

# Written Submission for the Pre-Budget Consultations in Advance of the Upcoming Federal Budget 

By: Canadian Consortium for Research

Established in 1976, the Canadian Consortium of Research (CCR) consists of 20 organizations that represent researchers in all disciplines across Canada and within multiple sectors. With more than 50,000 researchers and 650,000 students represented in these member groups, the CCR is the largest umbrella organization in Canada whose primary concerns are the funding of research in all sectors and support for post-secondary education. For more information, please visit https://ccr-ccr.ca/.

## Recommendations

Recommendation 1: That the government increase funding to the base budgets of each of CIHR, SSHRC, NSERC for core programming by at least $10 \%$ annually for five years

Recommendation 2: That the government significantly increase the value and number of scholarships and fellowships for graduate students and postdoctoral fellows to keep pace with increases to costs of living and with research trainee compensation trends around the world and to ensure that Canadian research and its scientific expertise remain proportional to its demographic weight across nations.

Recommendation 3: That the government enhance programming to support early to mid-career researchers to accelerate their pathway to becoming leaders of tomorrow, inclusive of committing to new research chair positions for tenure-track early career researchers.

Recommendation 4: That the government, in fulfilling the above recommendations, renew funding for EDI in research programming and data collection and analysis, to support a truly inclusive research environment that welcomes a broad range of perspectives and experiences as relates to gender equity, racialized and Indigenous researchers, those living with disabilities, and francophones.

Canada, and the world, rely on strong science and research to investigate fundamental questions, drive innovation, make ground-breaking discoveries, and increase understanding of complex problems.

At present, Canada is not making the best use of our existing talent and capacity, and we are falling behind our peers internationally in investments in research and science, threatening our ability to attract and retain world-class researchers. Furthermore, Canada is not investing enough in training the next generation of talent.

The recently released Report of the Advisory Panel on the Federal Research Support System stated, "we must continue to examine ways to enhance the system of supports to ensure that Canada's research and talent remain among the best in the world so that we can tackle challenges and seize opportunities facing us today and in the future." In keeping with this, the Canadian Consortium for Research (CCR) supports the following recommendations made in the report. If implemented, they will position Canada well to address the critical and complex research, economic, and societal challenges of today and tomorrow, and improve our collective well-being, competitiveness, and prosperity.

## 1: Solidify the base: invest in fundamental science

Basic research is the foundation of all science. Experts note that a minimum of $\$ 3$ must be spent on discovery-based research to $\$ 1$ of mission-driven or applied research for a thriving research ecosystem.

After a decade of neglect, Budget 2018 was a leap in the right direction. Canada has since plateaued, losing ground post-pandemic, as Canada's international counterparts (i.e., US, Japan, Australia, UK, Germany, etc.) have significantly re-invested in research and science as a national pillar of interest. For example, the US recently committed US\$200 billion over ten years for science; Japan created a US\$87 billion fund devoted to science leadership, and the UK increased its annual government investment in R\&D to $£ 20$ billion by 2024-25.

An increase in funding for basic research is also needed to increase compensation for students. A significant portion of support for graduate students and postdoctoral fellows is paid, not through scholarships, but through stipends or salaries out of grant funding awarded to supervising professors. By involving trainees in their research, grantees train the next generation of highly qualified personnel (HQP), providing them with research experience and skills, which in turn develops greater research capacity. Roughly 35,000 trainees are supported indirectly in this way, totalling an estimated \$726 million annually. This is almost three times the current annual spending by the granting councils for direct support via their scholarship and fellowship programs. Support for highly qualified personnel, including trainees and other technical research personnel, typically constitutes the majority of research grant funding awarded. The number and value of research grants are currently insufficient for the demand, and to support competitive salaries for trainees or staff scientists.

Investment in fundamental science is needed, not only to pay research students and staff fairly and to keep up with the rise in the costs of research, but to ensure that more research can be funded. Currently, there are many peer- approved research applications that do not proceed due to a lack of funding - this impacts Canada's overall research ecosystem and trainees.

Recommendation: Initial increase of at least 10\% annually for five years to the granting councils' total base budgets for their core programming to address a) the opportunities resulting from growth in the system (e.g., increasing number of graduate students and postdoctoral fellows many of whom are
funded via research assistantships through professors' grants); b) the effects of inflation; and c) the importance of nurturing a globally competitive research and talent base.

## 2. Nurture the next generation of researchers

The value and number of the government's awards (i.e., scholarships and fellowships) for university research trainees have not kept pace with increases to the cost of living nor with research trainee compensation trends around the world and retention of research-enabled talent. As a result of underfunding, student researchers - particularly those in marginalized or under-represented groups are required to take on additional jobs, thereby negatively impacting their research output productivity, as well as their physical and mental health.

Recommendation: Significantly increase the value and number of scholarships and fellowships for graduate students and postdoctoral fellows to keep pace with increases to costs of living and with research trainee compensation trends around the world and to ensure that Canadian research and its scientific expertise remain proportional to its demographic weight across nations.

## 3. Support the talent continuum

In addition to increasing the support for Canada's graduate students and postdoctoral fellows, the development of Canada's research talent across the continuum must also be nurtured and supported.

There is also a need for enhanced programming to support early to mid-career professors. Pre-tenure competitive programming to reward early-career research excellence will boost Canada's capacity to retain top, diverse talent, while enabling the scientific leaders of tomorrow to build ambitious, worldleading programs that will attract and fund trainees at all levels.

It is estimated that one out of three academic staff are working in teaching-only contracts. The federal government can play a role to address the underemployment of Canada's highest quality personnel by dedicating funding to support faculty renewal of top, diverse early career researchers through programs like the Canada Research Chairs.

Recommendation: Commit to enhanced programming to support early to mid-career researchers, inclusive of new research chair positions for tenure-track early career researchers.

## 4. Accelerate equity, diversity, and inclusive research

In fulfilling these recommendations, it is critical that the government supports and fosters a truly inclusive research environment that welcomes a broad range of perspectives and experiences as relates to gender equity, racialized and Indigenous researchers, those living with disabilities, and francophones.

The additional funding for equity, diversity, and inclusion (EDI) in research, committed in Budget 2018 has now expired and must be renewed. This would renew the Dimensions program, which has shown early promise in supporting culture change, as well as the EDI capacity-building grants and funding for Statistics Canada to deepen its work in collecting EDI data on the student and science and research workforce.

Recommendation: Renew funding for EDI in research programming and data collection and analysis.

