



## SUMMARY

**THE CANADIAN ASSOCIATION FOR GRADUATE STUDIES believes that continuous and increased support for the education and training of graduate students is imperative to enable Canadian businesses, governments, and organizations to mobilize research, market innovation and commercialization and participate in global value chains and increase their international reputation and market share.**

**Therefore, CAGS requests that:**

- the **Fundamental Science Review** recommendations be implemented, including;
  - increased funding for the Tri-Council;
  - increased scholarships for graduate students;
  - increased funding for international research;
  - predictable and stable funding for the Canada Foundation for Innovation;
- support be increased to promote inclusiveness for disadvantaged graduate students, including:
  - new funds for scholarships for indigenous graduate students;
  - review of Tri-Council practices and policies to ensure inclusivity of students with disabilities;
  - review of Tri-Council processes with a view to eliminating unconscious bias against women;
- support be increased for graduate student mobility, including for Canadian students to study abroad and for international students to study in Canada;
- support continued for Mitacs internships;
- support be increased for Labour Market Information.





[The Canadian Association for Graduate Studies](#) (CAGS) thanks the Minister of Finance and the House of Commons Standing Committee on Finance for the opportunity to express our views concerning the 2018 Federal Budget.

CAGS is Canada's national organization providing leadership, fostering community, and promoting collaboration to advance excellence in graduate education, research and scholarship. The association brings together 60 Canadian universities with graduate programs as well as other institutions and organizations having an interest in graduate studies.

CAGS members support and promote graduate education as a crucial component in making Canada a more productive and globally competitive country. The value of a graduate education rests not only in the increased earning power of graduates – and thus greater taxable income – but in the talent and intellectual innovation they bring to advance knowledge and technology and further develop the economy and society. Further, this particular group of highly qualified personnel bring international perspective and experience, essential qualities in a global marketplace. Nearly 50% of Canadian PhD holders are from foreign countries or obtained their degree outside of Canada.

If Canada is to maximally benefit from the knowledge, intellect and drive of its accomplished workforce changes need to be made.

Continuous and increased support for the education and training of graduate students is imperative to enable Canadian businesses, governments, and organizations to mobilize research, market innovation and commercialization and participate in global value chains and increase their international reputation and market share.

## **VALUE OF PSE AND GRADUATE EDUCATION**

Shifts in demographics, in technology and its application, internationalization of research and graduate education have required graduate programs to evolve to meet needs and expectations of students, governments, and the public and private sectors.

A substantial majority of Canadian graduate students will enter the workforce by filling demand for highly skilled employees across sectors. Nearly 40% of PhDs are employed in the education sector. The balance holds well-paying jobs outside of academia and are having an impact on our economy and social well-being.

The number of PhD degrees earned in Canada has nearly doubled since 2000 and Canadian enterprises in the for-profit and not-for-profit sectors are hiring PhDs at a rate commensurate with rising graduation rates; however, if Canada is to be a global player, research and development outside of academia needs to be stimulated and supported by government.



As part of an economic development strategy, it is imperative that we prepare graduates for the current labour market as well as for jobs not yet created. Active partnership between academia and both public and private sectors is crucial to bolstering Canada's competitiveness and prosperity. Simultaneously, government and social investment in research, development and innovation will drive demand for a highly trained and educated workforce.

## **RECOMMENDATIONS OF THE FUNDAMENTAL SCIENCE REVIEW (THE NAYLOR REPORT)**

**CAGS joins with other organizations in the higher education sphere in commending the recommendations of the Fundamental Science Review (the Naylor Report) to the Finance Committee.** We are grateful for the effort put into the consultation, research and development of the report. It not only provides excellent guidance for the Government of Canada but also an excellent overview of Canada's position in the world in relation to scholarship and research.

### **FUNDING FOR SCIENCE AND SCHOLARLY RESEARCH**

As illustrated most recently by the Canada's Fundamental Science Review (the Naylor Report) funding for the Tri-Council has not kept up with inflation, the increase in researchers seeking support or with the expansion of Tri-Council responsibilities including skills development, new clients (in terms of community colleges), and external communications.

Maintaining the current funding situation is incompatible with building our knowledge economy, changes are essential.

**CAGS supports the Naylor Report's recommendation of an increase of \$485 million on the current base of research funding (\$1.66 billion) over 4 years to address the cumulative underfunding developed over the past years.**

**CAGS supports the Review Committee's recommendation that 5 per cent of the final envelope for investigator-led research funds be allocated for international collaboration, multidisciplinary research, high-risk, high-reward projects, and research undertaken in response to fast-breaking issues or crises.**



## **Tri-Council Scholarships**

The number of Canada Graduate Scholarships has not increased since 2007 despite the increase in graduate enrolments and their value has remained at 2003 levels (Naylor). Graduate students fuel the research enterprise that benefits our economy and society. They are a sound and strategic investment, yet it is not one to which the government has committed to.

Also, with the smaller number of research grants being awarded each year, fewer students are being supported indirectly by Tri-Council funds.

**CAGS requests the expansion of the Canadian Graduate Scholarships program – with new money and revision of eligibility to include international students as a means of attracting top students from across the world to study in Canada. This will have the impact of further opening Canada and Canadian universities to the world and ensuring diversity in graduate education.**

## **CFI funding**

The Canadian Foundation for Innovation (CFI) provides state-of-the-art infrastructure (facilities and equipment) to support high caliber, world class research in universities, colleges, research hospitals and non-profit research institutions. This investment aids in attracting and retaining the world class talent required to lead high impact projects that benefit Canadians as well as train the next generation of researchers. Through partnerships with industry and private-sector businesses, innovation, technology transfer and knowledge mobilization support the creation of high-skilled jobs that contribute to strengthening the Canadian economy and society.

**CAGS requests that the Canadian Foundation for Innovation receive predictable and stable funding going forward.**

In relation to CFI, CAGS is concerned about the rules around the matching of CFI funds. While the matching process was developed with the idea that provincial government funds would be available, this is not always the case and, in the current fiscal environment, universities are challenged to commit matching funds. The result is uneven access to CFI across provinces.

**CAGS recommends that CFI undertake an analysis of the impact of the rules around matching funds through a lens of regional equality in access and incorporate changes to address unintentional regional biases.**



## STUDENT INCLUSION IN THE EDUCATION AND RESEARCH ENTERPRISE

CAGS strongly endorses the Naylor report's statement concerning inclusion in the education and research enterprise:

*“Canada cannot compete globally in any realm without strong participation by all communities”.*

CAGS believes that pathways and resources must be in place to enable individuals who are disadvantaged in access to university and graduate studies to pursue higher education. We have endorsed the recommendations made in the Truth and Reconciliation report around education, the National Graduate Experience Taskforce, and the National Educational Association of Disabled Students. Thus,

**CAGS requests that the federal government provide adequate funding to ensure timely access to First Nations students seeking a post-secondary education.**

**CAGS requests that the federal government provide new funds to create graduate scholarships for First Nations students.**

**CAGS requests that the Tri-Council review their practices and policies to ensure accessibility, accommodation and inclusivity of students with disabilities to existing tri-council funding and scholarship programs. This includes ensuring support for students with long term disabilities in engaging in activities essential to their graduate research work.**

CAGS is concerned about the imbalance between men and women in graduate study in the STEM disciplines. As an illustration, enrollment of women in 2013 in Architecture, Engineering & Related Technologies was 24.5% of the total and 25.6% in Mathematics, Computer & Information Sciences.

**CAGS encourages the Tri-Council to review processes with a view to eliminating unconscious (or hidden) bias against women in calls for applications for scholarships, fellowships or research grants and in the adjudication of these awards.**



## ENCOURAGING MOBILITY

International experience and international talent are fundamental to success and competitiveness in a global economy. The most recent information we have (for the 2014-2015 academic year), indicates that International students accounted for a quarter (26%) of full-time Master's and a third (32%) of full-time doctoral enrolments that year. Graduate student exchanges are generally unbalanced with the majority of students inbound to Canadian institutions rather than domestic students going abroad; a consequence of limited funding programs supporting graduate student exchanges.

It has been clear for some time that at least 50% of international graduates choose to remain in Canada. The Canadian Bureau for International Education's 2015 survey also showed that those who return to home countries are likely to retain their connections to Canada assisting in the furthering of education and business interests.

CAGS endorses the federal government's support for attracting international researchers and scholars to Canada through its Reforms to Canada's Express Entry. We believe that this will be critical to building a prosperous and influential country.

**CAGS urges the federal government to provide new funds to the Tri-Council to develop more robust programs that will assist Canadian students to study abroad for defined periods of time.**

**CAGS urges the Government of Canada to facilitate mobility for international students to study in Canada. It is important that student visas are accessible and can be obtained in timely fashion if Canada is to be a destination of choice for top workforce talent.**

## SKILLS TRAINING AND INTERNSHIPS

It is well understood that a successful workforce requires a range of technical skills as well as soft skills. Opportunities to develop and hone these skills must be incorporated into graduate training if our graduates are to have the versatility to become leaders and apply their advanced knowledge and research skills to multiple career sectors.

The realization that internships and experiential opportunities are important parts of the education process is altering the way graduate students are trained and curricula are structured. Mitacs, a national, not-for-profit organization that has delivered training programs in Canada for 15 years, has proven the value-added of such opportunities. 25% of businesses participating through Mitacs programs created new positions to hire their intern post-graduation and 26% stated that the experience led them to hire other new employees.



The expansion of the Mitacs internships beyond STEM to the social sciences and humanities as well as to non-profits and into the federal government is very welcome. The impact is anticipated to be significant in terms of job creation and employment outcomes as well as promoting a research culture across labour sectors.

**CAGS encourages the federal government to make a greater investment in Mitacs Accelerate internship programs.**

## **LABOUR MARKET DATA**

All graduate students, whether in research or professional programs, and potential employers, can benefit from reliable, timely labour market information.

CAGS values the report prepared for the Business Council of Canada and supports the call for the Forum of Labour Ministers' new Labour Market Information (LMI) Council to engage in active collaboration between the federal government, the provinces and territories. This will help align and validate LMI information, using common survey questions, terms and definitions, which will permit meaningful comparisons across jurisdictions and regions.

**CAGS urges the Federal Government to champion the Labour Market Information initiative, providing appropriate permissions and funds to ensure that LMI is accurate, valid, accessible and timely.**

Thank you for your attention.