Message from the John & Donna Krenicki Director of Integrative Neuroscience:

I want to thank the 72 faculty, postdocs and grad students who attended our first neuroscience retreat at the quaint lakeside town of St. Joseph, Michigan. Special thanks to all of our speakers, notably our keynote, Dr. Michael Hausser, and Dr. Josh Burda. We started a number of good discussions that we hope to continue throughout the summer. I want to thank the faculty and students for the creative ideas that emerged during the strategic planning breakout session. We will explore some of these in the upcoming year to continue building an interactive, vibrant and truly integrative neuroscience community.

A few reminders:

- Our Neuronetworking seminar series will start on Wednesday, June 7th (a formal announcement with room and presentation schedule will follow).
- The travel grant deadline is May 26th

Finally, congratulations to all of our recent graduates - keep in touch!

- Donna Fekete

IU collaboration qualtrics again

Featured Faculty Member: Fang Huang

The Huang lab aims to develop the next generation high resolution optical microscopy methods, known as super-resolution microscopy or ‘nanoscopy’, that are capable of resolving subcellular structures in three dimensions while monitoring their dynamics in living specimens with nanometer resolution.

The group builds novel nanoscopy instruments that combine techniques from engineering and physics such as single photon interference, nanofabrication and adaptive optics and seeks to invent algorithms that take advantages of concepts in mathematics, statistics and signal processing.

We aim to significantly push the envelope of high resolution imaging in directions of live cell and tissue imaging, two major roadblocks of modern super-resolution techniques and further allow building dynamic structural models of large protein complexes in live cells and neurons with ~1 nm resolution

Huang earned his bachelor degree in Physics at the University of Science and Technology of China in 2004 and his doctoral degree in Physics from the University of New Mexico in 2011. Before joining Purdue, Fang Huang was a Postdoctoral Fellow in Cell Biology at Yale School of Medicine. The research in the Huang lab is supported by NIH and DARPA.

EVPRP Funding

The Bindley Bioscience Center Imaging Facility received EVPRP funding through the competitive Equipment Program to purchase an IncuCyte imaging platform for real-time live cell analysis. For more information regarding the instrument and its capabilities contact Andy Schaber (schaber@purdue.edu**).**

The IncuCyte S3 is a compact dual fluorescent and HD-phase contrast imaging microscope placed within a standard tissue culture incubator thus providing unparalleled environmental control. It has a rotating objective turret with 4x, 10x and 20x objectives that allow concurrently run experiments requiring different magnifications. The 2 fluorescent channels have the following bandpass excitation and emission wavelengths: Green: EX - 440nm-480nm, EM - 504nm-544nm and Red; EX 565nm-605nm, EM - 625nm-705nm. This semi-high content equipment enables multiple dish observation (up to 6 multi-well dish format vessels) and quantification of cell behavior over time by automatically gathering and analyzing images to generate decision making data in an "all in-one" format that is seamless from image acquisition to image analysis and to generation of statistically relevant data within one work-flow. Data acquired from the time points is used to generate movies and/or graphical data for quantitative measurements of multiple cellular applications. Among these applications, the IncuCyte S3 can automatically measure proliferation, apoptosis, viability, phagocytosis, cell migration, 3D spheroid growth, stem cell colony control and can detect fluorescently labeled proteins, ligands and reporter gene activation. Chief among the many applications is cell monitoring whereby the device enhances understanding of normal cell behaviors and the ability to recognize different or abnormal behaviors.

Inventors and Colleagues

OTC is looking for interns. If you know any talented undergrads looking for a paid job or grad students curious about technology commercialization who can spare a few hours a week, I hope you can pass this on to them or send me their

names. OTC interns' primary responsibility is writing our marketing summaries. Someone knowledgeable in life science would be an asset to the team of interns.

The posting can be found here: https://www.prf.org/careers/job-listings/PRF%20-%20Office%20of%20Technology%20Commercialization%20Intern.html

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Pew Scholars and Searle Scholars

Purdue University has been invited to submit *one* application for the 2018 competition of the**Searle Scholars Program**. 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*). 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, 2016. Additional eligibility and program information are available at http://www.searlescholars.net/. **Searle deadline:** September 29.

The **Pew Scholars Program in the Biomedical Sciences** has invited Purdue to submit *one*candidate to their 2018 program. Eligible candidates must hold a full-time appointment (starting no earlier than July 7, 2014) as an assistant professor in medicine or biomedical sciences with the former area being liberally defined as "contributors in science relevant to human health". Previous awardees encompass a range of disciplines including: biology, genetics, neuroscience, biochemistry, bioengineering, immunology, pharmacology, and biophysics. Previously unsuccessful Pew candidates are eligible to reapply to the foundation but only two attempts are allowed. Additional eligibility and program information are available athttp://www.pewtrusts.org/en/projects/pew-biomedical-scholars/program-details. **Pew deadline:**July 7 – candidate nomination deadline; October 23 – application deadline.

The internal deadlines for these competitions are as follows:

Monday, June 12: 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 19: Rankings due to the EVPRP

The Michael J. Fox Foundation

The Michael J. Fox Foundation is accepting pre-proposals for Fall 2017 Parkinson's research funding.

We fund research in both academic and industry settings and are currently accepting pre-proposals for two targeted grant opportunities.

Inflammation Biomarkers for Parkinson's Disease: develop new or improved biomarker tools for neuroinflammation or peripheral inflammation in Parkinson's disease

Computational Tools for PD Therapeutic Development: apply technologies in biomedical computing, informatics and computational science for analysis of existing Parkinson's disease datasets

Deadline for pre-proposal submission is Wednesday, May 31st. Download applications templates through our website. Sign up for an informational webinar on Wednesday, May 3rd to learn more about our funding strategy, currently available funding opportunities, and the grant application review process.

Foundation Grant Opportunity

American Society of Neuroradiology (ASNR)
The Foundation of the ASNR
Amount **$250,000 USD**

The ASNR anticipates funding multiple awards under this program. Applicants may request up to two years and $250,000 in total costs, inclusive of both direct and indirect costs. Exceptions for particularly unique projects will be considered, but requests that exceed $100,000 must be well justified in the Budget Justification section of the application. Budgets that exceed $100,000 require pre-approval by the Chairs of the Research committee prior to submission. Indirect costs may not exceed 10 percent of direct costs. For additional information please visit: http://www.theaftd.org/research/funding-opportunities

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Funding Opportunities

Opportunity	Award Amount	Deadline
NIH Silvio O. Conte Centers for Basic Neuroscience or Translational Mental Health Research (P50)	**1.75 Million**	**May 24, 2017**
NIH Perception and Cognition Research to Inform Cancer Image Interpretation ***R21*** ***R01***	**Varies**	**May 30, 2017**
Supplement Opportunity to Support Population-Based Research Studies of Rare Cancers	**150,000**	**June 1, 2017**

NIH Cancer Tissue Engineering Collaborative: Enabling Biomimetic Tissue-Engineered Technologies for Cancer Research (R01)	400,000	June 5, 2017
NIH Neurobiology of Migraine • *R21* • *R01*	Varies	June 5, 2017 June 16, 2017
NIH Innovation Grants to Nurture Initial Translational Efforts (IGNITE): Development and Validation of Model Systems and/or Pharmacodynamic Markers to Facilitate the Discovery of Neurotherapeutics (R21/R33)	250,000	June 16, 2017
NIH-NIMH Biobehavioral Research Awards for Innovative New Scientists (NIMH BRAINS) (R01)	400, 000	June 20, 2017
***Challenge.gov NSF Hearables Challenge*	Between 3,000 & 80,000	June 26, 2017
NIH Advancing Our Understanding of the Brain Epitransciptome • *R21* • *R01*	Varies	June 2017
Michael J. Fox Foundation for Parkinson's Research Inflammation Biomarkers for Parkinson's Disease	Up to 300,000	August 4, 2017
***NIH Role of Myeloid Cells in Persistence and Eradication of HIV-1 Reservoirs from the Brain* • *R21* • *R01*	Varies	August 7, 2017
NSF Research in the Formation of Engineers (RFE)	350,000	September 27, 2017
NIH Novel Cell Non-autonomous Mechanisms of Aging (R01)	250,000	October 3, 2017
NIH From Genomic Association to Causation: A Convergent Neuroscience Approach for Integrating Levels of Analysis to Delineate Brain Function in Neuropsychiatry • *R01* • *Collaborative R01*	Varies	October 5, 2017
NIH Innovative Research in Cancer Nanotechnology (IRCN) (R01)	450,000	November 21, 2017

**Newly Added