

Brief to the Standing Committee on Science and Research

Study of the Government of Canada's Graduate Scholarship and Post-doctoral Fellowship Programs

June 2023

Founded in 1951, the Canadian Association of University Teachers (CAUT) represents more than 72,000 teachers, librarians, scientists, researchers, general staff, and other academic professionals in 125 Canadian post-secondary institutions including universities, colleges, and polytechnics. CAUT works in the public interest to improve the quality and accessibility of Canada's post-secondary education.

Introduction

CAUT welcomes the opportunity to submit a written brief to the Standing Committee on Science and Research's study on graduate scholarship and post-doctoral fellowship programs. Today's graduate students and fellows are tomorrow's leading researchers and are integral to Canada's research and science workforce. Investment and planning are needed to ensure a flourishing and sustainable research community that will foster the knowledge needed to improve quality of life and address the critical challenges we face as a society.

To achieve these goals, the value and number of fellowships and scholarships should be increased, as well as research grants, as these are used to employ and train the majority of graduate students. Both of these investments are needed to address affordability challenges and support the next generation of researchers and scientists.

Increase support for early career researchers

The value of graduate scholarship awards in Canada has remained unchanged for nearly 20 years, and postdoctoral fellowships had only a slight increase over the same period. As the cost of living has skyrocketed across the country in recent months, these scholarships and fellowships provide increasingly inadequate support or incentive to begin or continue graduate studies.

Most graduate students and post-doctoral fellows are not funded by scholarships and fellowships, but through research assistantships paid for by research grants.

¹ Treleaven, Sarah. "[Inside the mental health crisis at Canadian universities](#)", Nov 2022. "Supporting Graduate Student Mental Health", *Canadian Federation of Students – Ontario, 2017*. Accessed 30 May 2023. [Factsheet-GraduateMentalHealth.pdf \(cfsontario.ca\)](#)

To improve student wages, increases are also needed to grant sizes and to the number of grants available, enabling faculty researchers to improve compensation and to hire additional graduate students and post-doc researchers. Competitive and fair remuneration for this work is critical to attract and retain early career researchers.

Without higher award levels or increased access to research opportunities and stipends, graduate students and post-doctoral fellows are left scrambling to pay their bills, often having to sacrifice time and attention from their research and contributing to impacts on mental health.¹ With increased prices of food, rent and incidentals, as well as rising tuition costs, low award values and limited access to funded research opportunities make it increasingly difficult for Canada to grow its talent pool of researchers. Canada is 25th among OECD countries for graduate student attainment.²

CAUT supports the calls made in the [Report of the Advisory Panel on the Federal Research Support System](#) to increase the granting councils' core grant programming by at least ten percent annually for five years and that funding for students (paid through scholarships and through grants from the granting councils) be increased to an internationally competitive level.

Recommendation 1

Increase the number and value of graduate student scholarships and postdoctoral fellowships by \$185 million in 2023 and an additional \$55 million per year thereafter.

Recommendation 2

Increase funding for the research agencies core grant programming by at least ten percent annually for five years.

² OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris.

Fix Canada's science and research talent pipeline

A 2021 Council of Canadian Academies report concluded that cultivating a robust, resilient, and diverse scientific workforce is central to the development of a nation's research capacity and requires supporting researchers throughout their careers.³

Yet the job market for discovery research in Canada has steadily eroded. The number of assistant professorship or early career research jobs in Canada has shrunk by 17% in the last 15 years.⁴ Over the last six years, Canada is the only G7 country to experience a decrease in the number of researchers. Between 2014 and 2018, the number of full-time researchers per million inhabitants in Canada declined by 4.8%. During that same period, the number of researchers in the United States increased by 4.9%, in the United Kingdom by 9%, and in Germany by 20%.⁵

Research capacity is also affected by the fact that approximately one-third of faculty at Canadian universities and colleges are working in teaching-only contract positions. Between 2006 and 2016, census data shows a 79% increase in the number of university professors working part-time and or part-year. In CAUT's surveys of contract academic staff members, the majority of respondents would like to work in a position that also supports their research but are limited to teaching-only appointments.

The federal government should work with its counterparts and other stakeholders to support workforce renewal and ensure a flourishing research community in Canada for years to come.

Recommendation 3

Work with provinces, territories and other stakeholders to develop a pan-Canadian science and research workforce strategy and expand the University and College Academic Staff System Survey to ensure it is data-driven.

Advance equity, diversity and inclusion

While available data is limited, there is evidence that the academic workforce is not as diverse as either the student body or the general labour force. Evidence also shows significant wage gaps between men and women, and between white, Indigenous and racialized academic staff.⁶

The greatest diversity of skilled researchers is over-represented in part-time or part-year work and are therefore less likely to be engaging in research activities.⁷ If Canada is to achieve excellence in research and innovation, action is needed to address precarious employment and to ensure that there are more permanent and stable jobs in fundamental science for a more diverse research community.

CAUT supports the recommendation made in the Bouchard report that the federal research support system continue to advance the implementation of the Tri-Agency Equity, Diversity and Inclusion Action Plan. The Plan aims to foster a more equitable, diverse and inclusive research ecosystem in Canada by addressing systemic barriers that limit the full participation of all talented individuals.

³ Council of Canadian Academies. (2021.) Powering Discovery: The Expert Panel on International Practices for Funding Natural Sciences and Engineering Research.

⁴ Statistics Canada. [Table 37-10-0144-01 Number and proportion of full-time teaching staff at Canadian universities by academic rank and gender](#)

⁵ Sylvain Charbonneau. Vice-president of research and innovation at the University of Ottawa, (2021) Oral Testimony. House of Commons Committee on Science and Research, February 10.

⁶ The Canadian Association of University Teachers. (2018). Underrepresented and Underpaid: Diversity and Equity Among Canada's Post-Secondary Teachers.

⁷ Ibid.

In addition to an increase to the Tri-Council Agencies core grant programming, CAUT recommends an investment of \$26 million to increase equity and diversity in research over the next five years. The funding would include \$10 million in Equity, Diversity and Inclusion Institutional Capacity Building grants, \$5 million to renew the Dimensions program, and \$5 million to repeat the Survey of Post-secondary Faculty and Researchers.

Lastly, this funding would commit \$6 million to the expansion of the University and College Academic Staff System (UCASS) Survey to capture equity data beyond gender, data on contract academic staff, and data from the college sector to help fill information gaps that currently limit our understanding of equity, diversity, and inclusion in the academic workforce.

Recommendation 4

Invest in better data and concrete commitments to equity, diversity and inclusion, starting with \$26 million to increase equity and diversity in research over the next five years.

Summary of Recommendations:

- Increase the number and value of graduate student scholarships and postdoctoral fellowships by \$185 million in 2023 and an additional \$55 million per year thereafter.
- Increase funding for the research agencies core grant programming by at least ten percent annually for five years.
- Work with stakeholders to develop a pan-Canadian science and research workforce strategy and expand the University and College Academic Staff System Survey to ensure it is data-driven.
- Invest in better data and concrete commitments to equity, diversity and inclusion, starting with \$26 million to increase equity and diversity in research over the next five years.