



THE CANADIAN CONSORTIUM FOR RESEARCH
LE CONSORTIUM CANADIEN POUR LA RECHERCHE
2705 PROMENADE QUEENSVIEW DRIVE, OTTAWA ON K2B 8K2
TEL: 613-820-2270 FAX: 613-820-7244
HTTP://EN.CCR-CCR.CA

**CANADIAN CONSORTIUM FOR RESEARCH SUBMISSION:
HOUSE OF COMMONS STANDING COMMITTEE ON FINANCE 2018 PRE-BUDGET CONSULTATION**

EXECUTIVE SUMMARY

With 20 member-organizations, the Canadian Consortium for Research (CCR) represents more than 50,000 researchers and 650,000 students across disciplines. It is the largest advocacy coalition in Canada focusing on research funding in all disciplines and support for post-secondary education.

Science – social, natural and health – is a fundamental part of Canada, having relevance to societal well-being, human functioning, health, technology, innovation, productivity and the economy; its relevance can be measured at the individual, business, and community levels. As such, it is critical to develop, promote and support a culture that values discovery and innovation in all sciences – including but not limited to natural science, technology, engineering, social science and humanities, health, and mathematics – to foster an interest in Canada’s youth and underrepresented segments of society, and to achieve and benefit from the vast impacts of scientific inquiry. Achieving this requires continued and sustained investments in funding for research.

The CCR commends the Government’s continued commitment to:

- fundamental science via the recent review conducted by a panel that was overseen by Dr. Naylor;
- creation of the Chief Science Advisor and accompanying office;
- support for Indigenous students pursuing post-secondary education; and
- expanded eligibility criteria for the Canada Student Grants program to support more part-time students and those with dependent children (beginning in 2018-19).

These commitments, coupled with the government’s investment in fundamental research for 2016/17 to the funding agencies, in students, and in research infrastructure, have been needed to help the research community – and Canada as a whole – which had only recently begun to see funding investments after years of austerity. Much more however can and needs to be done, as outlined in the Fundamental Science Review Report¹ – the most comprehensive review of federal support for fundamental science in 40 years.

We therefore recommend that the government implements fully the recommendations embodied within the Fundamental Science Review report, particularly to move the annual spending in steady-state across the four agencies and related entities from approximately \$3.5 billion to \$4.8 billion; this steady-state increase in base by the end of four years would amount to an additional 0.4% of the Government of Canada’s annual budget.

This new spending would be balanced across the following areas – areas for which the CCR has long advocated:

- investigator-led research operation grants [30% increase (\$485 million) to the current budget of \$1.66 billion currently committed to direct project funding for both priority-driven and investigator-led research be phased in over four years];

¹ [http://www.sciencereview.ca/eic/site/059.nsf/vwapi/ScienceReview_April2017.pdf/\\$file/ScienceReview_April2017.pdf](http://www.sciencereview.ca/eic/site/059.nsf/vwapi/ScienceReview_April2017.pdf/$file/ScienceReview_April2017.pdf)

- enhanced personnel support for researchers and trainees at different career stages (total base increase of \$140 million per year be phased in over four years, in equal increments of \$35 million per year to harmonize, upgrade and strategically focus the system of graduate student and post-doctoral fellow supports);
- targeted spending on infrastructure-related start up (small equipment) and operating costs (Big Science facilities) [stable annual budget for CFI of \$300 million and another \$35 million annually for major research facilities (MRFs) matching ratio funding]; and
- enhancement of the environment for science and scholarship by improved coverage of the institutional costs of research (adding \$314 million to the existing \$1.7 billion per year the federal government currently pays through the Research Support Fund).

Science advances and innovations happen when students and researchers from all disciplines and sectors (e.g. universities, government departments, data collection agencies, libraries), across health, social and natural sciences, are supported with funding, graduate scholarship, infrastructure support, and career development opportunities. Implementation of the recommendations outlined in the report from the Fundamental Science Review would help Canadians be as productive as possible in their workplaces and their communities; help Canadian businesses to be more productive and competitive; enhance the well-being of Canadians; and support a strong science culture upon which the development of good policy and programming is based.

ASSISTING CANADIANS AND BUSINESSES TO BE MORE PRODUCTIVE

As part of the pre-budget consultation in advance of the 2018 budget, the government is seeking input on two main questions:

1. What federal measures would help Canadians to be more productive?
2. What federal measures would help Canadian businesses to be more productive and competitive?

To these questions, the CCR submits that the answers lie in implementing the recommendations in the report from Canada's Fundamental Science Review – *“Investing in Canada's Future: Strengthening the Foundations of Canadian Research”* – which was released on April 10, 2017. The report was prepared by an independent, expert advisory panel and was commissioned by the federal Minister of Science, Kirsty Duncan.

Through its recommendations, the report offers a comprehensive plan to both change and improve Canada's research ecosystem and, in so doing, restore the position of Canadians as research leaders on the international stage. The report recommends a steady-state increase in base funding to the federal research granting councils; better support for graduate students and early-career researchers; greater support for research infrastructure; consistent governance and coordination among organizations that fund researchers; and greater efforts to promote equity and diversity within the research community.

Increasing the Base Funding of the Research Councils: In line with the CCR's recommendations to the panel, the first priority of the report is to increase funding for independent, investigator-led research. To this end, the report recommends cumulative increases to the base funding of the federal research granting councils from the current \$3.5 billion to \$4.8 billion by 2022, phased in over four years — this would represent an increase of roughly 8% annually over the next four years.

Support for Graduate Students and Postdoctoral Fellows. The report also identified the need for harmonizing, upgrading, and bringing strategic focus to the system of graduate student and post-doctoral fellow (PDF) supports. To this end, it recommends that a total base increase of \$140 million per year be phased in over four years, in equal increments of \$35 million per year.

Infrastructure. The report also proposes a bold and much needed plan to strengthen Canada's research ecosystem through recommendations for stable annual funding for CFI (\$300 million) and another \$35 million annually for major research facilities (MRFs) matching ratio funding; increased support for facilities and operations (targeted 40% reimbursement rate for all institutions with more than \$7 million per year of eligible funding – additional \$314 million to the current \$1.7 billion currently paid); and consolidated long-term funding for a merged entity to oversee national digital research infrastructure.

Strengthening the Foundations of Canadian Research. The report also outlines a comprehensive agenda to strengthen the foundations of Canadian research. Among its recommendations is legislation to create an independent National Advisory Council on Research and Innovation (NACRI) that will work closely with Canada's new Chief Science Advisor (CSA).

The CCR supports efforts to improve coordination and harmonization, promote collaboration, and share best practices among CIHR, SSHRC, NSERC and CFI. Consistent with the CCR's recommendations to the panel, the report also called for balance across all research disciplines (social sciences and humanities, health, and natural) as a foundational principle for funding; new forms of support for multidisciplinary and international funding; support for indigenous researchers, diversity in research, and research that cross-cuts disciplines; and improved agility and timeliness in responding to emerging research issues.

Conclusion. It is critical to develop, promote and support a culture that values discovery and innovation in all sciences – including but not limited to natural science, technology, engineering, social science and humanities, health, and mathematics – to foster an interest in Canada’s youth and underrepresented segments of society, and to achieve and benefit from the vast impacts of scientific inquiry. Achieving this requires continued and sustained investments in funding for research.

Students represent the next generation of researchers who will contribute to Canada’s science culture by making ground-breaking discoveries and tackling the many economic, social, and cultural challenges facing Canadians, thereby helping Canada’s people, businesses and communities. Supporting graduate-level (masters, doctoral and post-doctoral fellows) teaching, research, and real-world experience through internships and fellowships, across diverse disciplines and settings, will encourage Canadians to pursue graduate-level education and build a foundation for economic and social development.

Science advances and innovations happen when students and researchers from all disciplines and sectors (e.g. universities, government departments, data collection agencies, libraries), across health, social and natural sciences, are supported with funding, graduate scholarship, infrastructure support, and career development opportunities. Implementation of the recommendations outlined in the report from the Fundamental Science Review would help Canadians be as productive as possible in their workplaces and their communities; help Canadian businesses to be more productive and competitive; enhance the well-being of Canadians; and support a strong science culture upon which the development of good policy and programming is based.

The CCR extends its thanks to the House of Commons Standing Committee on Finance for welcoming input as part of the 2018 pre-budget consultation. We also once again thank the Minister of Science for convening this necessary review of Fundamental Science in Canada, and the distinguished panel of scientists for conducting the review in as systematic, transparent, and inclusive a manner as possible. For further information contact the CCR Chair, Dr. Lisa Votta-Bleeker, at 613-237-2144 ext. 323 or executiveoffice@cpa.ca.