

Collaborative Program in Neuroscience (CPIN)

University of Toronto

Newsletter – Vol. 34, No. 9 – May 2018

Featured In This Issue

2018 CPIN Research Day & Mental Health symposium (updates) has been set for Thursday, **June 14 at the U of T Medical Sciences Building**. Please see page 2 for details.

Conferences – International Congress of Neuroendocrinology on July 15-18, Toronto Westin Harbour Castle (Page 3) and Local Conferences: **UofT Spine Program** on June 11 and SickKids Annual **Brain & Mental Health Day Conference** (Page 4).

Call for CPIN 2018-2019 Distinguished Lecturer Nominations CPIN trainee & faculty members are welcome to nominate potential speakers for the 2018-2019 Neuroscience Distinguished Lectureship Series. Please submit your nominations at the following link: http://www.neuroscience.utoronto.ca/events/lectureship/distinguished_lecturer_nominations.htm. Nominations will be reviewed by the CPIN Committee for approval.

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

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

Welcome New CPIN Faculty Member



We would like to welcome **Dr. Julien Muffat** (Scientist, Sickkids; Assistant Professor, Department of Molecular Genetics) as a new faculty member to the CPIN community.

Dr. Muffat hails from France where he studied for his Licence (B.Sc.) in Biochemistry and Molecular Biology at the Biochemistry and Bioengineering department of the Ecole Normale Supérieure de Paris-Saclay. He went on to do research on the oxidative and aggregative properties of amyloid in Alzheimer's disease, in the laboratory of Rudolph Tanzi at Harvard Medical School, receiving a DEA (M.Sc.) in Biology of Aging from the University of Paris. Dr. Muffat was awarded a Ph.D. in Molecular and Cellular Neurobiology from the California Institute of Technology, for his studies of the genetics of normal and pathological aging under the guidance of Seymour Benzer and Paul Patterson. He completed his post-doctoral training as a NARSAD/BBR Young Investigator with Rudolf Jaenisch at the Whitehead Institute of MIT, where he established an *in vitro* method of differentiation of human iPS cells into microglia-like cells, to model CNS disorders.

Dr. Muffat started his laboratory at SickKids in 2018, and is an assistant Professor in the Department of Molecular Genetics at the University of Toronto. His laboratory studies the interactions of the nervous and immune systems, using an *in vitro* approach capitalizing on the advent of human induced pluripotent stem cells, directed differentiation in 2D and 3D, and genetic engineering. Of particular interest to the lab is the role of the resident innate immune cells of the brain, microglia, in diseases such as Alzheimer's disease and Multiple Sclerosis. His lab welcomes applications from motivated graduate students and postdocs.

<http://www.sickkids.ca/AboutSickKids/Directory/People/M/julien-muffat.html>
<http://www.moleculargenetics.utoronto.ca/faculty/2018/4/4/julien-muffat>

CPIN Newsletter

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Faculty of Medicine

CPIN Participating Units
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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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UNIVERSITY OF
TORONTO

Collaborative Program In Neuroscience (CPIN)

CPIN Research Day 2018

THURSDAY JUNE 14TH, 2018

Medical Sciences Building
(9:30 AM – 5:30 PM)

The **Collaborative Program in Neuroscience (CPIN)** welcomes everyone to join us on June 14th for our Research Day. The event starts with a **workshop** on Communication featuring professional storytelling coach **Sage Tyrle**, a networking session led by a UofT Career Educator, and talks by CPIN alumni/students on alternative career paths in the morning, followed by **Research Poster Presentations** by CPIN students and postdoctoral fellows during lunch time. The **Mental Health Symposium** in the afternoon will start with TSN Radio host and mental health advocate **Michael Landsberg**, and then three scientific talks will be delivered by U of T Professors **Jeffrey Meyer**, **Etienne Sibille**, and **Kang Lee**. In the Awards ceremony session, the recipients of the 2018 Jonathan Dostrovsky Award in Neuroscience, and the Poster Presentations Awards will be announced.

This event is open to everyone inside and outside U of T. Have questions or interested in signing up? Email us at cpin.researchday2018@gmail.com or p.neuroscience@utoronto.ca



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Krembil
Relentless.

SickKids
RESEARCH
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Heart & Stroke Richard Lewar
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The **online registration** is now open to CPIN Faculty and trainee members, and none-CPIN members (http://www.neuroscience.utoronto.ca/events/CPIN_Research_Day.htm).

For faculty members who will be available to serve as the **Judge for the student poster presentations**, please register online at http://www.neuroscience.utoronto.ca/events/CPIN_Research_Day/researchdayfacultyreg.htm.

For the program updates, please visit the CPIN website (http://www.neuroscience.utoronto.ca/events/CPIN_Research_Day.htm).

The Research Day Organizing Committee are extremely excited to see you all joining us on June 14!

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Michael Landsberg has been a prominent face and voice on the Canadian sports scene since 1984. With his unique style, he quickly became one of this country's most polarizing personalities- perceived by some as forthright and others as arrogant.

In 2009 people began to agree more on Michael after he publicly shared his, then decade long, struggle with severe depression and anxiety. Since then, he has become one of this country's loudest voices- pushing for all Canadians to see mental illness as a sickness, not a weakness. Michael frequently used his platform as producer and host of *Off the Record* on TSN to change people's opinion of mental illness.

Michael has been an official spokesperson for Bell Let's Talk Day since that initiative was launched. In 2015 Michael launched his own initiative, a not-for-profit, called SickNotWeak. SickNotWeak is dedicated to changing the way Canadians see mental illness. www.SickNotWeak.com gives a voice to celebrities and everyday folks to share their struggles and their views on mental health issues.



Dr. Jeffrey Meyer is a Tier 1 Canada Research Chair in the Neurochemistry of Depression. He leads the Neurochemical Imaging Program in Mood and Anxiety Disorders at the Campbell Family Mental Health Research Institute at CAMH and is a full professor at U of T's Department of Psychiatry. Dr. Meyer has made a number of replicated discoveries including the first definitive evidence of neuroinflammation during major depressive episodes; that monoamine oxidase A level is elevated during major depressive episodes, that serotonin reuptake inhibitor medications block 80% of their target at clinical doses and that serotonin transporter binding is increased in the brain in winter relative to summer. Much of his recent research focuses on neuroinflammation, in major depressive disorder. He is an author on more than 100 peer-reviewed papers in journals including 16 papers as a lead/senior author in *JAMA Psychiatry/Archives of General Psychiatry* and the *American Journal of Psychiatry* as well as other journals such as *lancet psychiatry* and *PNAS*. Dr. Meyer's research has a strong translational component, and he has experience in a variety of techniques and technologies extending from a PET imaging focus including, MR spectroscopy, functional MRI, early phase clinical trials of therapeutics, natural health product development and advancement of peripheral biomarkers.



Dr. Etienne Sibille is Deputy Director and Senior Scientist at the Campbell Family Mental Health Institute of CAMH. He holds the Campbell Family Chair in Clinical Neuroscience at CAMH and is a U of T Professor in the Departments of Psychiatry and Pharmacology & Toxicology. His research focuses on the neurobiology of depression and aging in humans and animal models. His lab demonstrated that biological pathways affected during brain aging, including inhibitory functions, overlap with psychiatric conditions and neurological disease. In 2016, he was the recipient of the NARSAD Distinguished Investigator Award. This award is offered by the Brain & Behavior Research Foundation to Investigators conducting innovative research in understanding and treating psychiatric disorders.



Dr. Kang Lee, PhD, Professor, OISE, University of Toronto, Tier 1 Canada Research Chair in Developmental Neuroscience, and Senior Scientist at the Department of Psychology, University of California, San Diego. For over two decades, Dr. Lee has used multi-level methodologies (including neuroimaging and machine learning) to study psychological-physiological-neural correlates of human social behavior and emotion. To date, Dr. Lee has published close to 300 peer-reviewed papers and book chapters in international journals, and 20 book chapters. Dr. Lee's research has received funding from various founding agencies such as the US National Institute of Health, US National Science Foundation, Canadian Foundation for Innovation, Natural Science and Engineering Research Council of Canada, and Social Science and Humanities Research Council of Canada, and Chinese National

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Science Foundation. To date, the amount of funding in total exceeds 11 million dollars. His work has also been featured in various news media outlets such as New York Times, Washington Post, National Geographic, Scientific American, Fox News, and Canadian Broadcast Corporation.

Dr. Kang Lee is a co-inventor of the Transdermal Optical Imaging technology that uses a conventional digital video camera and deep machine learning to noninvasively image blood flows under the facial skin to reveal invisible psychological and physiological activities. He is a co-founder and Chief Science Officer of Nuralogix, a leading Affective Artificial Intelligence company in the world. Using Transdermal Optical Imaging, Nuralogix has developed an affective artificial intelligence engine DeepAffex that is capable of decoding not only expressed emotions (facial expressions) but also (and more importantly) internally felt, yet unexpressed emotions and even deception. Dr. Lee and his team are developing applications of DeepAffex in such fields as health, education, marketing, and risk management. Their goal is to make DeepAffex a ubiquitous affective artificial intelligence engine used in all smart devices, and to create artificial intelligence devices that are not only intellectually smart but also emotionally smart.

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

International Congress of Neuroendocrinology

July 15-18, 2018 Toronto, Canada

The International Congress of Neuroendocrinology will be hosted at the Toronto Westin Harbour Castle July 15 - 18, 2018. With 1000+ expected delegates from over 30 countries, this quadrennial conference is the premier event in neuroendocrinology. The conference has a strong focus on the neuronal control of metabolism and obesity, as well as stress, reproduction, timing, and behaviour. Some of our 14 plenary speakers include Drs. Jeffrey Friedman (leptin), Catherine Dulac (behaviour), Richard Palmiter (feeding), Masamitsu Nakazato (ghrelin/obesity therapeutics), Vincent Prevot (metabolism), and many more. The congress also includes 88 symposium speakers, with over 500 confirmed abstract presentations, as well as opportunities for trainee networking and professional development. Welcome to join us - please visit the congress website at www.ICN2018.org for more information or contact Dr. Denise Belsham, LOC Chair at d.belsham@utoronto.ca.



INTERNATIONAL CONGRESS OF
NEUROENDOCRINOLOGY
July 15 - 18 • Toronto, Canada



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

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

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University of Toronto Spine Program: SpineFEST 2018

July 11, 2018 Toronto

Location: MaRS Building, Main Auditorium, lower Concourse, 101 College St.

The University of Toronto Spine Program's 9th Annual Academic Day "SpineFEST"

Keynote Speaker (Tator-Hall Visiting Professor Lecturer): **Sanford E. Emery** MD, MBA, Professor and Chairman, Department of Orthopaedics, Director of Surgical Services, West Virginia University.

Keynote Address: "Leadership Training for Surgeons: Filling the Pipeline". @8:30 am.

Guest Speaker: Robert S. Bell, MDCM MSc FRCSC FACS, Deputy Minister of Health and Long-Term Care.

SpineFEST is an accredited group learning activity as defined by the Maintenance of Certification Program of The Royal College of Physicians & Surgeons of Canada (section I, 6.5 points). All faculty and trainees with interest in spine care and research are invited and welcomed to participate in this event. Onsite free registration, however early RSVP to uoft.spine@utoronto.ca is encouraged

FOR MORE INFORMATION, please visit

<http://www.neuroscience.utoronto.ca/Assets/Neuroscience+Digital+Assets/Neuroscience/UTNP+Digital+Assets/events+and+seminars/2017-2018/SpineFEST+2018.pdf>

SickKids: The Centre for Brain & Mental Health's Annual Brain and Mental Health Day Conference

June 21, 2018 Toronto

Location: Peter Gilgan Centre for Research and Learning, 686 Bay Street, Toronto, ON M5G 0A4

Time: 8:30 am – 4:55 pm, Robert B. Salter Auditorium, PGCR (Reception to follow: 4:55 pm to 6:30 pm in the PGCR Gallery)

Topic: Bridging Brain Health & Mental Health: Is Improving Brain Health a Way to Improve Mental Health in Children & Youth?

Invited Speakers:

Professor Ian Hickie, AM, Australia Mental Health Commissioner; Co-Director, Health and Policy, University of Sydney Brain and Mind Centre; Professor of Psychiatry, Central Clinical School, Sydney Medical School

Dr. Michael Meaney, C.M., PhD, C.Q., FRSC, Co-Scientific Director, Ludmer Centre for Neuroinformatics and Mental Health Researcher, Douglas Institute; Director, Sackler Program for Epigenetics & Psychobiology; James McGill Professor, Departments of Psychiatry and Neurology and Neurosurgery, McGill University

Dr. Kimberly Noble, MD, PhD, Associate Professor of Neuroscience and Education at Teachers College, Columbia University
...and more!

Visit the registration website for further details about all the exciting speakers presenting at C-BMH Day and to REGISTER NOW while space is available: <http://www.event.com/d/6ggn2d>

Please note: If you register and do not attend, your cost centre will be charged a fee of \$50 Please ask your manager or supervisor for your department's Cost Centre number to enter when registering.

FOR MORE INFORMATION: Please contact brain.mentalhealth@sickkids.ca