

Collaborative Program in Neuroscience (CPIN)

University of Toronto

Newsletter – Vol. 31, No. 4 – December 2014

Announcements

Season's Greetings CPIN would like to wish all members a happy holiday season.

News – CPIN Faculty Members Congratulations to CPIN Faculty member **Dr. Richard L. Horner** (Departments of Medicine, Physiology) on the release of his new book for the general public titled “**The universal pastime: sleep and rest explained**”. Please see page 2 for more details.

News – CPIN Faculty Members Congratulations to CPIN members **Dr. Michael Fehlings** (Institute of Medical Science), **Dr. John S. Floras** (Institute of Medical Science) and **Dr. Ulrich Tepass** (Cell & Systems Biology) on their recent Honours & Awards. Please see page 2 and 3 for more details.

Welcomes New Faculty Members **Dr. Lorraine Kalia** (Medicine, Laboratory Medicine and Pathobiology) and **Dr. Suneil Kalia** (Surgery, Laboratory Medicine and Pathobiology). Please see page 3 for more details.

2015 CPIN Distinguished Lectureship Series The schedule for the 2015 CPIN Distinguished Lectureship Series is now available. Please click the link below to view it on the CPIN website: <http://www.neuroscience.utoronto.ca/events/lectureship.htm>

2014-15 CPIN Distinguished Lectureship Series

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



Speaker | **Dr. Bob Hart**, Professor, Division of Neurology, Department of Medicine, McMaster University

Title | *Atrial Fibrillation and Stroke: the first 100 years*

Date | **Friday, January 30, 2015**

Time | 9:00 am

Location | Li Ka Shing Knowledge Institute (209 Victoria St); 1st floor Room 136

Hosts | Dr. Tom Schweizer, Director, Neuroscience Research Program, St. Michael's Hospital; Assistant Professor, Faculty of Medicine (Neurosurgery) & IBBME, University of Toronto; University of Toronto

Stroke Program

Sponsors | St. Michael's Hospital Neuroscience Research Program; University of Toronto

Stroke Program



Speaker | **Dr. Ahmet Hoke**, Professor of Neurology and Neuroscience, Johns Hopkins University; Director, Division of Neuromuscular Diseases; Director, Neuromuscular Medicine Fellowship Program; Director, JHU NIMH NeuroAIDS Developmental Core; Editor in Chief, Experimental Neurology

Title | *Challenges in nerve regeneration*

Date | **Friday, January 30, 2015**

Time | 12:00 pm

Location | Hollywood Theatre, Hospital for Sick Children

Hosts | Dr. Gregory H. Borschel, Surgeon, Plastic and Reconstructive Surgery, Associate Scientist, Neurosciences & Mental Health, Research Institute, Hospital for Sick Children, Assistant Professor, Departments of Surgery and Biomaterials and Biomedical Engineering, University of Toronto; and Dr. Tessa Gordon, Senior Scientist, Hospital for Sick Children, Professor Emeritus, University of Alberta

Co-sponsor | Department of Surgery, University of Toronto

<http://www.neuroscience.utoronto.ca/communications/2014newsletter.htm>

CPIN Newsletter

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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
Rehabilitation Science

Contributor:

St. Michael's Neuroscience
Research Program

Toronto Western Research
Institute

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News - CPIN Faculty Members - Book Release

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



Congratulations to CPIN Faculty member **Dr. Richard L. Horner** (Departments of Medicine, Physiology) on **the release of his new book for the general public titled “The universal pastime: sleep and rest explained”**. It is available at all online bookstores including Amazon, Barnes and Noble, Kobo and Scribd: [Link on Amazon.ca](http://www.amazon.ca)

Dr. Horner received his undergraduate degree in Physiology from the University of Sheffield, UK in 1986. He then completed his PhD at the University of London, UK in 1991 followed by postdoctoral work in the Department of Medicine at the University of Toronto (1991-1994) and the

University of Pennsylvania (1994-1997). He returned to a faculty position at the University of Toronto in 1997 where he is now Professor of Medicine and Physiology and a Canada Research Chair. His research focuses on the brain cells and circuits controlling the states of sleep, drug-induced sedation and anesthesia, and their impact on vital functions such as breathing. He has over one hundred peer reviewed scientific publications and chapters in textbooks. Dr. Horner is also active in undergraduate and graduate teaching at the University of Toronto. He has won awards for these courses, as well as awards for linking teaching with research.

News - CPIN Faculty Members – Honours and Awards

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



Congratulations to CPIN Faculty member **Dr. Michael Fehlings** (Institute of Medical Science) for **being inducted as a Fellow to the Royal Society of Canada**. The RSC official press release of the election and list of “Class of 2014 New Fellow Citations” are posted at:

<http://rsc-src.ca/en/friends-partners/newsroom/press-releases/royal-society-canada-names-new-fellows>

Additionally, Dr. Fehlings was also **elected to the Fellowship of the Canadian Academy of Health Sciences**: <http://www.caahs-acss.ca/forums/>

Dr. Fehlings is Head of the Spinal Program at Toronto Western Hospital. Dr. Fehlings is also a Professor of Neurosurgery, Co-Director of the Spine Program and, most recently, appointed Vice Chair Research in the Department of Surgery at the University of Toronto. He holds the Halbert Chair in Neural Repair and Regeneration, is a Senior Scientist in the Division of Genetics and Development at the Toronto Western Research Institute, a Scientist at the McEwen Centre for Regenerative Medicine, and a McLaughlin Scholar in Molecular Medicine. Dr. Fehlings combines an active clinical practice in complex spinal surgery with a translationally-oriented research program focused on discovering novel treatments for the injured brain and spinal cord. Dr. Fehlings has published over 550 peer-reviewed journal publications in neuroscience chiefly in the area of spinal cord injury and complex spinal surgery. In addition, Dr. Fehlings is a principal investigator in the Christopher and Dana Reeve Foundation North American Clinical Trials Network, Chair of the internationally renowned AOSpine North America network and leads several international clinical research trials.



Congratulations to CPIN Faculty member **Dr. John S. Floras** (Institute of Medical Science) for being **recently elected as a Fellow of the Canadian Academy of Health Sciences**:

<http://www.caahs-acss.ca/forums/>

Dr. Floras pursues patient-oriented research into circulatory and cardiac control mechanisms in health and disease, with particular emphasis on hypertension, heart failure, renal failure, heart-lung interactions and sleep-related breathing disorders. After graduating in Medicine from Toronto, in 1977, he accepted a Rhodes Scholarship to read for a D.Phil. at the University of Oxford concerning neural regulation of the circulation in hypertension. Following doctoral training at the University of Iowa Cardiovascular Research Center, he was recruited to the Division of Cardiology at the Toronto General Hospital in 1985. There he established the first human cardiovascular laboratory in Canada with the capacity to record efferent sympathetic nervous discharge to resistance vessels. From 1995 to 1998, while Mount Sinai Hospital Cardiology Division Head, he integrated this program with a cardiac catheterization and a sleep laboratory both dedicated exclusively to human cardiovascular investigation. His findings have appeared in over 200 original publications that collectively have been cited over 10,000 times. In 1997 he was promoted to Professor, and in 2004 he was awarded a Tier 1 Canada Research Chair in Integrative Cardiovascular Biology.

<http://www.neuroscience.utoronto.ca/communications/2014newsletter.htm>

News - CPIN Faculty Members – Honours and Awards (contd.)



Congratulations to **Dr. Ulrich Tepass** (Cell & Systems Biology) for **being recently elected a Fellow of the Royal Society of Canada**. The RSC official press release of the election and list of “Class of 2014 New Fellow Citations” are posted at:

<http://rsc-src.ca/en/friends-partners/newsroom/press-releases/royal-society-canada-names-new-fellows>

Dr. Tepass is Professor and Chair of the Department of Cell & Systems Biology, and a member of the CPIN Board of Directors. Dr. Tepass has made major contributions to our understanding of epithelial cell polarity and cell adhesion and the development of photoreceptor cells using the fruit fly as a model.

Meet our new Faculty Members



Dr. Lorraine Kalia (Assistant Professor, Medicine, Laboratory Medicine and Pathobiology): Dr. Kalia is an assistant professor in the Division of Neurology, Department of Medicine and the Department of Laboratory Medicine and Pathobiology at the University of Toronto. She is a scientist at the Toronto Western Research Institute and Tanz Centre for Research in Neurodegenerative Diseases, as well as a neurologist specializing in Parkinson's disease and related movement disorders at the Toronto Western Hospital. Parkinson's disease is a common neurodegenerative disorder for which there is no cure. It is associated with prominent death of dopamine-producing neurons in the brain, and the mainstays of treatment are dopaminergic therapies.

However these therapies only alleviate symptoms and are associated with substantial adverse effects. There are no available treatments that slow or stop the progressive neurodegeneration. Dr. Kalia's research program is based on the hypothesis that understanding the molecular mechanisms underlying neuronal death in Parkinson's disease will lead to development of these much needed disease-modifying therapies.



Dr. Suneil Kalia (Assistant Professor, Surgery, Laboratory Medicine and Pathobiology): Dr. Kalia is a scientist at Toronto Western Research Institute and assistant professor in neurosurgery and the Department of Laboratory Medicine and Pathobiology at the University of Toronto. His research laboratory focuses on understanding molecular mechanisms of protein homeostasis in neurodegenerative disease with a focus on Parkinson's disease (PD). As a neurosurgeon, he specializes in stereotactic and functional neurosurgery which includes neuromodulation based therapies such as deep brain stimulation for the surgical management of movement disorders including PD.

Dr. Kalia received his BSc at McGill University and his MD and PhD degrees from the University of Toronto. In 2006 he entered the neurosurgery residency program at University of Toronto, during which he completed a postdoctoral research fellowship at the MGH Institute for Neurodegenerative Disease, Harvard University. After obtaining his FRCS(C) in neurosurgery, he undertook his subspecialty training at the Toronto Western Hospital. His research team is actively working on developing novel biological therapies that are designed to slow or halt the progression of neurodegeneration in PD.

Upcoming Events

U of T Neuroscience Seminars

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

Baycrest Rotman Research Institute Rounds

Speaker | **Dr. Sandra Black**, Brill Chair in Neurology, Department of Medicine, University of Toronto, Sunnybrook Health Sciences Centre; Hurvitz Brain Sciences Research Program Director, Sunnybrook Research Institute; Executive Director, Toronto Dementia Research Alliance; Site Leader, Canadian Partnership for Stroke Recovery

Title | *Brain Networks and Network Science - Big Data in a Shrinking World*

Date | **Monday, January 5, 2015**

Time | 3:30 – 4:30 pm

Location | Classrooms ABC, Baycrest

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Upcoming Events (contd.)

U of T Neuroscience Seminars

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

Psychology Emblinghaus Empire Talk Series 2014-2015

Speaker | **Dr. Steve Joordens**, Psychology, Scarborough Campus, University of Toronto

Title | *Creating Habits of Mind: Can Cognitive Skills like Critical Thought Be Effectively Taught in Any Classroom?*

Date | **Wednesday, January 21, 2015**

Time | 12:15-1:30 pm

Location | Room 3130 (3rd floor), Sidney Smith Hall, 100 St. George Street

Psychology Emblinghaus Empire Talk Series 2014-2015

Speaker | **Dr. Ryan Webb**, Rotman School of Management, University of Toronto

Title | *TBD*

Date | **Wednesday, January 28, 2015**

Time | 12:15-1:30 pm

Location | Room 3130 (3rd floor), Sidney Smith Hall, 100 St. George Street

Faculty of Music and MaHRC Music and Health Colloquium

Speakers | **Dr. Sean Hutchins**, Director of Research, Royal Conservatory of Music

Title | *Recent Research in the Perception and Performance of Singing*

Date | **Wednesday, January 28, 2015**

Time | 3:00 - 4:30 pm

Location | Room 216, Edward Johnson Building

Conferences and Meetings

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

Canadian Sports Concussion Project Conference

Event Date: January 17th, 2015

Toronto Western Hospital - Auditorium 2-401 West Wing

You are invited to attend the third conference hosted by the Concussion and CTE team at The Krembil Neuroscience Centre. The invited speakers from the Project Team and from other research groups will be making presentations on the clinical, neuropsychological, neuroimaging and neuropathological manifestations of the concussion spectrum of disorders including acute concussion, post-concussion syndrome, emotional consequences of concussion, and major brain degeneration including chronic traumatic encephalopathy (CTE). This conference will cover the latest research developments in this field. Researchers from across Canada are invited to attend. There is no registration fee.

Keynote Speakers & Sessions: Professor **Erin D. Bigler**, Brigham Young University, Utah (Neuropsychology), Title: "Understanding the Latest Developments in Neuroimaging in Sports Concussion", Professor **Eric J. Huang**, University of California at San Francisco (Neuropathology), Title: "Neuroinflammation in TBI and Neurodegeneration"

If you have any questions about the event, please email conferences@uhn.ca

Reminders

Submissions for News Updates The CPIN Office welcomes 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

Volunteer Opportunity at the 2015 Toronto Brain Bee CPIN Faculty and trainee members are invited to volunteer at the **17th Annual Toronto Brain Bee** that will be held on **Friday, March 27, 2015** at the University of Toronto. Please fill out the online volunteer form at <http://www.neuroscience.utoronto.ca/events/brainbee.htm>

Trainee Record Updates The CPIN Office is currently updating its records & requests that all CPIN students & postdoctoral fellows provide information pertaining to awards, publications & other achievements on the online form at the link below: http://www.neuroscience.utoronto.ca/students/Trainee_Awards_and_Publications_Form.htm

Neuroscience Opportunities The CPIN website now includes postings for available positions in the Toronto neuroscience community. Please see the website for details: http://www.neuroscience.utoronto.ca/communications/Positions_Available.htm

<http://www.neuroscience.utoronto.ca/communications/2014newsletter.htm>