

Collaborative Program in Neuroscience (CPIN)

University of Toronto

Newsletter – Vol. 34, No. 2 – October 2017

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2017-18 CPIN Distinguished Lectureship Series

<http://www.neuroscience.utoronto.ca/events/lectureship.htm>



Speaker | **Dr. Sylvain Williams**, Professor of Psychiatry, Douglas Mental Health University Institute McGill University
Title | *What can we learn by visualizing neuronal cell assemblies during behavior?*
Date and Time | **Wednesday, October 18, 2017, 4:15 pm**
Location | Room 2117, Sidney Smith Hall, 100 St. George Street, U of T
Hosts | 1) Dr. Kaori Takehara-Nishiuchi, Associate Professor, Department of Psychology, U of T; 2) Dr. Laura Corbit, Assistant Professor, Department of Psychology, U of T
Co-sponsor | Department of Psychology Brain and Behaviour Seminar Series, U of T



Speaker | **Dr. Dalton Dietrich**, Scientific Director, The Miami Project to Cure Paralysis and the Kinetic Concepts Distinguished Chair in Neurosurgery, University of Miami Miller School of Medicine
Title | *Translational Studies for Spinal Cord Injury: Current and Future Challenges*
Date and Time | **Friday, November 3, 2017, 4:20 pm**
Location | Main Dining Room, Faculty Club, University of Toronto, 41 Willcocks St, Toronto, ON M5S 3G3
Host | Dr. Michael Fehlings, Head, Spinal Program, UHN & Vice Chair Research, Dept. of Surgery, U of T
Co-Sponsors | (i) UHN; (ii) Krembil Neuroscience Centre; (iii) U of T Spine Program; (iv) the Spinal Cord Injury Research Unit; (v) the DeZwirek Family; (vi) Barbara Turnbull Foundation
Note: The Charles Tator-Barbara Turnbull Spinal Cord Injury Symposium will held on Fri. Nov 3rd between 12-5pm. CPIN students are welcome to attend all/part of the Symposium



Speaker | **Dr. John H. Zhang**, Professor, Departments of Anesthesiology, Physiology, and Neurosurgery; Director, Center for Neuroscience Research, Loma Linda University School of Medicine, Loma Linda, CA; Editor in Chief, Translational Stroke Research; Editor in Chief, Medical Gas Research; Editor in Chief, Proceedings of Neuroscience
Title | *Stroke: a 2400 years puzzle*
Date and Time | **Wednesday, November 15, 2017, 3:00 pm**
Location | Rm. 2172, Medical Sciences Building, 1 King's College Circle, U of T
Host | Dr. Hong-Shuo Sun, Associate Professor, Departments of Surgery, Physiology, Pharmacology & Toxicology and Institute of Medical Science, U of T
Co-sponsor | Division of Neurosurgery, Department of Surgery, U of T

CPIN Newsletter

Zhong-Ping Feng
Director
CPIN
Graduate Studies

Suhail Asrar
Administrator
CPIN Office

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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

News - CPIN Faculty Members

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

2017 Canadian Academy of Health Sciences (CAHS) Fellows



Dr. Michael Cusimano



Dr. Richard Horner



Dr. Haibo Zhang

Congratulations to CPIN faculty members **Dr. Michael Cusimano** (Professor, Surgery, Education and Public Health and the Institute of Medical Sciences, U of T; Neurosurgeon, St. Michael's Hospital, University Health Network and the Hospital for Sick Children), **Dr. Richard Horner** (Professor, Medicine and Physiology, U of T; Canada Research Chair in Sleep and Respiratory Neurobiology) and **Dr. Haibo Zhang** (Professor, Anesthesia, Physiology and the Interdepartmental Division of Critical Care Medicine, U of T; Chang-Jiang Scholar in Medicine; Yangcheng Research Chair in Respiratory Medicine) on being recently elected as 2017 Canadian Academy of Health Sciences (CAHS) Fellows.

Excerpts from the Canadian Academy of Health Sciences 2017 Fellows announcement

(<http://www.cahs-acss.ca/wp-content/uploads/2017/09/Congratulations-Welcome-to-our-2017-Fellows.pdf>):

Michael David J. Cusimano

Dr. Cusimano is a Neurosurgeon at St. Michael's Hospital, the University Health Network and the Hospital for Sick Children, and a Professor of Neurosurgery, Education and Public Health at the University of Toronto. He also leads the Injury Prevention Research Office at St. Michael's Hospital. His development of endoscopic skull base surgery has become the norm internationally and his identification of the risk factors and outcomes of traumatic brain injury has been translated to new policy. As a leading researcher in brain injury and neurosurgery, he continues to be sought out as an expert in the field nationally and abroad.

Richard L. Horner

Dr. Horner has advanced knowledge in respiratory and sleep science by elucidating the cellular mechanisms of the brain responsible for the impact of sleep on breathing. This knowledge is particularly relevant to clinical disorders of breathing during sleep, including obstructive sleep apnea, and has guided clinical trials of possible pharmacological approaches to its treatment. Dr. Horner has also contributed to public understanding of sleep science, through both the popular media and through a book he has written for the lay person that highlights the importance of sleep within the broader contexts of evolution and biology.

Haibo Zhang

Dr. Zhang is a Professor in the Departments of Anesthesia and Physiology and the Interdepartmental Division of Critical Care Medicine at the University of Toronto. He is an international expert in lung infection and immunity, lung repair and regeneration, who has significantly advanced the fields of ventilator-induced lung fibrosis, endotoxin signaling and stem cell treatment in lung injury and sepsis. He also leads the Canada-China Joint Research Centre for Respiratory Disease, a large and unique basic and clinical research program focusing on the mechanisms and therapy in epidemic respiratory diseases.

News - CPIN Trainees

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



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

During her doctoral studies, Mohadeseh used the combination of cutting-edge CRISPR genetic engineering and proteomics technologies to establish a novel signaling pathway downstream of prion protein that involves the largest known upregulation of endogenous protein levels to date and reconciles diverse prnp knockout mouse phenotypes in a simple model.

Mohadeseh generated the first knockout models of prion protein using CRISPR technology, contributed to 10 peer-reviewed journal articles during her PhD, 5 of which have been first-author contributions. She has presented her research findings in 20 different university-level and international conferences with written reports, poster and oral formats and mentored multiple undergraduate and M.Sc. students in the research of neurodegenerative diseases.

Mohadeseh has been the recipient of the prestigious Ontario Trillium Scholarship award from the Government of Ontario (2011-15) as well as the International Fellowship in Neuroscience from the Weston Brain Institute (2016-17). The latter has supported her time at the University of California, San Francisco where she has explored mechanism-driven-informed drug screens targeting prion diseases and tauopathies in the laboratory of Dr. Stanley Prusiner, the winner of Nobel Award in Physiology or Medicine (1997).

CPIN Undergraduate Mentorship Panel Event Report

http://www.neuroscience.utoronto.ca/events/undergraduate_mentorship.htm

The CPIN Mentorship Program held its first event of the academic year on September 28, 2017. The event included a panel of CPIN graduate students who answered questions on the topics of the application process, supervisors and research, and the graduate experience. The Q&A session was followed by interactive networking between graduate and undergraduate students. The event was held by the CPIN Mentorship Team: **Chantel Kowalchuk, Joe Steinman, Vivian Szeto, Nirsan Kunaratnam, Kate Rzakdi & Raymond Wong**. We would like to thank our graduate panelists (**James Saravanmuttu, Andrea Hung, Josiane Mapplebeck, Lee Propp, Amin Kamaledin & Marija Zicevska**), faculty panelist (**Dr. Zhong-Ping Feng**) for their participation and making this event a success! Lastly, we would like to thank the Human Biology Department for their sponsorship of this event (*Event report by Vivian Szeto*).



Photo Credits: Dr. Zhong-Ping Feng

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Welcome New CPIN Students

Last Name	First Name	Home Unit	Degree	Supervisor
Abudiab	Sally	Rehabilitation Science	MSc	Dr. Robin Green
Ahmed	Sarah	Institute of Medical Science	MSc	Dr. Romina Mizrahi
Bitar	Mahmoud	Cell and Systems Biology	MSc	Dr. Ashley Monks
Cheung	Ching Kong	Psychology	PhD	Dr Matthias Niemeier
Cox	Elizabeth	Psychology	PhD	Dr. Donald Mabbott
Cruz-Sanchez	Arely	Cell and Systems Biology	MSc	Dr. Maithe Arruda-Carvalho
Doroszkiewicz	Corinne	Institute of Medical Science	MSc	Dr. Charles Tator
Gill	Talwinder	Institute of Medical Science	MSc	Dr. Isabelle Boileau
Gregor	Sarah	Rehabilitation Science	PhD	Dr. Kara Patterson
Hanna	George	Institute of Biomaterials and Biomedical Engineering	MASc	Dr. Tom Chau
Houston	David	Rehabilitation Science	MSc	Dr. Kristin Musselman
Intson	Katheron	Pharmacology & Toxicology	PhD	Dr. Amy Ramsey
Lavigne	Stéphanie	Music	MA	Dr. Michael Thaut
Li	Winston	Physiology	MSc	Dr. Beverley Orser
Lin	Lilian	Laboratory Medicine and Pathobiology	PhD	Dr. Janice Robertson
Lundbye	Camilla	Physiology	PhD	Dr. Graham Collingridge
McSweeney	Claire	Institute of Medical Science	MSc	Dr. Karen Gordon
Mellerup	Miranda	Physiology	MSc	Dr. Anne Wheeler
Park	Caroline	Institute of Medical Science	MSc	Dr. Roger McIntyre
Rodrigues	Nelson	Institute of Medical Science	MSc	Dr. Nir Lipsman
Sato	Julie	Psychology	PhD	Dr. Margot Taylor
Schwab	Nicole	Laboratory Medicine and Pathobiology	MSc	Dr. Lizi-Naz Hazrati
Shenouda	Marc	Laboratory Medicine and Pathobiology	MSc	Dr. Janice Robertson
Strauss	Maximilian	Laboratory Medicine and Pathobiology	MSc	Dr. Janice Robertson
Talwar	Natasha	Institute of Medical Science	MSc	Dr. Tom Schweizer
Tomasi	Julia	Institute of Medical Science	MSc	Dr. James Kennedy
Volianskis	Rasa	Physiology	MSc	Dr. Graham Collingridge

Upcoming Events

U of T Neuroscience Seminars

<http://neuroscience.utoronto.ca/events/seminar.htm>

Conferences and Meetings

http://neuroscience.utoronto.ca/events/Conf_M.htm

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Neuroscience Opportunities

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

Postdoctoral Fellow Position

Lunenfeld–Tanenbaum Research Institute, Mount Sinai Hospital, Toronto, ON, Canada

Description: The Laboratory of Dr. Graham Collingridge, located at the Lunenfeld–Tanenbaum Research Institute of Mount Sinai Hospital (affiliated with University of Toronto) is currently seeking highly motivated post-doctoral fellows skilled in electrophysiology (preferably with single cell recording experience) and ideally also imaging. The lab is studying synaptic plasticity mechanisms, with a focus on the role of glutamate receptors and the hippocampus in health and disease models. We welcome other neuroscience projects, however we will first consider specific projects that have been funded by a CIHR Foundation grant and by Brain Canada. We are located in the Toronto Discovery District which represents one of the largest neuroscience communities in North America. You will have access to a rich assortment of expertise and collaboration. The lab is very well equipped and has a variety of tools and techniques including mouse models, neurobehavioural testing, in vitro and vivo optical and electrical recordings, multiphoton and fluorescence imaging, genetics, proteomics and biochemistry.

Interested applicants are asked to forward a copy of their CV, as well as the names of 3 referees whom we may contact, to Francesca Fabry at fabry@lunenfeld.ca

Other Neuroscience Positions

Research and Policy Analyst

Canadian Centre on Substance Use and Addiction, Ottawa, ON, Canada

Description: The Canadian Centre on Substance Use and Addiction (CCSA) changes lives by bringing people and knowledge together to reduce the harms of alcohol and other drugs on society. We partner with public, private and non-governmental organizations to improve the health and safety of Canadians. A non-governmental organization with a national focus, CCSA's vision is for a healthier Canadian society where evidence transforms approaches to substance use. Reporting to the Associate Director, Research and Policy, the Research & Policy Analyst (RPA) is a subject matter expert who conducts research and responds to research requests (both internal to CCSA and external), and provides research-based policy analysis relevant to CCSA's priorities. The RPA may represent CCSA on various expert committees and working groups and provide advice on research initiatives and their impact on public policy. The RPA works in collaboration with CCSA's external facing divisions to communicate key messages and aid in the knowledge mobilization of research findings.

For further information, please see the link:

<http://www.ccdus.ca/Eng/About-CCSA/Career-Opportunities/Pages/default.aspx#RPA>

Reminders

Submissions for News Updates The CPIN Office requests trainee and faculty members to submit updates in research discoveries, events, and other achievements involving CPIN members. Please send your submissions to p.neuroscience@utoronto.ca

Follow CPIN on social media: CPIN faculty and trainee members are welcome to follow us at the following links:

Facebook: <https://www.facebook.com/Collaborative-Program-in-Neuroscience-212564644049/>

LinkedIn: <https://ca.linkedin.com/in/cpinuoft>

Twitter: https://twitter.com/CPIN_UofT

CPIN Student Completion Form CPIN graduate students who have completed both their home department and CPIN trainee requirements must fill in the online completion form located at the link below:

http://www.neuroscience.utoronto.ca/students/cpin_student_completion_form.htm

Faculty Profile Update The CPIN Office is looking to update the CPIN faculty member profiles on the website: <http://www.neuroscience.utoronto.ca/faculty/list.htm> If you wish to add or update your profile on the CPIN website, please contact the CPIN Office at p.neuroscience@utoronto.ca.