Message from the Director

April tends to be a busy month for all; students and faculty are preparing for the end of the semester. The Integrative Neuroscience Center Leadership Team has started to think through the summer activities we will orchestrate to continue building momentum and coalescing integrative, interdisciplinary research. As always, we welcome your suggestions or ideas for summer activities. Finally, just a quick mention that we will (starting next week) have a number of director candidates visiting campus. We look forward to your participation and feedback.

- Donna Fekete, Inaugural Director

ANIMAL BEHAVIOR CORE - We need your input!!!

The Integrative Neuroscience Center is interested in launching an Animal Behavior Core. Please respond to this survey to ensure we are purchasing the necessary equipment.

Featured Faculty Member:
A major challenge in neuroscience is to understand how brain circuits perform computations, affect perception and behaviors. **Alexander Chubykin**'s research uses in vitro and in vivo electrophysiology, optogenetics, behavior assays in mouse models in an effort to understand neural circuitry. The goal of his research is to understand how impairments in synaptic and neural circuit functions lead to changes in sensory perception and learning impairments. Characterizing single gene mutations associated with autism spectrum disorders (ASDs) in genetically modified mice provides a unique opportunity to dissect the biochemical pathways involved, and to study the functional impairments both at the level of neural circuits and at the level of an organism. This approach holds promise for development of new biomarkers and for potential discovery of pharmacological therapies, which could target the biochemical pathways altered in ASDs. Learn more about Alex on [his website](https://us12.admin.mailchimp.com/campaigns/preview-content-html?id=41235).

**Upcoming Events:**

- **Dr. Steven Schiff** from Penn State University will be speaking on Tuesday, April 12th at 9:30am in Lawson 1142 - PLEASE NOTE THIS IS A ROOM CHANGE. The title of Dr. Schiff's talk is *Integrating Control Engineering into Neuroscience: From Control of Seizures and Migraines, to Reducing Infant Brain Infections in Africa*

- On Friday, April 15th the 2016 Indiana Spinal Cord and Brain Injury Research Conference will take place in Indianapolis. The event will run from 8:00AM to 1:30PM. The Indiana Spinal Cord and Brain Injury Fund (ISCBIRF) is a state-supported program that funds research for the treatment and cure of spinal cord and traumatic brain injuries (TBI). For additional information and registration, visit [this site](https://us12.admin.mailchimp.com/campaigns/preview-content-html?id=41235).

- Thursday April 28th, from 3-4pm RPH164 there will be a seminar talk by Dr. Ellen Unterwald Professor of Pharmacology, Director of the Center for Substance Abuse Research, Lewis Katz School of Medicine, Temple University - "GSK3b signaling in cocaine reward and memory"

- The Integrative Neuroscience Center will have a station in Lyles-Porter Hall at this year's Spring Fest on April 16th.
- Save the date for our upcoming Traumatic Brain Injury Symposium on May 11th at the Burton D. Morgan Center. Details will be forthcoming.

- Friday, May 13th, the 2016 Chicago Symposium on Translation Neuroscience will take place at the Kapp Center for Biomedical Discovery. For more information click [here](#).

**Funding Opportunities:**

*Brain Research Foundation’s Scientific Innovations Award Program* provides funding for innovative science in both basic and clinical neuroscience. This funding mechanism is designed to support creative, exploratory, cutting edge research in well-established research laboratories, under the direction of established investigators. It is expected that investigations supported by these grants will yield high impact findings and result in major grant applications and significant publications in high impact journals. Each total award is limited to $150,000 (direct costs) for a two year grant period from the specified dates only (January 2017-December 2018) and funds must be spent within the grant period.

Eligible faculty are full-time professors or associate professors working in the area of studies of brain function in health and disease. Current major NIH or other peer-reviewed funding is preferred but evidence of such funding in the past three years is essential. Studies should be related to either normal human brain development or specifically identified disease states. This includes molecular and clinical neuroscience as well as studies of neural, sensory, motor, cognitive, behavioral and emotional functioning in health and disease. The grant proposal must detail a new research project that is not funded by other sources.

Internal deadlines are as follows:

**Monday, April 18**: Preproposals due to the EVPRP (see attached template)

Agency deadlines: June 20 – LOI; December 2 – Full proposal (by invite only)

Please note: Preproposals to the EVPRP should be e-mailed to EVPRPlimited@purdue.edu. Purdue's limited submission policy and templates for preproposals may be found at [http://www.purdue.edu/research/funding-and-grant-writing/limited-submissions.php](http://www.purdue.edu/research/funding-and-grant-writing/limited-submissions.php). For any case in
which the number of internal preproposals received is no more than the number of proposals allowed by
the sponsor, the EVPRP will notify the PI that he/she can proceed with their submission to the sponsor.
Here is the link to the full guidelines:

https://thebrf.org/Grants/Scientific+Innovations+Award

**NIH Mechanistic Basis of Diffuse White Matter Disease in Vascular Contributions to Cognitive Impairment and Dementia (VCID)(R01)** The purpose of this FOA is to support hypothesis-testing research to elucidate cellular and molecular mechanisms that underlie diffuse white matter disease of vascular origin including multifocal, small, and silent brain infarcts that may contribute to cognitive impairment and dementia.

Deadline: April 19

**Michael J. Fox Foundation** The Michael J. Fox Foundation works tirelessly to accelerate promising research toward breakthroughs for Parkinson’s patients. While our strong emphasis is on funding translational and clinical research, we also support high-risk/high-reward discovery work. Learn more about our priorities on our [Research Strategy page](#).

In addition to funding, awardees benefit from working with our internal research staff and broad network of scientific and industry advisors.

Core funding programs: Target Advancement (novel targets, priority targets, lead pathway target), Therapeutic Development (disease-modifying, symptomatic, clinical, and pre-clinical), and Outcome Measures (imaging agents, biomarker assay, clinical outcomes).

*Pre-proposal deadline: May 18th, 2016*

**NIH Bioengineering Research Partnerships (U01)** This FOA encourages bioengineering applications that will accelerate the development and adoption of promising tools and technologies that can address important biomedical problems. The objectives are to establish these tools and technologies as robust, well-characterized solutions that fulfill an unmet need and are capable of enhancing our understanding of life science processes or the practice of medicine. Awards will focus on supporting multidisciplinary teams that apply an integrative, quantitative bioengineering approach to developing technologies, and engage biomedical researchers or clinicians throughout the project. Deadline: May 18