



Neuroscience Research in Canada

February 13, 2017 12:00 p.m. to 1:30 p.m.



Parliament Hill

"The brain is the last and grandest biological frontier, the most complex thing we have yet discovered in our universe. It contains hundreds of billions of cells interlinked through trillions of connections. The brain boggles the mind."

> James D. Watson Discovering the Brain National Academy Press, 1992

HEALTH RESEARCH CAUCUS Neuroscience Research in Canada Parliament Hill, Ottawa

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Speakers:

Dr. Beverley Orser, MD, PhD, FRCPC University of Toronto

Dr. Beverley Orser is a clinician-scientist and Professor of Physiology and Anesthesia at the University of Toronto. She is a practicing anesthesiologist and Director of Research, Department of Anesthesia at Sunnybrook Health Science Centre. She will talk about how unveiling the general mechanism by which anaesthetics works can lead to better drug development. She also made very significant contributions to our understanding on how memory is affected by anaesthesia. She is a practicing doctor who runs a very successful basic research laboratory.

Dr. Charles Bourque, PhD

McGill University, Montreal

Dr. Charles Bourque studies how the brain monitors body hydration, salt and temperature. He seeks to define how networks of neurons work together with clock neurons (regulates daily behavioural rhythms) and cells of the central nervous system (astrocytes) to regulate the sensation of thirst, release of antidiuretic hormone (vasopressin), and vascular tone. Defects in the regulation of fluid balance and the concentration of electrolytes (osmoregulation) are hallmarks of many clinical conditions, including dehydration, heart failure and sepsis. Moreover, changes in osmoregulation likely link dietary salt intake to many forms of hypertension.

LUNCHEON EVENT

Neuroscience research impacts all Canadians. One in three Canadians will be affected by a neurological disorder, injury or psychiatric disease in their lifetime. For the vast majority of the thousands of conditions that can affect the nervous system, no clear causes or cures are known. Health Canada has estimated the economic burden of neurological and psychiatric conditions to represent 14% of the total burden of disease in this country, which is more than cardiovascular disease or cancer. This problem will be more and more prevalent as life expectancy is increasing and the population is ageing.

This luncheon will showcase great examples on how investment into basic research can and does lead to improved treatment strategies.

Neuroscience over the next 50 years is going to introduce things that are mind-blowing.

David Eagleman

Co-host:

The Canadian Association for Neuroscience

The Canadian Association for Neuroscience represents neuroscientists in Canada who are dedicated to advancing brain research. The association is composed of approximately one thousand researchers, who work at academic institutions across the country and who share the common goal of ensuring neuroscience remains one of the greatest research and innovation strengths of Canada. The Canadian Association for Neuroscience recognizes the need to develop a national strategy for the development of a long-term, sustainable plan that would lead to the understanding of the healthy brain, and the treatment and prevention of brain disorders.