House of Commons
Chambre des communes
Canada

House of Commons Standing Committee on Finance – Pre-budget Consultations 2013

This brief is submitted by:

(•) **an organization** **Organization name:** Canadian Association of Postdoctoral Scholars/Association Canadienne des Stagiaires Post-doctoreaux

or

( ) **an individual** **Name:** _____

Topic: Education and skills training

*Recommendation 1: Please provide a short summary of your recommendation.

We recommend that the Canadian Federal Government substantially increase funding for Canada's basic, discovery-oriented, "blue sky" research programs operated by Canada Foundation for Innovation (CFI), Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council of Canada (NSERC), and Social Science and Humanities Research Council (SSHRC).

Expected cost or savings: From the pull-down menus, please indicate the expected cost or savings of your recommendation to the federal government and the period of time to which the expected cost or savings is related.

$10 million-$99.9 million

5 or more years

Federal funding: Please provide a precise indication of how the federal government could fund your recommendation. For example, indicate what federal spending should be reallocated, what federal tax measure(s) should be introduced, eliminated or changed, etc.

Due to a shift towards short-term funding over the past decade, there is a dire need to rebalance the synergy between basic, discovery-based funding and applied/industrial partnerships. However, it is important that this increase does not come at the expense of other programs operated by these councils. Canada will increase its knowledge economy and become a research leader on the world stage by funding research.

Intended beneficiaries: Please indicate the groups of individuals, the sector(s) and/or the regions that would benefit by implementation of your recommendation.

• Highly Qualified Trainees (e.g., graduate students and post-doctoral scholars), identified as a key population for increasing Canada's potential to engage in cutting-edge research & development (R&D)
• Researchers in the higher education sector
• Canadian Businesses, who engage in R&D through strategic partnerships with higher education
• The Canadian Economy: it has been shown that dollars spent on research in the United States results in a 40-fold return towards the GNP over 20 years (17% per annum).

General impacts: Depending on the nature of your recommendation, please indicate how the standard of living of Canadians would be improved, jobs would be created, people would be trained, etc.

The Science, Technology and Innovation (STI) Council's 2012 report indicates that STI is a major driver of Canadian economic prosperity and standard of living. These discovery-based funding programs operated by the four councils are highly regarded as effective mechanisms for supporting STI in Canada. Notably, CAPS' research has shown that discovery-based programs are a critical source of funding for supporting young talented researchers, such as post-doctoral scholars.

Topic: Please select from the pull-down menu

Recommendation 2: Please provide a short summary of your recommendation.

Expected cost or savings: From the pull-down menus, please indicate the expected cost or savings of your recommendation to the federal government and the period of time to which the expected cost or savings is related.

Please select from the drop down menu

Please select from the drop down menu

Federal funding: Please provide a precise indication of how the federal government could fund your recommendation. For example, indicate what federal spending should be reallocated, what federal tax measure(s) should be introduced, eliminated or changed, etc.

Intended beneficiaries: Please indicate the groups of individuals, the sector(s) and/or the regions that would benefit by implementation of your recommendation.

General impacts: Depending on the nature of your recommendation, please indicate how the standard of living of Canadians would be improved, jobs would be created, people would be trained, etc.

Topic: Please select from the pull-down menu

Recommendation 3: Please provide a short summary of your recommendation.

Expected cost or savings: From the pull-down menus, please indicate the expected cost or savings of your recommendation to the federal government and the period of time to which the expected cost or savings is related.

Please select from the drop down menu

Please select from the drop down menu

Federal funding: Please provide a precise indication of how the federal government could fund your recommendation. For example, indicate what federal spending should be reallocated, what federal tax measure(s) should be introduced, eliminated or changed, etc.

Intended beneficiaries: Please indicate the groups of individuals, the sector(s) and/or the regions that would benefit by implementation of your recommendation.

General impacts: Depending on the nature of your recommendation, please indicate how the standard of living of Canadians would be improved, jobs would be created, people would be trained, etc.

Please use this page if you wish to provide more explanation about your recommendation(s).

The Canadian Association of Post-doctoral Scholars (CAPS-ACSP) represents approximately 9,000 PhD-holding Canadian researchers across all disciplines. A survey of the journal Science (one of the worlds' leading research journals) found that 40% of research papers in the journal had a postdoc as the lead author. Although postdocs are a relatively small demographic in the research world, their output is second to none when it comes to front-line research. It is imperative that the country recognize this in an attempt to attract postdocs to research in Canada.

Recently, we conducted a survey of our members, finding that 48% of Canadian post-doctoral scholars are supported by their supervisors' funding grants (the leading source of support). The fact that Canadian researchers largely use these discovery-based funds to support post-doctoral fellows and other highly-qualified trainees speaks to their important role in developing Canada's STI.

The independence and flexibility of these keystone programs provides foundational support for leading Canadian researchers, resulting in high return for Canada's STI investment. For example, NSERC's 2008 evaluation of its Discovery Grant Program (DGP) noted that receiving DGP funds is often critical for researchers to attract additional funding from other sources that, in many cases, substantially exceeds the DGP funds. A researcher's ability to obtain discovery-based funding also tends to attract highly-qualified trainees from abroad, who bring their own funding (for example, through international sources such as Germany's prestigious DAAD fellowships).

Given the no-strings-attached nature of these programs, the administration of these funds is crucial to their success. The four councils have an outstanding track record in partitioning these monies directly to the best Canadian researchers, who need them the most. For example, NSERC's DGP has been internationally praised as an exceptionally effective model for supporting STI.

Raising the amount of basic, discovery-based funding for research in Canada will increase the number of highly-qualified national and international trainees in Canada. Enhanced discovery funding will also provide positions that will keep these individuals in Canada as career researchers, reducing 'brain drain'. This will bolster Canada's position in a research economy– money invested now will have a dramatic, multiplicative effect on Canada's economic power in the future.

*Please note that at least one recommendation must be provided