



**THE CANADIAN CONSORTIUM FOR RESEARCH
LE CONSORTIUM CANADIEN POUR LA RECHERCHE**

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**Canadian Consortium for Research Submission:
House of Commons Standing Committee on Finance
(August 2014)**

EXECUTIVE SUMMARY

With 19 member organizations, the Canadian Consortium for Research (CCR) represents more than 50,000 researchers and 500,000 students across disciplines (<http://en.ccr-ccr.ca/>). In this capacity, it is the largest advocacy coalition in Canada, focusing on research funding in all disciplines and support for post-secondary education.

The CCR recognizes that the federal government has continued to make investments in research infrastructures, internships, as well as in Canada's federal granting councils in past years. We look forward to further details about the Canada First Research Excellence Fund, which we anticipate will be accessible to all post-secondary institutions across Canada, based on a peer-review process by the research community.

We appreciate that in a time of fiscal constraint, increases in research funding may have been seen as challenging; necessitating a number of years of austerity for the research community, particularly individual researchers who have seen base funding for the granting councils decrease when adjusted for inflation. As we enter a surplus budget, increased investments in core funding for research, students and infrastructure are required to ensure program growth and to position Canada competitively in the international research landscape.

These investments will contribute to more and better-paying jobs, new inventions and patents, increased productivity, increased government revenues over the medium- to long-term and an increased standard of living for Canadians. They will also help to secure Canada's place as an international work destination for the next generation of researchers. For these reasons, the CCR submits the following recommendations for further investments in these areas as part of the 2015 Budget:

- **Recommendation #1:** That the government continue to increase the base budgets for the granting councils and the Indirect Cost of Research program at levels that compensate for the effects of current and past inflation, including increases in costs associated with infrastructure and research personnel, and restore Canada's international competitiveness, measured as a percentage of GDP. **Cost: \$150 million per year.**
- **Recommendation #2:** Increased support for students through graduate scholarships, full-time internships and post-graduate training, across a diversity of disciplines and settings, particularly high-demand fields. **Cost: \$35 million per year.**
- **Recommendation #3:** Invest in various building blocks of Canada's national research capacity and public science that support research conducted both within and outside of academic settings. **Cost: \$20 million per year.**

The CCR's recommendations address four of the six key themes identified by the House of Commons Standing Committee on Finance:

- **Theme 2:** Supporting families and helping vulnerable Canadians by focusing on health, education and training
- **Theme 3:** Increasing the competitiveness of Canadian businesses through research, development, innovation and commercialization
- **Theme 4:** Ensuring prosperous and secure communities, including through support for infrastructure
- **Theme 6:** Maximizing the number and types of jobs for Canadians

RECOMMENDATION #1: The CCR recommends that the government continue to increase the base budgets for the granting councils (particularly for NSERC Discovery grants, CIHR Open Operating grants, and SSHRC Insight grants) and the Indirect Cost of Research program at levels that compensate for the effects of inflation, including increases in costs associated with infrastructure and research personnel, and restore Canada's international competitiveness, measured as a percentage of GDP.

COST: \$150 million per year

THEMES SUPPORTED: 2, 3 & 6

Canada's granting councils are widely admired internationally and form the bedrock of support for research in Canada. While investments have been made in programs of excellence across the country, very many researchers rated highly by international standards of excellence are still being turned down each year for lack of funding. For example:

- In 2014, approximately 20% of SSHRC researchers received a grant despite another 40% of researchers being deemed eligible by peer-review committees. Social sciences and humanities research provides essential information on key social, cultural, psychological, economic, technological and health-related issues and in doing so provides critical evidence to support sound policy-making.
- Fewer than 15% of CIHR researchers are typically funded while selection committees deem about two-thirds worthy of funding. Investments in health-outcomes research will improve explorations of illness and prevention, which is crucial as Canada's population ages.
- Without a much-needed adjustment for inflation, NSERC's Discovery grant program has been unable to support research programs at the appropriate level in recent years.

If unaddressed, many of our talented investigators and trainees will look elsewhere for more stable funding, as is currently the case in Canada's biomedical and health research field which, once the envy of many countries is on a rapid downward trajectory.

Out of the 35 OECD countries, Canada is 1 of only 6 countries whose gross domestic expenditure in R&D has decreased since 2000. OECD data show that Canada's gross domestic expenditure on R&D, as a percentage of GDP, is lower than the OECD average (1.81 versus 2.40) and lower than other countries such as the U.S., Austria, Sweden and Finland, which themselves are all higher than the OECD average.

Canada's capacity to innovate and compete internationally is dependent on sustained support of a broad spectrum of research carried out in various environments (academic, industrial, research institutions, government laboratories, and not-for-profit settings). While targeted research can address specific issues, it is investigator-driven basic research, characterized by varying timelines (both short and long) that defines, validates, challenges, and resolves important questions and leads to significant technological advances that ultimately underpin Canada's economic growth. Consistent support for curiosity-driven research attracts and develops world-leading research teams whose activities will produce top scientists, professionals, highly-trained students and post-docs, and can even lead to entirely new fields of research and development (e.g. Green Chemistry).

RECOMMENDATION #2: The CCR recommends investing in core funding for students to expand graduate scholarships, full-time internships, and post-graduate training, across a diversity of disciplines and settings, particularly high-demand fields.

COST: \$35 million per year

THEMES SUPPORTED: 3 & 6

Students represent the next generation of researchers who, with the proper education and inspiration, will make ground-breaking discoveries and tackle the many economic, social, and cultural challenges facing Canadians. The CCR recognizes the investments that were allocated to industrial-based postdoctoral research partnerships through MITACS and the allowances that were made to include not-for-profit organizations in MITACS' Accelerate program.

Continued investments in graduate scholarships and full-time internships need to be made for the following reasons:

- Supporting graduate-level teaching, research, and experience builds a foundation for economic and social development, while fostering highly skilled and trained workers drives innovation. Expanding the Canada Graduate Scholarships by \$25 million would fund an additional 1,250 students (\$20,000 scholarship value).
- Continued support for internship and fellowship initiatives across a diversity of disciplines and settings, particularly those with not-for-profit organizations that don't have an economic focus, in the social sciences and humanities, and in high-demand fields is necessary. Continued investments of \$10 million/year would fund an additional 250 internships per year across disciplines and settings (\$40,000 internship/fellowship value).

Canada's continuing high youth unemployment rate necessitates a more robust active labour market policy. Increased funding for graduate scholarships and internships would benefit Canadians and employers across Canada. Investments in graduate scholarships will encourage Canadians to pursue graduate-level education, while real-world experience gained through internships will help them find meaningful research jobs or other high-quality employment. This would in turn boost economic growth; the broad impacts of which are better jobs and higher productivity.

Investing in post-graduate training through increased support for Post-graduate Scholarships and Post-doctoral Fellowships would also have significant international impacts, including but not limited to:

- helping to close the gap in graduation rates vis-à-vis those in peer countries;
- positioning Canada internationally as a solid training ground;
- allowing Canadian researchers to accept excellent foreign students who presently can't be accepted due to insufficient funding; and
- positioning Canadian students as highly qualified personnel.

It is essential that the private sector has the capacity to employ highly qualified graduates. This is in part because of the direct effect on knowledge transfer, but also because a trainee's willingness to pursue a given career path depends on the existence of meaningful career opportunities in the private sector.

RECOMMENDATION #3: The CCR recommends investing in various building blocks of Canada's national research capacity and public science that support research conducted both within and outside of academic settings, including but not limited to Canada Foundation for Innovation, Library and Archives Canada and Canada's national data collection agencies.

COST: \$20 million per year

THEMES SUPPORTED: 3 & 4

Another key aspect of research infrastructure requiring support is the development, maintenance, and access to regional, national, and international shared facilities that are competitive with the best in the world. It is imperative that the Government continue to invest in and maintain world-class research infrastructures and facilities in Canada to cover the indirect costs associated with conducting research. The Canada Foundation for Innovation (CF) continues to make valuable contributions in this regard – contributions so valuable that making their funding permanent is warranted.

However, it is also important to support the long-term operational and maintenance requirements of such facilities and their accessibility to researchers through other funding mechanisms beyond the CFI. NSERC's Research Tools and Instruments (RTI) funding has been used very effectively for the timely funding of smaller-scale equipment and equipment needed to pursue rapidly emerging research directions in individual laboratories. Recent reductions in funding of the RTI program and changes in program priorities have made it increasingly difficult for established researchers to maintain critical infrastructure of laboratories. The CCR strongly recommends allocating funds to the granting councils to address the current underfunding of this important area of research program support.

While one of the most important determinants of effective academic/private sector knowledge transfer is the quality and breadth of the research that is pursued in academic settings, key research is also conducted in non-academic based settings which equally requires continued investments. The services provided by Library and Archives Canada (LAC) and Statistics Canada support research undertaken in a variety of fields and for many sectors, leading to broad economic, social, and environmental benefits. Long-term, stable investments are needed to ensure their continued existence and contributions as part of Canada's research infrastructure.

Researchers, graduate students, policy makers, historians, genealogists, Aboriginal communities, and the general public benefit from the important artistic, historical, and cultural heritage collected and made available by Library and Archives Canada. The LAC's capacity to collect and preserve the country's rich documentary heritage, while investing in Canada's internationally renowned data collection, furthers researchers' ability to generate reliable knowledge and inform policy.

Statistics Canada's surveys are crucial, not only to the research community, but government, industry, business, not-for-profits, municipalities and communities depend on these surveys to develop reliable, informed decisions and policies that can improve productivity, economy and health. Statistics Canada has provided a mechanism for reliable regular data collection on a national scale, which are then used by researchers across Canada. Having national statistics available ensures that researchers are working from a common set of data points when considering issues of common concern. The CCR strongly recommends that national surveys which have traditionally underpinned research programs in Canada, such as the University and College Academic Staff System and the Survey of Earned Doctorates be reinstated.

On behalf of the CCR, we thank the Government for welcoming input as part of its pre-budget consultation. We would welcome the opportunity to provide further input (613-237-2144 ext. 323 or executiveoffice@cpa.ca).