Message from the Director:

Over the past two weeks, we have seen a lot of activity among the PIIN membership. I would like to thank everyone who was involved with our Traumatic Brain Injury Symposium on May 11th. We had some amazingly talented, engaging, and informative speakers. Special thanks to our keynote speaker, Lee Brush, a former Purdue football player who visited from Arizona. Lee's presentation reminded us not only of the devastating long-term consequences that can follow repeated concussive injuries, but also that more attention must be paid to helping both athletes and soldiers transition back to normal life following an intensely combative routine. Moreover, the patient perspective he offered was a poignant reminder of how the continued pursuit of brain research is essential to better understand, diagnose and treat these conditions.

Given how summer travel can thin our ranks, I am sending an urgent plea to those of you still on campus to please help fill the room for Dr. Steve Finkbeiner's seminar on neurodegeneration. Dr. Finkbeiner (UCSF) is a candidate for the Director position. The seminar is this coming Monday, May 23rd at 9:30AM in 121 Burton Morgan.

Last week, we received over 30 proposals in response to the Request for Applications to fund activities to promote neuroscience research—more evidence of the vibrant neuroscience community here at Purdue! We anticipate a final decision on awards by the end of next week. Additionally, we are planning a retreat for the fall, so please weigh in and provide your thoughts.

Finally, I am thrilled to announce that the Department of Biological Sciences has hired two new neurobiology faculty members, Dr. Estuardo Robles (retinal-brain circuit formation in zebrafish) and Dr. Scott Pluta (somatosensory cortical circuits in rodents). Please give them a warm welcome when they come to campus.

- Donna Fekete, *Inaugural Director*

Retreat Input! We are planning on hosting an Integrative Neuroscience retreat and would like your thoughts. Please fill out our survey!

Dr. Steven Finkbeiner, Associate Director and Senior Investigator, Gladstone Institute of Neurological Disease; Director, Taube/Koret Center for Neurodegenerative Disease Research; Investigator, Roddenberry Center for Stem Cell Biology and Medicine at Gladstone;
Professor, Neurology and Physiology, University of California, San Francisco

"Using the Past to Predict the Future: Unraveling Mechanisms of Neurodegeneration with Single Cell Analysis and Deep Learning in Patient Stem Cells"

Monday, May 23rd in 121 Burton Morgan @ 9:30 AM

A round table discussion with the candidate will follow the research seminar in Room 206 of Burton Morgan. Faculty are welcome to attend.

Dr. Finkbeiner is a candidate for the Purdue Integrative Neuroscience Institute Director position.

Featured Faculty Member:

Dr. Yuk Fai Leung joined Purdue's Biological Sciences Department in January of 2008 after earning his PhD from Chinese University of Hong Kong and completing a post-doc appointment at Harvard under the direction of Dr. John Dowling. Dr. Leung specializes in retinal degeneration which is a group of inherited eye diseases including retinitis pigmentosa and age-related macular degeneration that impair

vision. The Leung lab focuses on two main research areas addressing retinal degeneration: disease-causing gene network for retinal degeneration and Rapid drug discovery for retinal degeneration. To achieve these research goals the use the zebrafish model. Visit Dr. Leung's website for more information.

Course Offering Announcement for this fall:

PSY 60300 - Psychopharmacology Credit Hours: 3.00. This course will cover core pharmacology concepts and principles, such as neurotransmitters, receptors, drug classes, and mechanisms of drug action, while highlighting recent findings related to pharmacogenetics and sex/gender differences in psychopharmacology. There will also be a primary focus on drug therapy for major psychiatric disorders including addiction, depression, anxiety and schizophrenia. Prerequisites: (BIOL 56200 and PSY 51200) or PSY 61500 or MCMP 57000. Typically offered Fall Spring.

Funding Opportunities:

NIH Preclinical Research on Model Organisms to Predict Treatment Outcomes for Disorders Associated with Intellectual and Developmental Disabilities (R01) This FOA encourages applications from institutions addressing preclinical research in model organisms of neurodevelopmental disorders. Applications submitted to this FOA should propose to develop, validate, and/or calibrate outcome measures, surrogate markers, and biomarkers in model organisms that can inform and effectively translate to human clinical trials for individuals with intellectual and developmental disabilities. Deadline: June 5

NIH Career Development Awards:

NINDS Faculty Development Award to Promote Diversity in Neuroscience Research (K01) Deadline: June 12

NINDS Advanced Postdoctoral Career Transition Award to Promote Diversity in Neuroscience Research (K22) Deadline: June 12

Competition is now open for HHMI Professors: http://www.hhmi.org/programs/hhmi-professors - Intent to apply is due July 1, 2016

NIH Impact of Aging in Human Cell Models of Alzheimer's Disease (R01) The goal of this FOA is to establish the impact of aging on the expression and/or modulation of AD pathological processes and to assess age-related AD genotype-phenotype relationships in human cell models. Research incorporating different brain cell types to promote neural circuit maturation and complexity in such cell models is expected to better recapitulate and give greater insight into AD pathological processes. Deadline: September 28.

NIH Development and Application of PET and SPECT Imaging Ligands as Biomarkers for Drug Discovery and for Pathophysiological Studies of CNS Disorders (R01) This FOA invites research grant applications from organizations/institutions that propose the development of novel radioligands for positron emission tomography (PET) or single photon emission computed tomography (SPECT) imaging in human brain, and that incorporate pilot or clinical feasibility evaluation in pre-clinical studies, model development, or clinical studies. Deadline: October 5.

Limited Submission: *Searle Scholars Program* The Searle Scholars Program seeks to fund high risk, high reward projects from candidates in their first appointment as a tenure-track assistant professor beginning on or after July 1, 2015. Applicants should be pursuing independent research careers in biochemistry, cell biology, genetics, immunology, neuroscience, pharmacology, or related areas in chemistry, medicine, and the biological sciences. Those in other fields including engineering, physics, psychology, and nutritional science may be eligible provided the project has a strong life science focus (*see past awardees on the Searle website*). For this opportunity, Purdue is limited to ***one*** application.

Internal Deadlines:

Monday, June 13: A one-page summary of the candidate's research and a full CV should be submitted. *(Please indicate if you are competing for Pew, Searle, or both.)*

Monday, June 20: Rankings due to the EVPRP.

Sponsor Deadline: September 30

Our mailing address is:
Purdue University Pillars of the Life Sciences
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