



CAN-ACN

CANADIAN ASSOCIATION FOR NEUROSCIENCE
ASSOCIATION CANADIENNE DES NEUROSCIENCES

Freda Miller, Ph.D.
President
University of Toronto

Lynn Raymond, MD, Ph.D.
Vice-President
University of British Columbia

Edward Ruthazer, Ph.D.
Secretary
McGill University

Ellis Cooper, Ph.D.
Treasurer
McGill University

**Members of the Advocacy
Committee:**

Katalin Tóth, Ph.D.
Chair of the Advocacy
Committee
Université Laval

Jaideep Bains, Ph.D.
University of Calgary

Jean-Claude Béique, Ph.D.
University of Ottawa

Michael Hendricks, Ph.D.
McGill University

Beverly Orser, MD, Ph.D.
University of Toronto

David Kaplan, Ph.D.
University of Toronto

Doug Zochodne, MD, Ph.D.
University of Alberta

Communications Director:
Julie Poupart
julie.poupart@can-acn.org

Secretariat:
Caitlin Mooney
Podium Conferences
2661 Queenswood Drive,
Victoria, BC
V8N 1X6
Canada
secretariat@can-acn.org
1.250.472.7644

August 1st, 2016

The Honourable Bill Morneau
Minister of Finance
90 Elgin Street
Ottawa, Ontario K1A 0G5

Recommendations to the pre-budget consultations

Dear Minister Morneau,

The Canadian Association for Neuroscience (CAN) represents neuroscientists in Canada who are dedicated to advancing brain research. Our association is composed of approximately one thousand researchers, who work at academic institutions across the country. We share the common goal of ensuring neuroscience remains one of the greatest research and innovation strengths of Canada. Our research enterprises also play a key role in training the next generation of young scientists and technical staff who will be the foundation of the knowledge and innovation economy championed by the Government of Canada.

We thank the government for highlighting the importance of fundamental research in the 2016 Budget by increasing the budget of the Tri-Council with \$95 million. CAN is also strongly encouraged by the additional support to genomic and stem cell research in Canada through Genome Canada and the Stem Cell Network. Our research community is excited that the Federal Government recognizes the need for investigator-led discovery research, as one of the foundations of an innovative society.

We are writing this letter to bring your attention to the need to significantly increase funding for biomedical research in Canada in order to revert the effect of a decade of diminished research support. Individual investigators comprise the backbone of Canada's scientific enterprise; federal government support for these investigators has fallen to half of what it was in 2000. Our members are deeply concerned about the current funding situation and are increasingly worried about the future of their laboratories. The budget for operating grants distributed by the CIHR (Canadian Institutes of Health Research), was effectively reduced by approximately \$150 million since 2010. These funds provide training opportunities for graduate students, fund international scholars and create jobs for high-level technical staff. All three groups are key pieces of the knowledge and innovation economy of the future.



CAN-ACN

CANADIAN ASSOCIATION FOR NEUROSCIENCE
ASSOCIATION CANADIENNE DES NEUROSCIENCES

Why invest in neuroscience research?

Neuroscience research impacts all Canadians. One in three Canadians will be affected by a neurological disorder, injury or psychiatric disease in their lifetime. Unfortunately, there are no clear causes or cures for the vast majority of conditions that affect the brain and spinal cord. Health Canada estimates the economic burden of neurological and psychiatric conditions represents 14% of the total burden of disease in this country. The cost of neurological disorders exceeds those of cardiovascular disease and cancer. The costs of neurological diseases will continue to increase as life expectancy increases and the population ages.

Current status of investment in research and development:

- Investment in research in Canada has fallen from 2% of total GDP in 2004 to 1.6% in 2014 (www.oecd.org). In 2013 Canada was ranked 24th among the 41 countries while it was 16th in 2006. (Annex 1, page 47 of the 2015 Report of the Science, Technology and Innovation Council (Advisory Council to the Government of Canada)). Among the G7 countries Canada is currently ranked 6th based on the percentage of total GDP spent of R&D.
- The compound annual growth rate of biomedical R&D in Canada is currently negative, effectively decreasing by 2.6% per year (N Engl J Med 2014; 370:3-6).

Current status of biomedical research and neuroscience in Canada

The vast majority of our members operate their laboratories with funds that are provided by federal granting agencies including the Natural Sciences and Engineering Research (NSERC), the Canadian Institutes of Health Research (CIHR) and Brain Canada.

Operating funds available from the CIHR budget have not kept up with inflation. Under the current funding conditions, an increasing number of laboratories must compete for a shrinking pot of operating funds. The success rate of CIHR grant applications was 34% in 2000. This rate has steadily decreased, reaching 13% in 2016.

According to the latest report of the Science, Technology and Innovation Council (Advisory Council to the Government of Canada): *“Despite its priority status, however, Canada is not investing in neurosciences at a competitive scale in comparison with the United States (U.S.). Total federal funding for neuroscience research is only about 40% of that in the U.S., even after adjusting for the size of the U.S. economy which is about 11 times larger than Canada’s economy.”*



CAN-ACN

CANADIAN ASSOCIATION FOR NEUROSCIENCE
ASSOCIATION CANADIENNE DES NEUROSCIENCES

With these facts in mind, the Canadian Association for Neuroscience proposes the following recommendations to the Canadian government.

Recommendations:

1) The mid-term objective should be a doubling of the operating budgets of the NSERC and the CIHR.

If Canada invests in science 2% of the GDP, we will only return to the level of support science had 10 years ago. We believe that Canada's demonstrated excellence in research can only be sustained with support that reaches 3% of the GDP, which would make Canada's research investment comparable to Germany's and the USA's research investments. ***Doubling funds that are available in open competitions through the CIHR and the NSERC would be essential to stop the downward trend experienced by fundamental discovery research laboratories across Canada.***

2) An increase of \$150 million to the 2017 Budget for CIHR.

In the latest competition, the 13% success rate was made possible by moving the 2016-Autumn competition to the 2017 budget of the CIHR. This means that next year the expected success rate will be 5-6% unless the government decisively steps in and restores science funding in Canada. These investments would ensure that the standard of research excellence is maintained in Canada. Canadian scientists are willing and ready to continue to make important contributions that benefits all Canadians. It is important to ensure that we have the means to do so.

Sincerely yours,

Freda Miller, PhD
Professor, University of Toronto
President of the Canadian Association for Neuroscience

Katalin Tóth, Ph.D.
Chair of the Advocacy Committee
Canadian Association for Neuroscience
Professor, Université Laval



CAN-ACN

CANADIAN ASSOCIATION FOR NEUROSCIENCE
ASSOCIATION CANADIENNE DES NEUROSCIENCES

Contact information :

Katalin Tóth, Ph.D.
Quebec Mental Health Institute
Department of Psychiatry and Neuroscience,
Faculty of Medicine,
Université Laval
2601 chemin de la Canardiere, Québec
Québec, G1J 2G3, QC, Canada
Tel: 1 (418) 663 5747 ext. 4702
Fax: 1 (418) 663 8756
e-mail: katalin.toth@fmed.ulaval.ca

cc. The Honourable Jane Philpott, Minister of Health
The Honourable Navdeep Bains, Minister of Innovation, Science, and Economic
Development
The Honourable Kirsty Duncan, Minister of Science