

NEURO NEWS

News from the Director: Richard Dorsky

Dear Members of the Interdepartmental Program in Neuroscience,

I'd like to welcome all of you to the 2015-2016 academic year. As always, we congratulate our recent graduates and greet our incoming students, and we look forward to the upcoming events that bring us together scientifically and socially. Working on the training grant renewal last year provided a great reminder of what makes our Program so special, best illustrated by the success of our students as they move on to independent research careers. Our strengths are a direct result of our faculty members' commitment to training, our students' dedication to leadership of Program activities, our fantastic Program Manager Tracy Marble, and the support of the University Administration.

Although this year's class is smaller than usual, the Program's goal is to maintain a consistent level of coursework and research training regardless of year-to-year fluctuations in class size. We are seeking to target our recent average of 7-10 recruits for the upcoming admissions cycle, led by our new Admissions Chair Michael Deans. In addition, we are planning to put an increased emphasis on the recruitment of talented applicants, through the hard work of our Recruitment Chair Megan Williams. Finally, we continue to work on reviewing and revising the Program Curriculum with input from our core course directors, Curriculum Chair Greg Clark, student representatives, and KC Brennan. A proposal for revisions will be presented to the faculty for discussion and a vote before the end of 2015.

I urge everyone to mark your calendars and plan to participate in Program activities such as student symposia, seminars, and recruitment events. Our mission to train world-class neuroscientists depends on the efforts of the entire community.

Thanks and Best Regards,

Richard Dorsky
Program Director

2015 Incoming Students**

Jennifer Cheng, Wesleyan University
Ariadne Penalva, Cornell College
Christine Wnukowski, Allegheny College

The Neuroscience Program office has moved

The new location: 390A BPRB. We have moved along with the Department of Neurobiology & Anatomy. Phone #: 581-4820 (same), e-mail: tracy.marble@hsc.utah.edu (same). Please stop by and say "hi" and take a look out of Tracy's window!!



****ACADEMIC DEFENSES****

Since the last issue of NeuroNews, the Neuroscience Program congratulates the following students on successfully defending their dissertations: **Andrew Haack (Taha lab)**, **Kevin Breen (Vetter lab)**, **Rob Duncan (Dorsky lab)**, **Adam McPherson (Dorsky lab)**, and **Lingyan Xing (Bonkowsky lab)**.

Also, since the last issue of NeuroNews, the Neuroscience Program congratulates the following students on successfully passing their qualifying exams: **Josh Barrios (Douglass lab)**, **Kevin Huang (Tian lab)**, **Kyle Jenks (Shepherd lab)**, **Andrew Moran (Wachowiak lab)**, **Patrick Parker (Brennan lab)**, **Pratyush Suryavanshi (Brennan lab)**, **Andrew Taibi (Shepherd lab)**, and **Brent Young (Tian lab)** and dissertation proposals; **Feliks Furmanov (White lab)**, **Punitha Subramaniam (Yurgelun-Todd lab)** and **Anthony Umpierre (Wilcox lab)**.

****STUDENT AWARDS****

Greg Remigio (West lab) has been selected as a University of Utah Graduate Research Fellow. This award covers \$15,000 of his stipend, tuition benefit and 80% of his health insurance.

The Neuroscience Training Grant recipients for 2015-2016 are: **Danielle Giangrosso**, **Anne Gibson**, **Michelle Reed**, **Ana Santos** (2nd years) and **Jennifer Cheng**, **Christine Wnukowski** (1st years).

****FACULTY AWARDS****

Alex Shcheglovitov (Neurobiology & Anatomy) received the 2015 Ritvo-Slifka Award for Innovation in Autism Research. This is a very prestigious award by the International Society for Autism Research and Slifka foundation to support promising junior investigators to pursue excellent research.

He also received the 2015 Whitehall Foundation Research Grant. This highly competitive grant is awarded by the Whitehall Foundation to young scientists at the beginning of their careers in life sciences.

****SEMINAR SERIES 2015-2016****

November 17: Franck Polleux, Ph.D., Columbia University

December 15: André Fenton, Ph.D., SUNY, Downstate Medical Center

January 19: Rick Haganir, Ph.D., Johns Hopkins SOM

February 16: Yang Dan, Ph.D., UC - Berkeley

March 15: Chris Dulla, Ph.D., Tufts University

April 19: David Loane, Ph.D., University of Maryland SOM
see more details at:

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

****Other Important Dates****

Sept. 17: Neuroscience Program: Meet the New Students Reception

Jewish Community Center; 5-8PM

Oct. 30: Annual Neuroscience Program Symposium @ Snowbird

"*Neuroimmunology*"

<http://neuroscience.med.utah.edu/Snowbird>.

This year's invited speakers:

Jonathan Kipnis, Ph.D., University of Virginia SOM

Annadora Bruce-Keller, Ph.D., LA State University

Andrea Tenner, Ph.D.: UC - Irvine

Tom Lane, Ph.D., University of Utah

J. Michael McIntosh, M.D., University of Utah

Stacey Clardy, M.D., Ph.D., University of Utah

Oct 17-21: The Society for Neuroscience Annual Meeting held this year in Chicago, IL.

Feb. 12, 2016: Neuroscience Program Recruitment Week-end.

****Recruiting News****

Seeking student volunteers for alma mater visits

The Neuroscience Program will send advanced Neuroscience Program students to their alma mater schools this fall to present a research seminar and discuss our graduate program with undergraduate students. This is a great opportunity to promote our program and practice presenting a seminar. Expenses are covered by the program and include a \$200 honorarium to the student for their effort. Visits must be completed before Thanksgiving.

Please email Megan Williams (megan.williams@neuro.utah.edu) if you are interested in this opportunity. Provide your name and year, current faculty advisor, alma mater and seminar topic. Spots are limited, so please respond ASAP.

****ALUMNI NEWS****

Matt Reidy is now working with the United States Space and Naval Warfare (SPAWAR) Information Command at their Atlantic Systems Center based here in Charleston, SC. SPAWAR is a civilian-staffed federal entity associated with the Navy under the Department of Defense. He is a staff scientist on the brain machine interface team in the Department of Research and Applied Science (7.1).

Benedict Albeni was awarded the Manitoba Dementia Research Chair for 5 years for \$500,000. Dr. Albeni's postdoc, Dr. Jelena Djordjevic, also received a 2 year award for \$36,750.

J. Djordjevic, M.G. Sabbir and **B.C. Albeni**, Traumatic brain injury as a risk factor for Alzheimer's disease: Is inflammatory signaling a key player? *New Concepts in Alzheimer's Research in Current Alzheimer Research*.

S.I. Omar, **B.C. Albeni**, K. Gough. Modelling the binding of Ca²⁺ and Zn²⁺ to Calbindin D28k and understanding their competition through protein structural analysis. *Current Alzheimer Research*.

Elliot Smith: Merricks, E.M., **Smith, E.H.**, McKhann, G.M., Goodman, R.R., Bateman, L.M., Emerson, R.G., Schevon, C.A., and Trevelyan, A.J. (2015) Single unit action potentials in humans and the effect of seizure activity. *Brain*, doi: 10.1093/brain/aww208

Christine Fogarty Celestino wins Utah Governor's Medal. Christine is a science instructor at Juan Diego High School.

Tim Simeone: Kim do, Y., Simeone, K.A., **Simeone, T.A.**, Pandya, J.D., Wilke, J.C., Ahn, Y., Geddes, J.W., Sullivan, P.G., and Rho, J.M. (2015) Ketone bodies mediate antiseizure effects through mitochondrial permeability transition. *Ann Neurol.*, Jul;78(1):77-87.

****NEW FACULTY****

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

Trafton Drew, Ph.D., Assistant Professor of Psychology. Research: Attention, working memory, medical image perception, EEG, ERPs, Eye-tracking.

Matt Euler, Ph.D., Assistant Professor of Psychology. Research: Understanding the contribution of dynamic neural processes to intra- and inter-individual variability in cognitive functioning.

Skyler Jennings, Ph.D., Assistant Professor of Communication Sciences & Disorders. Research: Understanding how the auditory system adapts to a changing acoustic environment in order to facilitate speech understanding in a noisy background.

Tom Lane, Ph.D., Professor of Pathology. Research: Neural Stem Cells, Multiple Sclerosis, Virology.

****NEWS WORTHY****

The Department of Neurobiology and Anatomy, Neuroscience Program and the Neuroscience Initiative offices have a new home in the Biopolymers Research Building (BPRB)

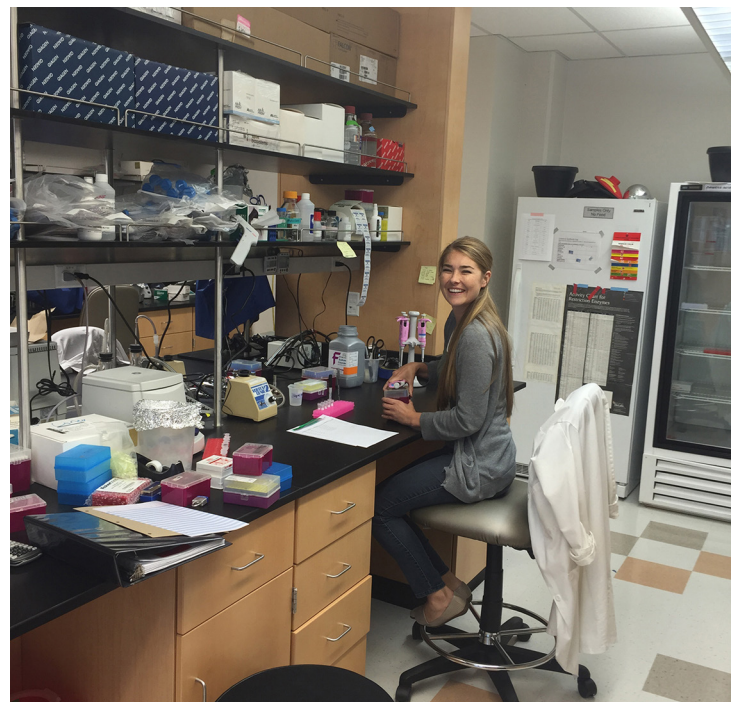
Laboratory space and offices were beautifully remodeled on levels 3 and 4 of the building, creating open integrated research spaces as well as shared procedure spaces in the basement for histology, electrophysiology and animal work. In addition, the conference room on level 5 was refurbished, and will be used for meetings, seminars and social events for building occupants. This space will also serve as a hub for Neuroscience Program teaching and activities. The move was completed by mid-August, so we are settling in and enjoying the new space.

We would like to acknowledge the generous support from the Vice President for Health Sciences, Dr. Vivian Lee, and would like to thank the entire construction team who worked hard this past year to make the remodel and relocation possible.

Please come and visit us!
The Neurobiology and Anatomy Department main office is located in **320 BPRB**.

Tracy Marble of the Neuroscience Program Office is now in **390A BRPB**.

The office of Rebecca Parker, Program Manager for the Neuroscience Initiative, is now in **390F BPRB**. She has also teaching materials and resources available from the Neuroscience lending library, now housed in 301 BPRB.



Sarah Anderson already hard at work in the new BPRB lab space

RECENTLY PUBLISHED

Byers, B., Lee, H.J., Liu, J., Weitz, A.J., Lin, P., Zhang, P., **Shcheglovitov, A.**, Dolmetsch, R., Pera, R.R., and Lee, J.H. (2015) Direct in vivo assessment of human stem cell graft-host neural circuits. *Neuroimage*, Jul 1;114:328-37. doi: 10.1016/j.neuroimage.2015.03.079. Epub 2015 Apr 25. PMID: 25936696

King, J.B., Yurgelun-Todd, D., Stoeckel, A., DiMuzio, J.M., and Lopez-Larson, M.P. (2015) Sex differences in white matter integrity in youths with attention-deficit/hyperactivity disorder: a pilot study. *Front. Neurosci.* 9:232. doi: 10.3389/fnins.2015.00232

POSTDOCTORAL FELLOWSHIP POSITIONS

Shcheglovitov lab: Ambitious, hard working, and highly motivated individuals are encouraged to apply for a postdoctoral position available in the Shcheglovitov's Lab! At this point, we particularly invite applications from young scientists who are about to graduate and have substantial research experience in electrophysiology, calcium imaging, or protein mass spectrometry. Please send your CV, brief statement of research interests and career goals, and contact information for three references to alexsh@neuro.utah.edu

More information about our lab and research can be found here: www.shcheglovitov.com

Albensi lab (Canada): Post-doctoral Fellowship in Synaptic Plasticity and Memory Laboratory St. Boniface Hospital Research, Winnipeg (Canada): see information below

A junior postdoctoral position is available at the Synaptic Plasticity and Memory Laboratory, St. Boniface Hospital Research, Winnipeg (Canada) under Dr. Benedict C. Albensi's supervision <http://www.sbr.ca/dnd/faculty/dr-benedict-c-albensi/>.

Dr. Albensi's research is focused on understanding, identifying, and targeting biological mechanisms associated with synaptic plasticity, memory, and memory impairment. Memory impairment can be a result of aging, brain injury, genetic predispositions, and/or from a disease state, such as, stroke, head trauma, epilepsy, Alzheimer's disease, and diabetes, etc. Our division is well positioned to study a variety of these conditions and how they affect memory, however, my main focus is on dementia.

Requirements: I am currently seeking applicants with a PhD, MD, and/or PharmD with a background in neuroscience or bioengineering. The preferred candidates would also have past experience with stroke and/or TBI models. The candidate will have an opportunity to use cutting-edge techniques and equipment (eg., IHC, Westerns, ELISA, confocal, EMSA, Seahorse/Oroboros plate readers, MRI, PET), behavioral (eg., MWM, Barnes platform, etc), or electrophysiology (eg., hippocampal slice/LTP paradigms, patch clamp) methods/procedures. Several funded projects are currently being conducted in my lab involving Alzheimer's disease, vascular dementia, and epilepsy. These projects focus on how AD and/or stroke can affect synaptic plasticity and memory and lead to dementia. One signaling pathway of interest involves NF-kB. Collaborative efforts are underway with leading investigators in Winnipeg and across the world. Serious applicants must have an excellent command of the English language. We will give applicants with publications in internationally recognized and/or high impact journals first preference.

Applications: Qualified applicants should send their curriculum vitae, 2-3 references, and a brief cover letter summarizing interests and past accomplishments to the attention of:

Dr. Benedict C. Albensi, Manitoba Dementia Research Chair
Everett Endowment Fund Chair
Associate Professor of Pharmacology/Therapeutics, Univ. of Manitoba
Division of Neurodegenerative Disorders
St. Boniface Hospital Research
351 Tache Avenue
Winnipeg, Manitoba R2H 2A5 Canada
Email: balbensi@sbr.ca

*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*