

In favour of better financial support for graduate students

Brief by the University of Quebec submitted to the House of Commons
Standing Committee on Science and Research as part of its study on the
Government of Canada's Graduate Scholarship and Post-Doctoral
Fellowship Programs

Recommendation 1

Increase the annual value of graduate scholarships in Canada by 50% and then index it annually to inflation.

Recommendation 2

Double the number of Canadian graduate scholarships offered at the master's and doctoral levels and implement a mechanism to ensure that the additional scholarships are distributed to students from more diverse backgrounds.

Recommendation 3

Extend the duration of graduate scholarships in Canada from 12 to 24 months at the master's level and from 36 to 48 months at the doctoral level, which represents the anticipated duration of most master's and doctoral programs.

Recommendation 4

In addition to the investments required for recommendations 1 to 3, increase by at least 10% a year over five years the total base budget of the three major granting agencies in order to support their research grant programs, thereby increasing the capacity of grant holders to improve the financial support offered to students through these grants.

The University of Quebec (UQ) believes that it is high time to take action to increase the support that Canada provides through its graduate scholarship programs for training the next generation of scientists and highly qualified personnel (HQP). Funding is a determining factor in students' educational choices and success. The UQ supports the arguments put forward in the Bouchard report (2023)¹ stating that talent is crucial in generating ideas and intellectual property, which are an indispensable source of prosperity that ensures well-being. The UQ believes that, if Canada does not take decisive action, more highly qualified personnel will leave, which would cause the economy to shrink.

Value, number and duration of scholarships

VALUE

In its first report,² the Standing Committee on Science and Research recommended that the Government of Canada increase the number of scholarships and fellowships to graduate students and postdoctoral researchers, increasing their value by 25% and indexing them to the consumer price index (CPI). The University of Quebec is proposing targets that are equally, if not more, ambitious.

The value of scholarships is a key issue. As has been repeated on various occasions, “[t]he values of [\$17,500 at the master’s level and \$21,000 to \$35,000 at the doctoral level] ... have remained virtually stagnant for the past 20 years. As a result, they have not kept pace with increases to the cost of living nor with research trainee compensation trends around the world—a situation that significantly dampens Canada’s position as a global hub for the attraction and retention of research-enabled talent. Recent analyses show that the award levels offered by Canada’s federal scholarship and fellowship programs result in a lower material standard of living for our graduate students and postdoctoral fellows than those available in comparable countries.”³ During these years of stagnation, the CPI has increased by more than 30% in Canada.⁴ Furthermore, support for the next generation of researchers accounts for an ever-smaller proportion of our science funding: in the last 10 years, the proportion of scholarship funding has been declining steadily, going from 13% to 9.5%, even though the total value of investments increased (see Figure 1).

Canada’s Chief Science Adviser, Mona Nemer, is clear on this point: “The role of graduate students and postdocs in the science ecosystem is not sufficiently appreciated.”⁵

¹ Bouchard et al. (2023). *Report of the Advisory Panel on the Federal Research Support System*. p. 46 ff.

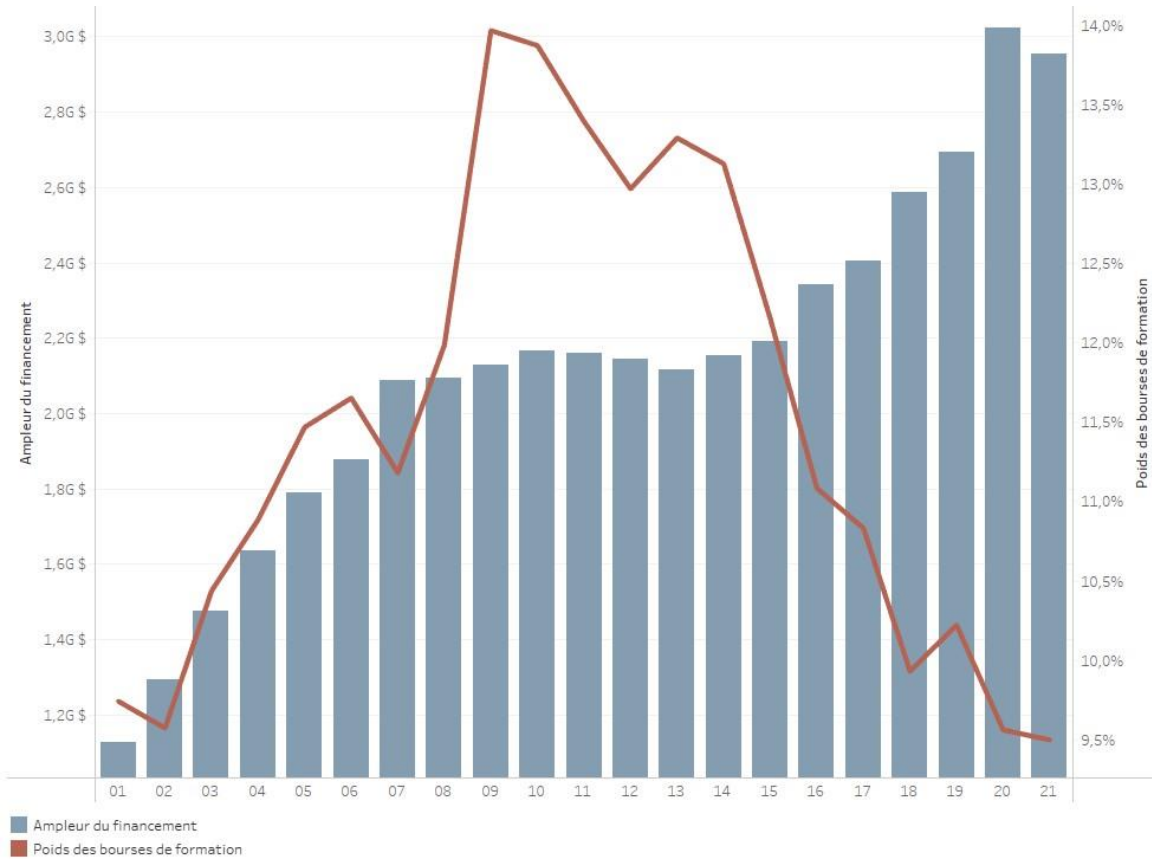
² Standing Committee on Science and Research. (2022). *Successes, Challenges and Opportunities for Science in Canada*. <https://www.ourcommons.ca/Content/Committee/441/SRSR/Reports/RP11841016/srsrrp01/srsrrp01-e.pdf>.

³ Bouchard et al. *Op. cit.* p. 46.

⁴ Statistics Canada. (2022). *Annual average change in the Consumer Price Index (CPI) and the CPI excluding energy, 2007 to 2021*. Accessed on July 20, 2023: <https://www150.statcan.gc.ca/n1/daily-quotidien/220119/cg-b001-eng.htm>.

⁵ Owens, Brian. (2022, September 22). Catching up with Canada’s chief science adviser. *University Affairs*. <https://www.universityaffairs.ca/features/feature-article/catching-up-with-canadas-chief-science-adviser/>.

Figure 1. Change in funding levels and the proportion of training awards granted by the three granting councils



| English | French |
|-------------------------------|--------------------------------|
| Funding level | Ampleur du financement |
| Proportion of training awards | Poids des bourses de formation |

Source: *Cube des trois conseils (OST)*, prepared by the *Direction de la recherche institutionnelle*, University of Quebec, June 2023.

Recommendation 1. Increase the annual value of graduate scholarships in Canada by 50% and then index it annually to inflation.

NUMBER

The number of scholarships offered is also insufficient. In 2021, 7,088 Canada Graduate Scholarships were available to 244,355 graduate students, representing a coverage rate of 2.9%. Although some other funding opportunities exist, the percentage of students holding scholarships remains very low in most institutions, whether they are in major cities, smaller municipalities or whether they serve the regions. At University of Quebec institutions, only 1.3% of graduate students receive a tri-council graduate scholarship. Since the opportunities for financial support through scholarships are quite limited, some universities use their

operating funds and professors' research grants to provide financial support, although the amounts often are lower than what is provided to excellence scholarship recipients.⁶

Meanwhile, we note that the proportion of students in Quebec who must spend more than 20 hours a week working at a job that has little or nothing to do with their area of study is highest among institutions that are part of the UQ network: 35% of UQ students are in this situation, which is 8% higher than in other Quebec institutions. It follows, then, that 38% of graduate students enrolled at a UQ institution spend fewer than 20 hours a week on their studies or research, which is 8% higher than at other Quebec universities. Lastly, around 30% of graduate students at UQ network institutions must work at an off-campus job during their studies.⁷

For students, working a paid job off campus while pursuing their studies is associated with negative outcomes. According to the Executive Director of the Institut national de la recherche scientifique (INRS), a member of the UQ network that works exclusively with research and training at the graduate level, training at the graduate level is intensive and particularly time-consuming, often requiring around 50 hours of work per week. While it is true that they are gaining an education, in doing so, they are also producing a significant proportion of all research in university laboratories and research groups. They publish scientific articles and participate in international conferences.⁸ Graduate students deserve adequate support.

It is worth noting that support for students is not consistent across Canada. As Figure 2 shows, a group of fifteen universities (U15), mostly located in Canada's largest cities, receive a proportion of tri-council funding in training awards (73%) and research grants (79%) that is significantly higher than the proportion of graduate students at U15 institutions (62%) and researchers in Canada as a whole (52%). The Bouchard report (2023) states that "Canada's diversity is an asset at home and on the global stage, and it is in our best interest to better encourage and empower it."⁹ We firmly believe that, in order to avoid concentrating funding any further, and to "foster a truly inclusive research environment,"⁹ to help "improve the underrepresentation and underparticipation of certain groups and encourage diversity across the research ecosystem,"¹⁰ and to support the training of highly qualified personnel across Canada, doubling the number of scholarships must also be accompanied by mechanisms to promote access to scholarships for a greater diversity of student profiles, in order to ensure that scholarships are not concentrated in a targeted group of universities.

⁶ Giraldeau, Luc-Alain. (2023, June 8). Manger de la misère pour créer la science de demain? *Le Devoir*. <https://www.ledouvoir.com/opinion/idees/792555/precarite-manger-de-la-misere-pour-creer-la-science-de-demain>

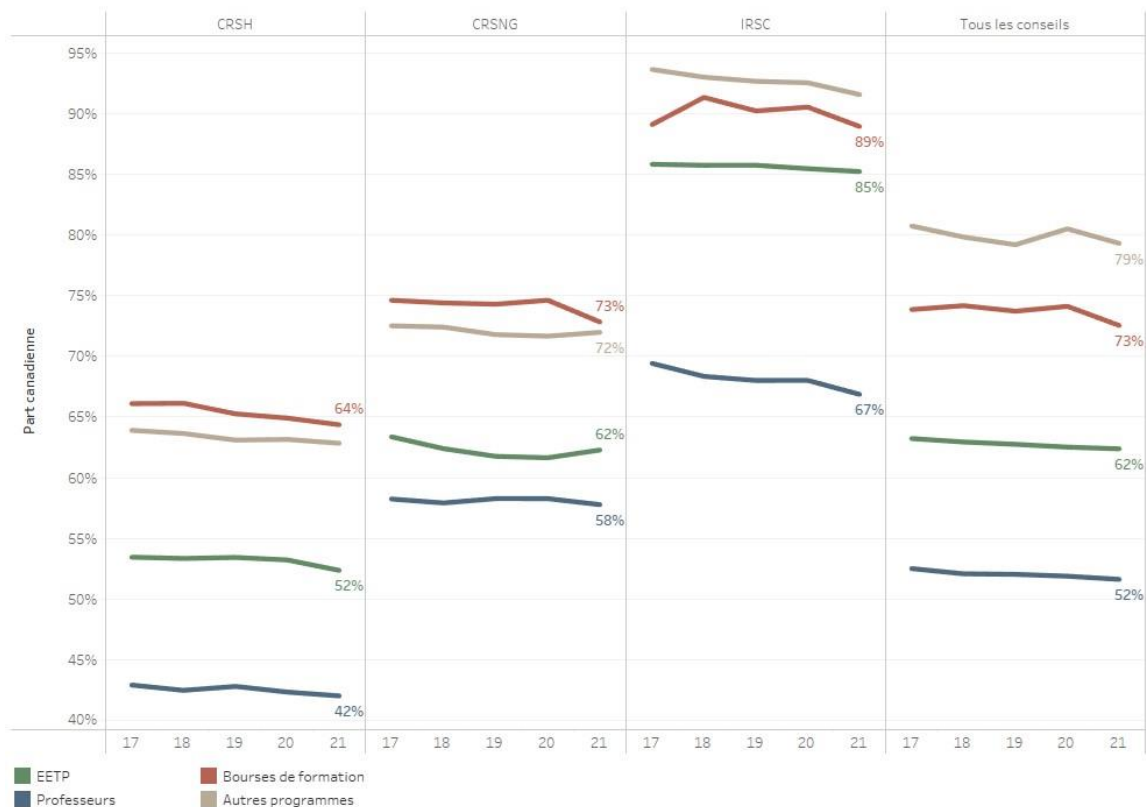
⁷ CGPSS. (2019). *Canadian Graduate and Professional Student Survey*. <https://ozza2b.p3cdn1.secureserver.net/wp-content/uploads/2019/12/Graduates-Studied-EN.pdf>.

⁸ Giraldeau. *Op. cit.*

⁹ Bouchard et al. *Op. cit.* p. 9.

¹⁰ Bouchard et al. *Op. cit.* pp. 9–10.

Figure 2. Change in the share of training awards and research grants awarded to U15 students and researchers by the federal granting agencies



| English | French |
|-----------------|----------------------|
| SSHRC | CRSH |
| NSERC | CRSNG |
| CIHR | IRSC |
| All councils | Tous les conseils |
| Canadian share | Part canadienne |
| FTES | EETP |
| Professors | Professeurs |
| Training awards | Bourses de formation |
| Other programs | Autres programmes |

Source: Cube des trois conseils (OST), prepared by the Direction de la recherche institutionnelle, University of Quebec, June 2023.

The University of Quebec has concerns about the quota system that governs the distribution of Canada Graduate Scholarships at the master’s (CGS-M) and doctoral (CGS-D) levels. Quotas are set based on each institution’s success rate in previous research grant competitions. In each of the three sectors covered by the three councils, a quota is established for the number of scholarships to be offered directly (CGS-M) or of applications that can be submitted for consideration (CGS-D). This method entrenches existing imbalances resulting from biases in how grants are awarded. In addition, since it considers only past awards, it does not allow for any flexibility, such as for developing new research and training niches associated with external funding or funding not taken into account in the calculations, such as funding from community-oriented research partnership agreements, the integration of new faculty members or the creation of new training programs geared to the needs of the regional economy. Furthermore, the quota system does not take into account the capacity of

institutions to oversee graduate students, for example, through the number of professors. At a minimum, the quota system should ensure that each Canadian university receives a certain number of grants in each of the sectors covered by the three Canadian granting councils.

Recommendation 2. Double the number of Canadian graduate scholarships offered at the master's and doctoral levels and implement a mechanism to ensure that the additional scholarships are distributed to students from more diverse backgrounds.

DURATION

Research has shown that the length of studies is influenced in particular by whether or not a student has received a scholarship for excellence.¹¹ It seems clear to us that a significant increase in the number and value of scholarships would have an immediate and lasting effect on students' perseverance and dedication to their studies, as well as on reducing the time it takes them to complete their studies. It should be noted that the time required to complete a doctorate in Quebec varies between five and six years, on average, depending on the institution, and sometimes takes as long as seven years to complete, even though programs are generally expected to take four years to complete. We also believe it is imperative to extend the duration of support provided for master's and doctoral scholarship programs. Currently, scholarships cover 50% of the expected duration of a master's program (one year out of two) and 75% of the expected duration of a doctoral program (three years out of four).

We urge the federal government to correct this situation by adjusting the duration of master's scholarships to cover the typical length of a master's program, as the Fonds de recherche du Québec has done.

¹¹ Aris, Diana. (2018). *Le support financier et la durée des études au doctorat* [master's thesis]. University of Sherbrooke. https://savoirs.usherbrooke.ca/bitstream/handle/11143/12165/Aris_Diana_MSc_2018.pdf.

Recommendation 3. Extend the duration of graduate scholarships in Canada from 12 to 24 months at the master’s level and from 36 to 48 months at the doctoral level, which represents the anticipated duration of most master’s and doctoral programs.

Students supported through research grants

It is common knowledge that “[a] significant portion of support for graduate students and postdoctoral fellows is paid not through scholarships but through stipends or salaries out of grant funding awarded to supervising professors.”¹² According to NSERC and CIHR,¹³ 62% and 75% respectively of the value of grant funding awarded to faculty is used to pay students and trainees. In our view, it is therefore important to take into consideration and to better support this effort by professors. As the value and duration of scholarships offered directly to students increase, professors will also have to consider the need to increase the value and duration of support provided to students and trainees from their research grants. We believe that this increase in support from faculty members should not be at the expense of other research-related costs. As a result, we echo the recommendation of the Bouchard report (2023) on tri-council funding:

Recommendation 4. In addition to the investments required for recommendations 1 to 3, increase by at least 10% a year over five years the total base budget of the three major granting agencies in order to support their research grant programs, thereby increasing the capacity of grant holders to improve the financial support offered to students through these grants.

The University of Quebec

The University of Quebec (UQ) was established on December 18, 1968, when a bill was passed in the National Assembly of Quebec. The UQ mission is to provide increased access so that Quebecers can achieve higher levels of education; to contribute to Quebec’s scientific development; and to contribute to the development of Quebec’s regions.

¹² Bouchard et al. *Op. cit.* p. 47.

¹³ Words of Mr. Ted Hewitt and Alejandro Adem, October 19, 2022, during a private meeting with institution heads from the University of Quebec network.

The UQ network has a head office and 10 institutions: the [University of Quebec at Montréal](#) (UQAM), the [University of Quebec at Trois-Rivières](#) (UQTR), the [University of Quebec at Chicoutimi](#) (UQAC), the [University of Quebec at Rimouski](#) (UQAR), the [University of Quebec in Outaouais](#) (UQO), the [University of Quebec in Abitibi-Témiscamingue](#) (UQAT), the [Institut national de la recherche scientifique](#) (INRS), the [École nationale d'administration publique](#) (ENAP), the [École de technologie supérieure](#) (ÉTS) and the [University of TÉLUQ](#).

Today, nearly 100,000 students, more than 25,000 of whom are at the graduate level, attend the 1,400 programs offered by the network's 10 institutions. Over 6,000 professors and lecturers, plus more than 4,500 regular staff members, carry out the UQ's day-to-day mission of teaching, research and creation, as well as services to the communities. Together, institutions in the UQ network have awarded over 800,000 degrees to date, helping to significantly increase the proportion of Quebec residents who attend university. They have achieved these results thanks to their strong roots in their communities, whether urban, rural or professional.

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