



Photo by Valeria Lau

FEDERAL PRE-BUDGET SUBMISSION:

Canadian Universities as Gateways for World-Class Talent Attraction and Retention

Written Submission for the Pre-Budget Consultations in Advance
of the Upcoming Federal Budget

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McGill

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Introduction

Since 1821, McGill University has attracted some of the world's brightest young minds and researchers, resulting in ground-breaking discoveries and societal progress. Today, McGill remains dedicated to the transformative power of ideas and research excellence guided by, and in the pursuit of public purpose.

Universities are uniquely positioned to tackle one of Canada's most pressing challenges: the domestic talent shortage and workforce skills gap. The creation and nurturing of a talent pipeline are critical to the economic health and well-being of the country, yet there remain numerous, well-documented hurdles to effectively recruiting, attracting, and retaining high-quality talent. In the higher education context, structural barriers such as underfunding, lack of competitive fellowships, grants, and research opportunities, and a challenging immigration system pose risks to Canada's attractiveness and competitiveness for top talent.

In addition to training young Canadians, Canadian universities also serve as entryways for global talent, eager to contribute to Canada's growth. Indeed, a 2022 survey by Australian firm IDP Connect found that international students ranked

Canada as the top destination of choice to obtain an advanced degree.¹

Despite Canada's status as a destination of choice for global talent, a 2021 survey from KPMG found that 68 per cent of businesses experienced a hard time hiring skilled workers in Canada.² Training Canadians for a rapidly shifting society and attracting highly-skilled international talent is a priority that universities share with the federal government. Collaboration between universities, government, and industry is urgently required to ensure that the brightest minds have accessible and equitable opportunities to learn, innovate and lead in Canada.

¹ www.idp-connect.com/apac/articles/international-market-trends/press-release-apac-emerging-futures

² home.kpmg/ca/en/home/media/press-releases/2021/08/tech-skills-top-priority-for-businesses-kpmg.html

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Recommendation 1:

Fund positions at internationally competitive rates to attract and retain a diverse and talented group of students, professors, and other skilled professionals

To attract the best and the brightest, we need to ensure that students, researchers, and professors receive internationally competitive offers to choose and remain in Canada.

It is important to note that most university graduates do not remain in academia. They use the skills acquired in critical thinking, communications, and analytical judgement to contribute to a wide range of jobs across the

public, private and non-profit sectors. McGill's data shows that almost half of doctoral students who graduated and are employed work in the private, government and non-governmental sectors³, eschewing the belief that PhDs only remain in academia.

Universities are ready to train the next generation of skilled talent, but funding is required to increase the availability and accessibility of educational opportunities. As such, **we echo U15's budget recommendation and call on the**

³ www.mcgill.ca/gps/files/gps/trace_mcgill_2103023-1.pdf

government to triple the number of graduate fellowships for Master’s level degrees and double the number for PhDs and postdoctoral researchers. These new fellowships should come with a long overdue increase in the amount of funding awarded. The value of fellowships from the tri-council agencies has not changed since 2004. These fellowships will support youth from a variety of backgrounds and prepare them to contribute to the future of Canada.

For established researchers, **we call on the government to fulfill the expansion of the Canada Research Chairs (CRC) program as**

outlined in the Liberal Party’s 2021 election platform and the Innovation, Science and Industry ministerial mandate letter. The Canada Research Chairs program was the envy of many nations when it was first established 30 years ago. Today, the CRCs receive the same amount of funding as they did when the program was created, despite rising inflation and a higher cost of living. Aligning CRC funding at internationally competitive levels is essential to ensuring that Canada can still attract and retain top researchers to its universities.

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Recommendation 2:

Build on the Fundamental Science Review investments to ensure Canada can perform in an internationally competitive innovation and research environment

Fundamental research has brought on life-changing transformations. There is no better example of the value of curiosity-driven research than the success of messenger RNA (mRNA) vaccines against COVID-19. The production of mRNA vaccines in relatively short order was only possible thanks to decades of dedicated, fundamental research.

Long before the development of mRNA vaccines, McGill's Nahum Sonenberg consulted with Moderna (co-founded by McGill graduate Noubar Afeyan) to define the efficacy of modified mRNA to make protein. Scientific discovery requires curiosity, tenacity and, above all else, a stable and predictable funding base to be successful.

The landmark \$925 million investment in Budget 2018 for investigator-led research, as recommended by the Fundamental Science Review, was undertaken to restore Canada's international standing in research funding.

This funding package and the corresponding Fundamental Science Review have served as the north star for Canada's research community for the last five years. This funding will expire this fiscal year, putting in jeopardy the progress made thus far to maintain a world-class science and research ecosystem in Canada.

Canada's spending on research and development (measured as Gross Domestic Spending on Research and Development) currently sits at 1.6 per cent of GDP, the second lowest among our G7 counterparts (according to OECD data, the United States dedicates 3.4 per cent of GDP to research, Germany 3.1, and Japan 3.2).⁴ **For Canada to be competitive, we recommend that the government invest at least 2.5 per cent of GDP in research within five years through increased and balanced contributions to higher education and industrial R&D.** This investment would ensure Canada's fundamental research ecosystem has the capital to effectively translate knowledge from across disciplines into innovation and progress.

Moreover, given the current macroeconomic context, inflationary pressures could undermine the stability of the research ecosystem and increase the gap between Canada and its international counterparts. **Future funding needs not only to be increased but to be indexed to inflation, otherwise multi-year funding will essentially decrease each year.**

Finally, we welcome the creation of new research opportunities focused on highly targeted research areas. These new opportunities, however, should not detract from the overall funding base for fundamental research. **We recommend an increase in tri-council funding by 10 per cent per year for each of the next five years, and five per cent per year for each of the subsequent five years to ensure researchers and students can access funding opportunities for fundamental research across the spectrum of disciplines.**

⁴ OECD (2022), Gross domestic spending on R&D (indicator). doi: 10.1787/d8b068b4-en

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Recommendation 3:

Fund university infrastructure as a means of supporting both talent attraction and public policy objectives

Attracting and retaining talent is not just about research funding, it is also about having high-quality laboratories and major research infrastructure. In short, top-notch talent requires top-notch research infrastructure.

To support the full costs of research, **we call on the government to make increased contributions to the Canada Foundation for Innovation to ensure institutions have the funds needed to properly maintain and operate major research infrastructure.**

In addition to research equipment, quality campus infrastructure is a key component for attracting and retaining top talent. Given this important role, **we call on the government to recapitalize the Post-Secondary Institutions Strategic Investment Fund [SIF] to build on previous successes and prioritize investments in greening campus infrastructure, including retrofits and new builds.** Modernizing existing campus infrastructure is key to achieving Canada's net-zero by 2050 target and to creating new research spaces for use by highly-qualified researchers.

McGill's New Vic Project is a prime example of the type of university campus infrastructure that will foster a strong academic environment. Situated on the grounds of the former site of the Royal Victoria Hospital, the Project will reimagine the site into a state-of-the-art research and teaching hub dedicated to sustainability systems and public policy. McGill's new complex will be built for connection between academics, students, and staff. Open, connected, and purposeful, it will serve the university community while inviting partners, community groups, and citizens to share in the physical and intellectual vibrancy of the site. This inspiring environment will

support McGill to attract and retain the best talents and will also ensure the continued delivery of high-quality education and research outputs. Government support for projects like the New Vic is essential to increasing the accessibility of our world-class research institutions.

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Recommendation 4:

Access the full potential of Canada's research talent by creating dedicated funds for university-industry collaborations and research commercialization

The Government of Canada has advanced several important initiatives and programs in recent years to boost innovation. As a result, Canadian laboratories are prolific discovery hubs and important actors in the Canadian innovation pipeline.

The possibility to take part in novel research opportunities helps Canadian universities attract top talent from around the world. However, bringing academic innovations to market is a complex process requiring strong collaboration

among universities, governments, and the private sector. Currently, universities have limited resources to invest in this purpose

To this end, **we recommend that the government fulfil the promise outlined in the 2021 Liberal Party election platform and the Innovation, Science, and Industry ministerial mandate letter to create a dedicated university research commercialization fund.** This new fund should provide direct investments in universities for building and maintaining a critical mass of highly qualified personnel to support a strong innovation pipeline, from discovery to commercialization.

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Recommendation 5:

Remove barriers to student immigration and academic recruitment to ensure Canada is the destination of choice for the best and the brightest

At McGill, a university with a high proportion of international students, we are acutely aware of the increasing challenges of attracting and retaining top international talent.

Current systemic barriers to attracting top international talent to Canada include immigration-related policies and processes that significantly hamper our ability to attract and retain talent to the detriment of Canadian universities and Canada's economy. The increasing delays for study permit applicants

require immediate action. Part of the challenge related to processing times is the lack of human resources both within Canada and in offices abroad. **We recommend that the government increase processing capacity and create a dedicated phone line or email address for designated learning institutions to inquire about student applications.**

We also recommend that IRCC issue a directive to require the expeditious processing of visiting professor visas and study permits in line with approval timelines in the US, UK, and Germany. Canadian universities compete with other high-

calibre international institutions to recruit the same candidates and, when the processing times to obtain a visa are too long, these candidates accept offers elsewhere.

Finally, in recognition of the unique situation facing international students studying in Quebec, **we recommend that IRCC reestablish the 2021 departmental policy allowing for the simultaneous processing of a *Certificat***

d'acceptation du Québec (CAQ) and a study permit. Currently, Quebec-bound students need to obtain a CAQ before beginning the application for a study permit, which adds several weeks to the overall process, putting them at a disadvantage compared to international students who choose to study elsewhere in Canada.



Conclusion

In closing, McGill University would like to thank the Standing Committee on Finance for the opportunity to provide input into the development of Budget 2023. We believe that the implementation of our recommendations, aligned with those provided by the U15 and Universities Canada, would contribute to Canada's prosperity and national readiness.