Collaborative Program in Neuroscience (CPIN)
University of Toronto
Newsletter – Vol. 36, No. 8 – April 2020

Featured In This Issue

Jonathan Dostrovsky Award deadline extension: The application deadline been extended to **Sunday, May 17, 2020**. For details and application form please see:
http://www.neuroscience.utoronto.ca/award_opportunities/jonathan_dostrovsky_award.htm

News – CPIN Trainees Congratulations to CPIN student member **Louisa Xinzhu Wang** on recently completing the CPIN requirements and graduating from her PhD program. Please see page 2 for details.

News – CPIN Faculty Members We would like to welcome **Dr. Darren S. Kadis** as a new faculty member to the CPIN community. Please see page 2 for details.

Neuroscience Opportunities Please see page 2 for details.

COVID-19 Update

http://www.neuroscience.utoronto.ca/

We sincerely hope that you and your families are keeping well during this continuing difficult time.

In the last week we've had some encouraging news from the most recent regional and provincial epidemiological data. The provincial government has announced that the curve appears to be flattening. As we wait for initial details of Ontario's framework for a gradual, and cautious reopening of the province, the University is also working on a plan for the gradual return of U of T operations and functions.

CPIN will continue to follow the University's lead on policies regarding large group gatherings. Please check the CPIN home page for any updates regarding our events: http://www.neuroscience.utoronto.ca/

We encourage CPIN members to contact us at p.neuroscience@utoronto.ca with any questions about the CPIN program or requirements.

For COVID-19 regular updates impacting graduate students in the University:
University of Toronto:
https://www.utoronto.ca/message-from-the-university-regarding-the-coronavirus
School of Graduate Studies: https://www.sgs.utoronto.ca/covid19/
City of Toronto's COVID-19 information page: https://www.toronto.ca/home/covid-19/

CPIN Newsletter

Zhong-Ping Feng
Director
CPIN
Graduate Studies

Iulia Park
Administrator
CPIN Office

CPIN Office
p.neuroscience@utoronto.ca
Tel.: 416 978 8637

Lead Faculty
Faculty of Medicine

CPIN Participating Units
Applied Psychology & Human Development
Biochemistry
Biomaterials & Biomedical Engineering
Cell & Systems Biology
Computer Science
Dentistry
Laboratory Medicine & Pathobiology
Medical Biophysics
Medical Science
Music
Pharmaceutical Sciences
Pharmacology & Toxicology
Physiology
Psychology
Public Health
Rehabilitation Science

Contributors:
Heart & Stroke/Richard Lewar Centre of Excellence in Cardiovascular Research

Human Biology Program

Krembil Research Institute

St. Michael's Neuroscience Research Program

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News – CPIN Trainees

http://www.neuroscience.utoronto.ca/communications/news_cpin_students.htm

Congratulations to CPIN student member **Louisa Xinzhu Wang** (Laboratory Medicine and Pathobiology, Dr. Gerold Schmitt-Ulms) on recently completing the CPIN requirements and graduating from her PhD program.

It has been known for some time that the tau protein is critical for cellular toxicity in a group of dementias, commonly referred to as tauopathies, that include Alzheimer's disease. How tau mediates this toxicity is unknown, forming the basis for a challenging PhD project. To answer this question, Louisa engineered a human co-culture model that can be differentiated into neurons and astrocytes, and it expresses inducible wildtype or mutant tau. This inducible model also expresses equal isoform ratios of 3- and 4-repeat tau, the first human cell culture model to do so. Equipped with this tool and applying an advanced affinity capture / mass spectrometry-based protein-protein interaction workflow, Louisa could show that wildtype but not mutant P301L tau interacts with a family of non-muscle myosins (NMMs). Intriguingly, this interaction depended strictly on ATPase activity of NMMs.

These findings spurred the formation of an international consortium of leading tau groups that is currently exploring the physiological significance of perturbed tau-NMM interactions for these tauopathies.

News – CPIN Faculty Members

http://www.neuroscience.utoronto.ca/communications/news_cpin_faculty_members.htm

We would like to welcome **Dr. Darren S. Kadis** (Assistant Professor, Department of Physiology, University of Toronto; Scientist, Neurosciences & Mental Health, Research Institute, Hospital for Sick Children) as a new faculty member to the CPIN community.

Dr. Kadis received his PhD through the Department of Psychology at the University of Toronto, with a distinction in neuroscience and training in clinical neuropsychology. He conducted his graduate and post-doctoral research at the Hospital for Sick Children, gaining experience with both invasive and noninvasive brain mapping procedures. During that time, he developed interest in magnetoencephalography (MEG), a fully-noninvasive neuroimaging/neurophysiological technique that allows for the study of neuronal population activity.

Dr. Kadis' expertise in MEG led him to work for several years at the Cincinnati Children's Hospital, where he served as Scientific Director of their MEG program.

Dr. Kadis currently studies brain-behaviour relationships and neuroplasticity in healthy development and disease. He is interested in how the brain supports language acquisition early in life, how the architecture and dynamics of the language network change in typical development, and how the network is impacted by perinatal or childhood injury.

Neuroscience Opportunities

http://www.neuroscience.utoronto.ca/communications/Positions_Available.htm

Postdoctoral Position
Developmental Systems Neuroscience Lab
University of Toronto Scarborough
Description: If you are interested in development, synaptic connectivity and behaviour please apply. Slice electrophysiology and/or stereotaxic surgery experience encouraged but not necessary. Details and contact info at our website http://devsneurolab.com

Lab Technician Position
Developmental Systems Neuroscience Lab
University of Toronto Scarborough
Description: Experience with rodent stereotactic surgeries required. Details and contact info at our website http://devsneurolab.com