Welcome to the September Clinical and Translational Neuroscience newsletter. This month, let you know about new funding opportunities from the NIH, highlight events of interest, and feature an investigator on campus. Please visit the program area pages of the IHSI website for the most up-to-date information, and sign up to receive other IHSI e-newsletters. As always, if you have an item to share with the neuroscience community at Illinois, we would be happy to feature it. Send your item to Gillian Snyder, IHSI research development manager.

DON'T FORGET TO REGISTER | HEALTH I.D.E.A.S. LECTURE SERIES

Imaging Function and Connectivity in the Human Brain with High Magnetic Fields: Spanning Scales from Cortical Columns to Whole Brain

Kamil Ugurbil, PhD, University of Minnesota

October 24, 2018 | 3:00 - 4:00 p.m.
Reception to follow
Beckman Institute Auditorium
Register (space is limited)

This lecture is held in partnership with the Beckman Institute, Carle Illinois College of Medicine, Center for Brain Plasticity, and the Neuroscience Program at the University of Illinois, and Carle Health System.

MORE DETAILS
INNOVATIVE INVESTIGATOR SPOTLIGHT | CATHERINE BEST-POPEȘCU

Each Investigator Spotlight features a clinical and translational neuroscience researcher doing important work right here at Illinois.

Professor Catherine Best-Popescu’s research interests include neuroprotection and neuroimaging of cerebral blood flow in the context of brain injury and neurodegenerative disease. Her lab works on interfacing bioengineering, neuroscience and medicine from the molecular to the behavioral scale, and the application of quantitative phase microscopy techniques to biomedical problems.

INCREASING NEUROSCIENCE DIVERSITY IN UNDERGRADS

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The over-arching goal of this NIH Blueprint R25 program is to encourage individuals from diverse backgrounds, including those from groups underrepresented in the biomedical, behavioral, and clinical research workforce, to pursue further studies or careers in research.

To accomplish the stated over-arching goal, this FOA will support creative educational activities with a primary focus on Courses for Skills Development, Research Experiences, and Mentoring Activities.

To assure consideration, Letters of Intent are due January 15, 2019, and Applications are due February 15, 2019.

NEUROMODULATION/NEUROSTIMULATION DEVICE DEVELOPMENT FOR MENTAL HEALTH APPLICATIONS

The National Institute of Mental Health (NIMH) intends to publish two new Funding Opportunity Announcements (FOAs) to support the next generation of brain stimulation devices for treating mental health disorders through both the R21 and R01 activity codes. This Notice is being provided to allow potential applicants with expertise and insights into the area of brain stimulation devices and related technologies sufficient time to develop meaningful collaborations and responsive projects.

Applications are sought that will either 1) develop novel brain stimulation devices or 2) significantly enhance, by means of hardware/software improvements, the effectiveness of brain stimulation devices that are currently U.S. Food and Drug Administration (FDA)-approved or cleared.

Novel devices should move beyond existing
electrical/magnetic stimulation and develop new stimulation techniques capable of increased spatiotemporal precision as well as multi-focal, closed-loop approaches. Applications seeking to develop new capabilities should focus on significant enhancement of the spatial resolution, depth of delivery, and/or precision of the device. Applications to this FOA are not expected to be hypothesis-driven, but should propose design-directed, developmental, or discovery-driven technology research using integrative approaches. Applications that seek to study scientific or clinical hypotheses that solely utilize devices are outside the scope of this FOA.

The FOAs are expected to be published in Fall 2018 with an expected application due date in Winter 2019. Watch for updates in an upcoming newsletter!

SCOLNICK PRIZE IN NEUROSCIENCE

The McGovern Institute is now accepting nominations for the 16th annual Edward M. Scolnick Prize in Neuroscience. The prize is named in honor of Dr. Edward M. Scolnick, who stepped down as President of Merck Research Laboratories in December 2002 after holding Merck's top research post for 17 years. Dr Scolnick is now at the Broad Institute, where he established the Stanley Center for Psychiatric Research. He also serves as a member of the McGovern Institute's scientific advisory board.

Candidates for the award must be nominated by individuals affiliated with universities, hospitals, medicals schools, or research institutes, with a background in neuroscience. Self-nomination is not permitted. Each nomination should include:

- A biosketch or CV of the nominee
- A letter of nomination with a summary and analysis of the major contributions of the nominee to the field of neuroscience
- Up to two representative reprints will be accepted

Nomination Deadline: December 15, 2018

NINDS ANNOUNCES INTENT TO FUND A SERIES OF TRAINING PROGRAMS

The National Institute of Neurological Disorders and Stroke (NINDS) intends to publish several Funding Opportunity Announcements (FOAs) to solicit applications for institutional training programs. These programs will support advanced predoctoral students (years 3-4 of graduate school), postdoctoral fellows and fellowship-stage clinicians. These Notices are being provided to allow potential applicants sufficient time to develop and design programmatic content that will form a cohesive approach to research training.

The first will be focused on translational research. Advancing basic discoveries to clinical application ("bench to bedside") requires a close collaboration between basic scientists and clinical investigators as
well as an understanding of the experimental and regulatory issues that arise in moving from basic discovery to clinical applicability. The goal of this FOA is to stimulate the creation of translational training programs in neuroscience that will equip trainees with research expertise and an understanding of the principles and practices involved in translating basic research findings to clinical therapies, technologies and devices. The program is intended to help expand the community of basic and clinical researchers working in teams to conduct basic, disease-relevant research with an understanding of the requirements to achieve clinical applicability.

The second will support institutional training programs that encompass basic, clinical, translational, or a combination of approaches in any area of research across the NINDS mission.

These FOAs are expected to be published in Fall 2018. Applications to both FOAs will be accepted once per year, with an expected first application due date of May 25, 2019. As always, the IHSI clinical and translational neuroscience team will keep you updated once the FOAs are published!

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NEW FRC PODCAST: PLASTIC CHEMICAL EXPOSURE LINKED TO BRAIN DEVELOPMENT

New research shows a relationship between phthalates and deficits in cognitive function in rats. This podcast explores what the findings could mean to humans and society as a whole. Investigators call it a "cautionary study" that shows exposure to phthalates at critical stages in human development could lower the baseline of how smart humans are as a society and while it may be difficult to prove over time, "enough evidence in animals of various sorts, should make us worried." The research team successfully mimicked the average phthalates exposure in humans with subjects and found the subjects exposed responded slower to task changes, behaved differently than those not exposed, and showed physical changes to the front part of their brain.

LISTEN HERE

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CLINICAL & TRANSLATIONAL NEUROSCIENCE IN THE NEWS

Researchers at Illinois advance work in clinical and translational neuroscience, addressing complex and critical challenges. Here, we highlight recent research news:

9.17.18 Eating fiber can delay brain aging
9.10.18 Infants can recognize when someone is being a bully
9.04.18 NIH awards $13M to Illinois, UCSF, to continue study on environmental influences on child health
9.01.18 Are you resilient? Your brain may hold the
8.31.18 Future environments: household chemicals with Susan Schantz

IMPORTANT DATES AND DEADLINES

- Health I.D.E.A.S. Lecture with Kamil Ugurbil: October 24, 3 p.m.
- Scolnick Prize in Neuroscience nominations: December 15, 2018

Contact Gillian Snyder, IHSI research development manager, at 217-300-6709 or gcooke@illinois.edu if you have a calendar item or event to share.