

Collaborative Program in Neuroscience (CPIN)

University of Toronto

Newsletter – Vol. 31, No. 10 – June 2015

Featured In This Issue

The 2015 CPIN Research Day on June 19, 2015 was a rousing success. More than 200 people participated in the events. There were 15 oral and 71 poster presentations that were evaluated by 26 judges. **Top 3 Outstanding Poster Presentation, 3 Excellence in Oral Presentation** and **8 Excellence in Poster Presentation Awards** were recognized by the presentation judges. **Dr. Jeffrey C. Magee**, Janelia Research Campus, Howard Hughes Medical Institute, delivered the memorable 2015 Raymond and Beverly Sackler Distinguished Lecture. CPIN would like to thank our generous [event sponsors](#). For further details, please see the **event summary**: http://www.neuroscience.utoronto.ca/events/CPIN_Research_Day.htm

News – CPIN Faculty Members Welcome **Dr. Kei Masani** (Assistant Professor, IBBME) to the CPIN community. Showcase: **Dr. Lyanne Schlichter's** (Senior Scientist, TWRI, UHN; Professor, Physiology) broad-ranging research in microglia. Congratulations to **Dr. Elise Stanley** (Senior Scientist, TWRI, UHN; Professor, Physiology) for being recently inducted into the Johns Hopkins University *Society of Scholars*. Congratulations to **Dr. Derek van der Kooy** (Professor, Molecular Genetics, Medical Biophysics and IMS) on his recent *Stem Cell Reports* journal publication. **Please see below and page 2 for details.**

News – CPIN Students Congratulations to **Danielle DeSouza** (IMS, Co-supervisors Dr. Karen Davis & Dr. Mojgan Hodaie) on graduating from her PhD Program and completing the CPIN doctoral requirements. **Please see page 3 for details.**

Careers in Life Sciences CPIN Trainees may be interested in Life Sciences career-related blog posts and a book by **Dr. Avrum I. Gotlieb** (Senior Academic Advisor to the Dean, Faculty of Medicine, U of T). **Please see page 3 for more details.**

Call for CPIN 2015-2016 Distinguished Lecturer Nominations CPIN trainee & faculty members are welcome to nominate potential speakers for the 2015-2016 Neuroscience Distinguished Lectureship Series. Please submit your nominations online at the following link: [Distinguished Lecturer Nominations Form](#). The nominations will be reviewed by the CPIN Academic/Executive Committees for approval.

Submissions for Faculty News Updates The CPIN Office welcomes faculty members to submit updates in research discoveries, awards, publications and other achievements. Please send your submissions to p.neuroscience@utoronto.ca

Trainee Record Updates CPIN students & postdoctoral fellows are requested to provide information pertaining to awards, publications & other achievements on the online form below: http://www.neuroscience.utoronto.ca/students/Trainee_Awards_and_Publications_Form.htm

News - CPIN Faculty Members

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



We would like to welcome **Dr. Kei Masani** (Assistant Professor, Institute of Biomaterials and Biomedical Engineering) to the CPIN community.

Kei Masani received his Ph.D. degree in physical and health education from the University of Tokyo, Tokyo, Japan. Since 2005, he has been a Scientist at Toronto Rehab, Toronto, Canada. Since 2012, he has been an Assistant Professor at the Institute of Biomaterials and Biomedical Engineering,

University of Toronto. From 1996 to 2004, he has been an Assistant Professor in Life Sciences, University of Tokyo. In 2003, he was a Visiting Scholar at the University of Toronto. Dr. Masani received the Young

Investigator Award from the Japanese Society of Biomechanics in 2000, and is a member of the International Society for Posture & Gait Research, the Society for Neuroscience, International Society of Biomechanics, and the International Functional Electrical Stimulation Society. His research interests are in understanding human movement and movement variability, from the view of neuro-mechanical interaction and sensory-motor integration.

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

CPIN Newsletter

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News - CPIN Faculty Members

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



Dr. Lyanne Schlichter is a Senior Scientist at TWRI (UHN), and Professor of Physiology (Faculty of Medicine) at the University of Toronto. After training in biophysics and membrane biology at the PhD & postdoctoral levels, she established her lab in Toronto in the field of Neuroimmunology.

Her lab's research is broad-ranging; from using rodent models of ischemic stroke and intracerebral hemorrhage to study the role of inflammation in brain damage, to studying many biological functions of the brain's immune cell (microglia), to targeting selected proteins (mainly ion channels) to control microglia functions and brain inflammation. Technical approaches include: cellular electrophysiology and fluorescence imaging, gene analysis and manipulation (including in vivo), protein biochemistry, histochemistry/cytochemistry, assessing proliferation, migration/invasion, phagocytosis, production and responses to cytokines and other mediators of damage and repair.



Congratulations to **Dr. Elise Stanley** (Senior Scientist, Toronto Western Research Institute, University Health Network; Professor, Department of Physiology) for being recently inducted into the Johns Hopkins University *Society of Scholars*.

(Photo caption: Dr. Elise Stanley receiving a medal from her sponsor, Dr. Daniel B Drachman, at the induction ceremony)

TWRI Senior Scientist Dr. Elise Stanley was inducted into Johns Hopkins University *Society of Scholars* at a ceremony hosted by the Provost, Robert C. Lieberman. The honour was bestowed to Dr. Stanley, along with 15 other inductees, on April 13, 2015 in Baltimore. The candidates—a select group of researchers that spent formative years at Johns Hopkins—were chosen by a committee comprising representatives of each academic division of the university. A total of 626 Scholars have been admitted into the Society since its creation in 1969.

Dr. Stanley was recognized for her contributions to synaptic biology in the nervous system, which have provided new insights into how synapses function at the molecular level. Neurons code information as electrical impulses which travel down a nerve fiber to a presynaptic terminal on the target cell. The impulse triggers calcium channels to open, which then gates the release of neurotransmitters and activates the target cell. In 1989 Dr. Stanley developed an experimental model that she used to report the first recordings of single channel calcium currents at a vertebrate presynaptic terminal. A few years later she used this preparation to demonstrate that a single calcium channel can control neurotransmitter discharge, a finding that provides the functional basis for current molecular models of transmitter release site organization.



Congratulations to **Dr. Derek van der Kooy** (Professor, Departments of Molecular Genetics, Medical Biophysics and Institute of Medical Science) on his recent *Stem Cell Reports* journal publication "A Hyaluronan-Based Injectable Hydrogel Improves the Survival and Integration of Stem Cell Progeny following Transplantation" in collaboration with **Dr. Cindi Morshead** and **Dr. Molly Shoichet**.

Derek van der Kooy served as Professor in the Department of Anatomy and Cell Biology at the University of Toronto from 1991 until 2002, and then became a Professor in the Department of Molecular Genetics. Derek received a M.Sc. in Psychology at the University of British Columbia, and a Ph.D in Anatomy, first at Erasmus University in the Netherlands, and finishing in the Department of Anatomy at the University of

Toronto. He did postdoctoral fellowships at Cambridge University and the Salk Institute. The van der Kooy lab works on various stem cell biology and developmental biology research projects, as well as projects on genes important for learning and memory in worms, and the neurobiology of motivation in rodents.

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News - CPIN Students

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



Congratulations to CPIN student member **Danielle DeSouza** (Institute of Medical Science, Co-supervisors Dr. Karen Davis & Dr Mojgan Hodaie) on recently completing the CPIN requirements and graduating from her PhD Program.

Danielle DeSouza received her PhD from the Institute of Medical Science and Neuroscience Collaborative program earlier this year. Her research involved the use of various neuroimaging techniques to study brain abnormalities and treatment-related plasticity in patients with the severe chronic facial pain disorder, trigeminal neuralgia.

Throughout her graduate training, Danielle was a member of the CIHR 'Cell Signals' Strategic Training Program and received numerous scholarships and awards including the Ontario Graduate Scholarship, UTCSP Pain Scientist Scholarship, James F. Crothers Family Fellowships in Peripheral Nerve Damage OSOTF Award, Purdue Pharma OGSST, and the Unilever/Lipton Graduate Fellowship in Neuroscience among other travel and scientific presentation awards. Additionally, she authored several peer-reviewed publications in reputable journals such as the Journal of Neuroscience, Pain, and the Journal of Neurophysiology. As a passionate teacher, Danielle was highly involved in the neuroanatomy curriculum at the University of Toronto, having worked as teaching assistant, laboratory demonstrator, and guest lecturer for several departments in the Faculty of Medicine. Currently, Danielle is a Postdoctoral Fellow at Stanford University in the Department of Neurology and Neurological Sciences.

Select Publications:

DeSouza DD, Davis KD, Hodaie M. Reversal of Insular and Microstructural Nerve Abnormalities Following Effective Surgical Treatment for Trigeminal Neuralgia. Pain 2015 156(6): 1112-23.

DeSouza DD, Hodaie M, Davis KD. Abnormal Trigeminal Nerve Microstructure and Brain White Matter in Idiopathic Trigeminal Neuralgia. Pain 2014 155(1): 37-44.

Careers in Life Sciences



CPIN trainees may be interested in the following blog post on Elsevier SciTech Connect by **Dr. Avrum I. Gottlieb** (Senior Academic Advisor to the Dean, Faculty of Medicine, U of T; Professor, Department of Laboratory Medicine and Pathobiology, U of T; Staff Pathologist, Laboratory Medicine Program, University Health Network):

Life Sciences Career Plan: Choosing Breadth or Depth?

<http://scitechconnect.elsevier.com/life-sciences-career-plan/>

Please note, for those at the University of Toronto, the book referred to in the blog is available at the UofT Libraries on the Science Direct platform as PDFs of each section of the book (via UToID access).

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

CPIN Newsletter will resume in September 2015 following the summer break

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