

July 25, 2023

Standing Committee on Science and Research of the House of Commons

To whom it may concern:

I submit this briefing to the House of Commons Standing Committee on Science and Research as a contribution to their ongoing Study on Graduate Student Scholarships and Postdoctoral Fellowships.

I am Dean of the Faculty of Graduate Studies at the University of Victoria. As Dean I have oversight of programming and support for over 3,000 students enrolled in postgraduate programs at UVic. This brief is also informed by my experience as a faculty member in the Department of Chemistry for nearly 27 years, during which I have received research funding from several different NSERC grant programs. Finally, I was fortunate to receive postgraduate and postdoctoral fellowships from NSERC in the early-to-mid 1990s when I was a graduate student and postdoc.

Why is it important to financially support graduate students?

Graduate degrees are fundamentally different from undergraduate studies. Normally, a bachelors degree is made up of a large number of courses which are *relatively* easy to take in a compartmentalized way. In contrast, the focal point of most Masters and PhD programs is *research*. A Masters or PhD degree indicates that the degree holder has done a ‘deep dive’ into a research field and become a true expert – and has become an independent researcher, capable of not only working at the ‘cutting edge’ but contributing to redefining it.

The pathway to success as a graduate student requires a “full time”, continuous, immersive commitment to their research. Such commitment clearly requires financial stability/security so that students do not have to take significant part-time or full-time work, or take terms away from their studies to work (an important distinction between research-based graduate programs and undergraduate programs is that the former *normally* involve registering as a student year-round).

What is the Federal Government’s role in supporting graduate students?

The federal government is a significant contributor to graduate student support. The tri-agency suite of postgraduate awards and fellowships are available on a competitive basis to well-qualified students, and often take center stage in discussions about graduate student support. However, the proportion of students who receive these awards is very small (more on this below). Tri-agency research funding to

faculty members represents another significant (if indirect) means of supporting graduate students. Many faculty use substantial proportions of their research grants to provide a direct stipend/research assistantship to their graduate students for their own research, or a pay-to-work arrangement for the student to work on the faculty member's research.

Why *should* the Government of Canada invest, and invest *well*, in graduate students? The arguments are many and obvious. Today's graduate students are tomorrow's leaders in an increasingly knowledge-, and skill-, based economy and society. As such, providing support needs must be regarded as an *investment*: in the immediate term, it's an investment in our graduate students. In the longer term, it's an investment in the country's future.

What are the current challenges?

The key issues have been well articulated by others and indeed are very well known. Stipend levels for tri-agency postgraduate awards have not changed in 20 years. We're long past the point of needing to debate *whether* something needs to be done about this.

Federal funding for 'core' research has also stagnated, badly. Although new tri-agency funding programs of a 'specialty' nature are occasionally introduced, baseline support for e.g. the NSERC Discovery Grant program has atrophied badly when cost of, well, *everything*, is taken into account. Two recent comprehensive reports about the federal funding landscape (the 2017 Naylor Report and the 2023 advisory panel report on federal research support system) both make very clear the case – the *need* – for massive investment in federally-funded research within Canada.

The consequences of 20+ years of static funding for graduate students and research within Canada are many and dire. It is currently far more challenging for graduate students to subsist on traditional funding sources, for the simple reason that their funding has remained the same while two decades worth of inflation has made everything more expensive. As a result, many graduate students are forced to find other ways to support themselves financially. For those that are able to do this, the time away from their studies means that their degrees take longer to complete, adds significant financial costs and additional stress to their lives. An increasing number of graduate students are taking leaves from their programs to support themselves. Some are forced to withdraw. Others never start a graduate program, or choose not to do so in Canada but go elsewhere where financial support is better. This is bad for the students and bad for Canada's future. In a nutshell, the current student funding landscape narrows the talent pipeline – *and makes travelling through it harder*. At a national level we are eroding the base of young talented and capable minds – Canada's next generation of leaders.

How can the Government of Canada help to improve the picture?

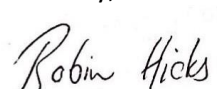
Regarding graduate student support, the mantra should be: *Invest in today, for tomorrow*. But if the federal government truly wishes to commit to our students (i.e. make the investment a "good" one), here are some things it must do.

1. Make an immediate and significant increase to the value of all federal postgraduate awards. While some have advocated for "fully" compensating for the 20+ years of no increases (and while that would be great), I realize a compromise level of increase may be

more pragmatic. But if there is to be *real* recognition that award funding levels have not increased in a long time, any such change needs to actually “move the needle”. I suggest that a 25% increase be considered the *bare minimum* in this context.

2. Moving forward, index the award values to the cost of living. Even modest proposals on this front (say, 5% increase in award levels every 2-3 years) coupled with my first suggestion above, would constitute significant steps in the right direction.
3. Increase the duration of all federally funded Masters awards to 2 years and Doctoral awards to 4 years, respectively. If we accept that the principle of supporting students in their program is valid, then let's strive to offer support that nominally covers the entire degree. To be sure, postgraduate degree completion times do vary - so for *some* students 2 or 4 years *may* not cover the length of the degree. But the current 1- and 3- year duration of these awards all but *guarantees* this support only covers part of a postgraduate program. It may be possible to couple an individual award's duration to the recipient's stage in their graduate program. For example, if doctoral awards were to provide funding for students in their first four years, a student in their first year could receive a 4 year award, a 2nd year student could receive 3 years, a 3rd year student eligible for 2 years, and so on.
4. Expand the total number of available federal postgraduate awards. Current tri-agency award numbers provide only about 2-3% of graduate students with federal support. I suggest doubling the number of awards.
5. Respond to the two recent reports on federal support for research. Do something, *anything*, about funding to the tri-Agency 'core' research programs.

Sincerely,



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