

CAN Connection

The Canadian Association for Neuroscience Newsletter

January 2016

Happy new year!

The year 2016 marks the tenth anniversary of the Annual Canadian Neuroscience Meeting, and we have a great program lined up to celebrate this important anniversary. The meeting will take place **May 29 - June 1 in Toronto**. Register today - you can also submit an abstract for poster presentation.

I want to thank all the members who have submitted proposals for parallel symposia. The Scientific Program Committee, chaired by **Kathleen Cullen** and **Jaideep Bains**, has had the privilege, and the difficult job of choosing the twelve symposia that will be presented this year. I also want to thank the [members of the 2016 Scientific Program Committee](#) for their important work. The selected symposia will be added soon to the [online CAN 2016 Program](#).

We are also pleased to present the members of the newly formed CAN Advocacy Committee. We have assembled a group of highly motivated neuroscientists, under the leadership of **Katalin**

Toth, who is the chair of the committee. We encourage you to share your advocacy efforts with us and the committee. Please visit the [Advocacy page on the CAN website](#) to view the plans and actions of the committee.

Please consider nominating a deserving neuroscientist for the [2016 CAN Young Investigator Award](#) - nomination deadline is February 1st.

Finally, we wish to congratulate all the neuroscientists who have won prizes and distinctions in the last few months. We are always pleased to see the hard work of our colleagues recognized.

I look forward to seeing all of you in Toronto for the 10th anniversary meeting of CAN.

Douglas Munoz

President - Canadian Association for Neuroscience

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- Prizes, nominations & Awards - Congratulations!

**CAN
ACN**

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10th Annual Canadian Neuroscience Meeting

May 29th - June 1st 2016

[Toronto Centre Sheraton Hotel](#)

Plenary speakers:

Larry Abbott | Columbia U

Gautam Awatramani | U of Victoria

Rick Beninger | Queen's U

Jonathan Britt | McGill U

Maurice J. Chacron | McGill U

Karl Deisseroth | Stanford U

Ann Graybiel | MIT

Kurt Haas | U of British Columbia

Steve Laviolette | U of Western Ontario

John O'Keefe | University College London

Frances Skinner | U of Toronto

Nelson Spruston | Janelia Research Campus

Roger Thompson | U of Calgary

Katalin Toth | U Laval

Public Lectures

Impact of innate vs. acquired brain disorders

Date: May 28th, 4PM

Location: Peter Gilgan Centre for Research and Learning at SickKids

Margot Taylor, PhD

Probing the autistic brain

&

Charles Tator, PhD MD

Why Concussions are a Significant Public Health Concern

Satellite symposia

May 28

Symposium at University of Toronto in honour of John MacDonald - Details to come

May 29 - 9:30AM - 4:30 PM

Action & Perception: Cognition, Coding and Clinical Populations

Organized by CAPnet and the Canadian Physiology Society

May 29 - 9:30AM - 4:30 PM

Neurophotronics satellite

Organized by the Canadian Neurophotronics Platform

May 29 2 - 4 PM:

Speak Up: The role of communication in modern neuroscience

Organized by the On Your Mind podcast

Upcoming deadlines

Abstract Submission	January 29
Trainee Travel Award	February 15
Registration	March 31
Early bird rates	
Hotel reservations (preferred rate)	April 18

Meeting webpage: <http://can-acn.org/meeting2016>

CAN Social at SfN2015 Chicago



It was nice to see so many of you at the CAN Social in Chicago. View all the pictures in the CAN Flickr album: <https://www.flickr.com/photos/can-acn/>

Hot neuroscience topics: New advances in brain development

Benjamin Blencowe (University of Toronto) and his team have discovered that a single molecular event in our cells could explain how the human brain became the largest and most complex. They discovered that a small change in a protein called PTBP1, which is a target and a major regulator of alternative splicing, a process through which new forms of proteins are generated from the same gene, unleashes a cascade of events that result in the production of many more neurons in our brains. These results help explain why the brains of many different species vary in complexity and ability, despite being made of proteins that come from very similar genes.

[Press release](#) - [Article in Science](#)

In a paper published in Nature Communications, researchers from McGill University and the Montreal Neurological Institute, led by Denise Klein, show that even brief, early exposure to a language influences how the brain processes sounds from a second language later in life. Even when the first language learned is no longer spoken.

Dr. Klein's team showed that the brains of children who are bilingual, or who were exposed to another language as infants (children of Chinese origin who were adopted into monolingual French families before the age of three) show activity in additional brain areas when performing word recognition tasks, compared to monolingual French children. These results suggest exposure to a language very early in life has a long lasting effect on processing by the brain.

[Press release](#) - [Article in Nature communications](#)

Olivier Collignon, and his team at University of Trento and Université de Montréal, showed in

another study that brief visual deprivation, early in life also results in brain reorganization and shapes the functional architecture of the brain. These changes remain in adults, born with cataracts in both eyes, whose vision was restored by cataract removal at a very young age, between 9 days and 8 months. In the case of early visual deprivation, researchers showed that auditory cues activated brain regions normally associated with vision, a brain change that seems permanent.

[Press release](#) - [Article in Current Biology](#)

Slightly older developing brains, such as those of adolescents, are also susceptible to long-term alterations induced by experience. Tomas Paus, from University of Toronto, showed that the developing brain of adolescents who are at high genetic risk of schizophrenia can be change by exposure to cannabis. "Our findings suggest that cannabis use might interfere with the maturation of the cerebral cortex in male adolescents at high risk for schizophrenia by virtue of their polygenic risk score. Their brains showed lower cortical thickness compared with low-risk male participants and low-or-high risk female participants who used the drug."

[Press release](#) - [Article in JAMA Psychiatry](#)

Read more neuroscience press releases on the [CAN-ACN website](#).

We also share these news on [Twitter](#) and [Facebook](#)



Sam David

Congratulations - Prizes and Awards

Sam David (McGill University) won the 2015 Barbara Turnbull Award for Spinal Cord Research. This recognition highlights his outstanding work to improve the health and quality of life of those living with spinal cord injuries. [Press release](#).

Robert Campbell (University of Alberta) is the recipient of the [Rutherford Memorial Medal in Chemistry](#) for outstanding research in physics and chemistry at a young age.



Robert Campbell

Janet Werker (University of British Columbia) received the Social Sciences and Humanities Research Council of Canada's highest honour, the [SSHRC Gold Medal](#). Dr. Werker's studies have fundamentally changed how we understand language acquisition in infants.

Paul Zehr (University of Victoria) received the [Society for Neuroscience's Science Educator Award](#), which recognizes an outstanding neuroscientist who has strongly added to public education and awareness about the field.



Janet Werker

Jean-Martin Beaulieu (Université Laval) was awarded the inaugural [Royal-Mach-Gaensslen Prize for Mental Health research](#), in recognition of innovative research that may lead to improved drug therapies for bipolar disorder and other mental illness.

Kevin Petrecca (The Neuro), along with Frédéric Leblond, from Poly Montréal have been named [Science personalities of the year by La Presse](#) newspaper for their development of a probe that allows surgeons to detect brain cancer cells in real time during an operation.



Paul Zehr

Philippe Morquette was named [Star Student researcher for November 2015 by the Fonds de Recherche du Québec Santé](#) for a paper published in [Nature Neuroscience](#).

Andrea Leblanc (McGill) was named [personality of the week of November 29th by La Presse for her research on Alzheimer's disease](#).



Jean-Martin Beaulieu



Kevin Petrecca



Philippe Morquette



Andrea Leblanc



Pierre Marquet

Congratulations - Nominations

Last December, the new Science Minister Kirsty Duncan visited Université Laval to announce the nomination of Pierre Marquet as the new [Canada Excellence Research Chair in Neurophotonics](#). Dr. Pierre Marquet is working to identify vulnerability biomarkers by using neurophotonics, and thereby aims to reduce the impact of mental disorders on youth. [Read the press release](#).



Yves De Koninck

Yves De Koninck and Alan Evans were named new [Fellows of the Academy of Arts and Sciences of the Royal Society of Canada](#). Yves De Koninck was recognized for his seminal contributions to understanding how neurons communicate at the cellular and molecular levels, in normal and pathological pain. Equally recognized are his contributions to developing novel photonics technologies to push the frontiers of neuroscience.



Alan Evans

Alan Evans was named fellow for his pioneering the use of advanced mathematical and computational techniques to study the brain's structure and function using neuroimaging, particularly in neurodevelopment and neurodegenerative disorders. He has built an international network using a high-performance computing hub at McGill.

Alexandre Prat was named [member of the College of New scholars, artists and scientists of the Royal Society of Canada](#), for his important work on the human Blood-Brain Barrier. Highly innovative scientific work from his lab serves as the basis for novel pharmacological strategies to favour drug entry into the brain and for novel treatment of brain diseases such as Multiple Sclerosis.



Alexandre Prat

Dr. [Nahum Sonenberg was elected to the National Academy of Medicine](#). Election to the Academy is considered one of the highest honours in the fields of health and medicine and recognizes individuals who have demonstrated outstanding professional achievement and commitment to service. Dr. Sonenberg also recently received an award from the Canadian Cancer Research Alliance for Outstanding Achievements in Cancer Research.



Nahum Sonenberg

Congratulations to all for these well deserved honors!

CAN Advocacy

We are proud to present the newly constituted CAN Advocacy committee, chaired by Katalin Toth from Université Laval.

CAN Advocacy committee

Chair of the CAN Advocacy committee
Katalin Toth, Université Laval

Members:

Michael Hendricks, McGill University

Beverly Orser, U of Toronto

Jaideep Bains, U of Calgary

David Kaplan, U of Toronto

Jean-Claude Béique, U of Ottawa

Doug Zochodne, U of Alberta

Jay Ingram, science writer, communicator

Anastasia Voronova, U of Toronto
(Liaison to CSMB)

Recent advocacy initiatives

Articles, interviews and opinion pieces by Canadian neuroscientists - read them in our

[Press review - October- December 2015](#)

CAN is now a member of [Research Canada](#) and will have a booth at a Parliament Hill event hosted by the Honourable Jane Philpott, Minister of Health on March 7th.

This event will allow CAN representatives to discuss issues that matter to neuroscientists with elected officials in Ottawa.

Read about our advocacy efforts, on the CAN Advocacy webpage:

<http://can-acn.org/advocacy>

Contact us with your ideas and initiatives:

advocacy@can-acn.org

CAN Board of Directors

President: **Doug Munoz**, Queen's U

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