALCN channelopathies: Distinguishing gain-of-function and loss-of-function mutations. *Neurology*. 87:1131-1139. DOI: 10.1212/WNL.0000000000003095

Jang, S., Nelson, J.C., **Bend, E.G.**, Rodríguez-Laureano, L., Tueros, F.G., Cartagenova, L., Underwood, K., **Jorgensen, E.M.**, and Colón-Ramos, D.A. (2016) Glycolytic Enzymes Localize to Synapses under Energy Stress to Support Synaptic Function. *Neuron*. 90(2):278-291.DOI: http://dx.doi.org/10.1016/j.neuron.2016.03.011

Benedict Albensi: published about 10 studies/papers this year. Additional oral presentations, etc., comes to a total of 21 citations. This can be viewed on NIH-NCBI My Bibliography.

https://www.ncbi.nlm.nih.gov/myncbi/browse/collection/48835760/?sort=date&direction=descending

Brain Awareness Week

Brain Awareness Week (BAW) is back again this spring from March 13th - 19th! If you're unfamiliar with BAW, it is an international education outreach program focused on brain function and research. Our local chapter is organized by graduate students from the Neuroscience Program and pulls student and faculty volunteers from various departments, such as the School of Medicine, Bioengineering, Psychology, etc. Undergraduate students are welcome to volunteer as well. We have a full schedule during the week, visiting local elementary through high schools. On March 18th, we'll have our grand finale at the Leonardo. Brain Awareness Week is always a hit with the local community and is only possible because of volunteers from the greater neuroscience and medical community here at the U. Additionally, for the second year in a row, student volunteers from the U will be hosting Brain Awareness Week at Universities in Jalapa, Nicaragua from March 18th-25th. So, save the dates and keep an eye out for emails with more information as the week approaches! You can also email neurobaw@gmail.com with any questions. See you soon!

Brain Awareness 2017 Co-Chairs: **Patrick Parker** and **Evan Ratzan**, Graduate Students, Neuroscience Program

2nd Annual Brain Bee

The 2nd Annual Brain Bee Competition will be in late January, 2017. This competition gives high school students all over Utah the chance to learn neuroscience, excel in an international competition, and meet scientists. The Brain Bee is run by Neuroscience Program graduate students and hosted by the University of Utah. Special thanks to Medtronic, this year's sponsor. Any questions about participating next year should go to **Jennifer Cheng** at slcbrainbee@gmail.com.

**** A Celebration of Neuroscience at the University of Utah****

A Symposium in honor of Dr. Thomas N. Parks
and 30 years of the Interdepartmental Graduate Program in Neuroscience

The symposium will feature speakers with links to the University of Utah Neuroscience program (which Tom co-founded) as well as to his field of auditory neuroscience.

1:00-1:20pm Symposium welcome and opening remarks by Dr. David Pershing, President of the University of Utah

Session 1 – Moderator: Dr. Richard Dorsky

1:20-1:50pm **David Moore,** Director, Communication Sciences Research Center Cincinnati Children's Hospital Medical Center

Title: ***TBA***

1:50-2:20pm **Roy Twyman**, Vice President, Janssen Research & Development, a Johnson & Johnson Company
Title: ***Driving Towards Treatments to Prevent Alzheimer's Disease: An Inside Perspective***

2:20-2:50pm **Louis Ptáček**, Distinguished Professor, Department of Neurology, University of California San Francisco
Investigator, Howard Hughes Medical Institute
Title: ***Genetic and Molecular Characterization of Episodic Neurological Diseases***

2:50- 3:20pm **Baldomero Olivera**, Distinguished Professor, Biology, University of Utah
Title: ***From Venoms to Drugs at Utah***

3:20- 3:50pm BREAK

Session 2 – Moderator: Dr. Baldomero Olivera

3:50-4:30pm **Keynote Lecture: Dan Sanes**, Professor of Neural Science and Biology, New York University
Title: ***Influence of early experience on sensory and non-sensory processing***

4:30-5:00pm **Ryan Watts**, Co-founder and CEO of Denali Therapeutics
Title: ***Can Neurodegeneration Be Stopped?***

5:00-5:30pm **Mahendra Rao**, Vice President for Regenerative Medicine, New York Stem Cell Foundation Research Institute
Title: ***Commercializing Neuroscience discoveries from the U of U***

5:30-6:30pm RECEPTION

Supported by: University of Utah President's Office, SVPHS/Neuroscience Initiative, Vice President for Research, Interdepartmental Program in Neuroscience, Department of Neurobiology and Anatomy

Do you have something to submit in the next issue of NeuroNews?
Send your information to: Tracy Marble, Program in Neuroscience
401 MREB, FAX: 581-4233, or e-mail: tracy.marble@hsc.utah.edu