SCIENCE & POLICY EXCHANGE
DIALOGUE SCIENCES & POLITIQUES

House of Commons Standing Committee on Science and Research

Brief submitted as part of the Study of the *Government of Canada's Graduate Scholarship and Post-Doctoral Fellowship Programs*

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Science & Policy Exchange / Dialogue sciences et politiques

Science & Policy Exchange (SPE) is a non-profit organization run by graduate students and postdoctoral fellows in Montreal. Our mission is to foster the next generation researcher voice in evidence-based decision making and to bring together leading experts from academia, industry, and government to engage and inform students, researchers, and the public on issues at the interface of science and policy.

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Recommendations

1. Increase the value of Tri-Agency Graduate Student Scholarships by 48% to fully adjust for inflation since 2003. This recommendation is with the exception of PGS-D awards, which we recommend be harmonized with CGS-D awards at $35,000.

2. Increase the value of the Tri-Agency Postdoctoral Fellowships further to fully adjust for inflation since 2003. The current value should be increased by 31.6% to match a 48% increase over the 2003 value.

3. Increase the number of Tri-Agency Graduate Student Scholarships and Postdoctoral Fellowships by 50% and 100%, respectively, to correct for inflation and to support more research talent development in Canada.

4. In line with recommendations of the recent report by the Advisory Panel on the Federal Research Support System, increase funding to the three Agencies by 10% every year for five years, with funding specifically allocated for graduate student stipends and postdoctoral fellow salaries.

Glossary

- ***Next generation researchers***: Graduate students and postdoctoral fellows. Usually funded directly by graduate student scholarships and postdoctoral fellowships and/or indirectly from their supervisors' research grants.
- ***Tri-Agency***: Related to the three federal research funding agencies: CIHR, NSERC, and SSHRC.
- ***Graduate student***: Someone who has earned a bachelor's degree and is pursuing additional education in a specific field, mainly through a Master's degree or a PhD.
- ***Postdoctoral fellow***: Someone holding a PhD who is in a temporary period of mentored research and advanced training, linked to an academic institution, industry, or government research lab.
- ***Principal investigator***: The lead researcher responsible for the preparation, conduct, and administration of a research grant. In academia, principal investigators are mainly professors.
- ***Minimum stipend or salary***: Minimum amount set by universities, faculties, departments, or programs that graduate students and postdoctoral fellows must receive. This amount can greatly vary across universities, and even within the same university. Sometimes there is no minimum stipend.

The next generation of Canadian researchers and innovators is in dire need of the federal government's financial support and investment. The values of Tri-Agency graduate student scholarships have not changed since 2003, and those of postdoctoral fellowships have only increased by $5000 in the same period. Meanwhile, the Canadian dollar has been inflated by 48%, and tuition fees have risen by 38% since 2006[1]. This situation has put immense financial strain on next generation researchers, with many living below the poverty line and being forced to make difficult financial compromises to continue to pursue their education and training. To address this issue, we need **inflation-matched increases to Tri-Agency scholarships, fellowships, and grants.** These awards serve as a benchmark for universities across Canada to set minimum stipends and salaries for their own graduate students and postdoctoral fellows, meaning that an increase in the Tri-Agency award values would benefit all next generation researchers in Canada.

Increasing the value of current awards is needed, but it is not enough: Canada also needs to **increase the total number of Tri-Agency scholarships and fellowships.** The number of available scholarships has fallen behind the growing number of graduate students, and the overall number of postdoctoral fellowships has decreased. Science & Policy Exchange has emphasized the need for increased federal funding for academic research since Canada's Fundamental Science Review Report[2] was released in 2017.

Importantly, increasing the value and number of Tri-Agency scholarships and fellowships would not only elevate more next generation researchers above the poverty line, it may also enable many principal investigators to reallocate the portion of their grant funding that was supporting these personnel towards other important research expenses. This is crucial as next generation researchers have been disproportionately affected by rising inflation and Canadian academic research in general has been hampered by increased costs (e.g., for research materials and for purchasing and maintaining advanced equipment). We echo recommendation five of the recent Report of the Advisory Panel on the Federal Research Support System[3]: **the Tri-Agencies require increased funding to adequately address these issues.**

Next generation researchers are essential to driving economic growth and maintaining Canada's global competitiveness in the knowledge-based economy. They are at the forefront of cutting-edge research, generate substantial revenue for Canadian universities, and play a pivotal role in training the next generation of highly skilled professionals. However, due to the lack of investment in these individuals, Canada is failing to attract and retain top graduate and postdoctoral talent. This lack of financial support is resulting in a significant loss of Canadian training investments, both in terms of dollars and the cost of falling behind other countries in research and development, and innovation. **By increasing the *value* and *total number* of federal scholarships and fellowships, and increasing funding to the Tri-Agencies,** Canada will be better positioned to retain the talented and innovative minds that will secure a strong economy and maintain Canada's position as a global leader in research and innovation.

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References

[1]Canadian and international tuition fees by level of study (Table 37-10-0045-01). 2022. Statistics Canada. Link.

[2]Naylor CD *et al*. 2017. Investing in Canada's Future: Strengthening the Foundations of Canadian Research. Canada's Fundamental Science Review. Link.

[3]Bouchard F *et al*. 2023. Report of the Advisory Panel on the Federal Research Support System. Innovation, Science and Economic Development Canada. Link.