

Submission to the Standing Committee on Science and Research of the House of
Commons

*Brief submitted with respect to the Government of Canada's Graduate Scholarship
and Post-Doctoral Fellowship Programs*

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DALHOUSIE
UNIVERSITY

Dalhousie University, and Canada's university sector, operate in a highly competitive global arena amidst worldwide economic disruptions, a demand to meet net-zero commitments, and the constant transformation driven by rapid developments in AI. Against this backdrop, Dalhousie University commends the *Standing Committee on Science and Research* for initiating this study on the Government of Canada's graduate scholarship and post-doctoral fellowship programs. Dalhousie is pleased to take this opportunity to affirm the importance of the Canada Graduate Scholarship and Post-Doctoral Fellowship programs to Canada's talent pipeline, research ecosystem, and future prosperity. We echo concerns raised by Universities Canada and other Canadian universities that, as a country, our continued lack of investment and continued non-indexation of graduate scholarships and post-doctoral fellowships pose a threat to Canada's long-term prosperity.

Graduate scholarships and post-doctoral fellowships play an essential role in talent development in Canada. The vast majority of highly skilled students completing these programs do so with a funding package. There are a range of publicly- and privately-funded graduate scholarships in Canada but the Canada Government Scholarships (CGS) are the backbone of our national graduate funding system. Unfortunately, the CGS awards are not sufficient to allow students to focus on their training. To complete their degrees, CGS award holders often need to supplement their scholarships with research or teaching assistantships, student stipends, and/or working outside the university. This puts the burden of making ends meet on students, their supervisors, and universities who are in-turn reliant in large part on the federal research funding system. Insufficient resourcing of graduate scholarships discourages students from continuing onto graduate study, prolongs time-to-completion for many who do pursue graduate studies, and puts undue pressure on students to meet growing financial obligations while also pursuing intensive academic programs. Canada needs competitive funding programs to attract and efficiently produce the highly skilled workers who fuel Canada's economic prosperity and growth now and into the future.

For Canada to remain competitive as a nation, we require equally competitive federal investments in graduate scholarships and post-doctoral fellowships; we urge the *Standing Committee on Science and Research* to recognize the importance of globally competitive graduate scholarships and post-doctoral fellowships to the maintenance of Canada's highly skilled talent pipeline. To do this, **Dalhousie recommends that the Government of Canada double the number of awards, increase their value by 50%, and index the awards for inflation on a regular basis.** While scholarship amounts and numbers have remained stagnant since 2003, inflation and cost of living have soared. A lack of funding and opportunity does not bode well for Canada's science, technology and innovation talent pipeline. Canada's lack of funding signals to sought-after, prospective Canadian students that Canada's research and innovation ecosystem is inhospitable. Many high-potential Canadian students choose to forego a graduate education or relocate to other countries that are willing to demonstrate significant financial commitment to graduate scholarships and post-doctoral fellowships.

The impact of low innovation on Canada's economy cannot be understated; limiting our innovation talent pipeline is damaging to Canadian industry and a demonstrated lack of innovation on a global stage discourages expanded foreign investment. From a global standpoint, Canada is already behind in research and innovation: we rank 28th in the OECD in graduate-level attainment and 15th in the Global Innovation Index (Dutta 2022). We know that, on average across OECD countries, progressively higher levels of educational attainment is directly linked to corresponding increased earnings. Supporting a robust pipeline of highly skilled workers and professionals will be essential to maintain momentum

across our increasingly digital and knowledge-based economy. Canadians who achieve higher levels of education are more likely to become the innovators and entrepreneurs that will drive Canadian economic growth. Canada's talent pipeline supports students who become innovators, and research universities cultivate these innovators. Investing in high-potential students is an investment in our future workforce.

In addition to a robust graduate scholarship and post-doctoral fellowship program, graduate student training is interconnected and reliant on Tri-Council and Canadian Foundation for Innovation funding. Research funding to university academics trickles down to graduate students through stipends and paid research assistantships, access to funded equipment and lab space, and opportunities to attend and present at conferences. The 2023 Bouchard Report, prepared by the Government of Canada-commissioned Advisory Panel on the Federal Research Ecosystem, identified opportunities to enhance Canada's research funding programs. It flagged an urgent need for Canada to act to increase funding for granting agencies and to support early career research talent. At Dalhousie, 37% of graduate support funding processed through our Faculty of Graduate Studies comes from professor-led research grants. This substantive proportion of graduate student funding flows to students as stipends and is made possible through Tri-Council and other research funding. An investment in Canada's Tri-Councils is also an investment in our highly-skilled talent pipeline. A robust and well-funded research ecosystem is essential for talent development, discovery and innovation, and international competitiveness.

A reimagining of investment in graduate scholarships and post-doctoral fellowships is an opportunity for Canada to signal its commitment to innovation, research and entrepreneurship. Researchers and innovators are creating solutions to address the climate crisis, ensure a just transition, and meet our commitments to the UN Sustainable Goals. As Canada seeks to become a world leader in growing fields such as Quantum Computing, AI, Batteries, and the Blue Economy, we need to be investing in the pipeline of people to fuel these workforces. Ensuring we have the enabling mechanisms in place is fundamental. Scholarship and fellowship packages that cover the cost of living and are indexed to inflation are a key component, as is a robust system to support student mobility from around the world and a research ecosystem that enables researchers and innovators to engage students in meaningful research during their studies.

Dalhousie University was founded in 1818 is looking toward our third century. As Nova Scotia's primary research-intensive university and a member of the U15 Group of Canadian Universities, our research and innovation includes world-leading researchers working in labs, studios and in the field.