

Written Submission for the Pre-Budget
Consultations in Advance of the
2023 Federal Budget



Recommendation 1: That the Government of Canada continue to invest in our top talent, our students, and researchers.

- Increasing Canadian Graduate Scholarship Awards by 45% while doubling and tripling the number of doctoral and master's awards, respectively.
- Establish an additional 1,000 Canada Research Chairs and increase program funding by 25%.
- Continue to increase funding for SSHRC, NSERC and CIHR to increase opportunities for students and researchers to participate in high-impact research projects.

Recommendation 2: That the Government of Canada regularize the immigration system so Universities can welcome the world's best students to campus.

Recommendation 3: That the Government of Canada leverage the skills of academic researchers to grow research and development and commercialization opportunities.

The University of Waterloo thanks the Government of Canada for its leadership as we recover from the COVID-19 pandemic. Our university has worked to provide students with continuity of education, and a holistic university experience including co-operative learning experiences, throughout the turmoil of the past two years.

We appreciate the significant federal supports for our students and researchers, which have helped to maintain our enrolment, ensured students were able to safely return to school, and helped provide work-integrated learning placements. The government's compassionate approach to supporting students helped them navigate a particularly challenging time and the University is grateful for the investments in our collective future.

The University of Waterloo was particularly pleased to see investments looking forward in Budget 2022, including continued support for Canada's Global Innovation Clusters, investments to create new Canada Excellence Research Chairs, and the Canadian Innovation and Investment Agency.

In advance of the 2023 budget, the University of Waterloo puts forward the following recommendations:

Recommendation 1: That the Government of Canada continue to invest in our top talent, our students, and researchers.

A robust talent pipeline is critical as Canada further builds out its knowledge economy. Federal support for graduate students not only provides financial resources to students, but also signals an important commitment to the future of research and innovation and ensures Canada remains competitive globally.

Canada is falling behind in developing the highly qualified talent needed to innovate across the private, public, and non-profit sectors. Canada has lagged other advanced economies in investing in, creating and adopting new and innovative technologies. As a result, overall productivity growth has slowed from 2.7% in the 1960s and 1970s to less than 1% today.

The proportion of Canadians who have a bachelor's degree is only slightly above the OECD average, and Canada ranks 28th in the OECD in graduate-level (master's and PhD) attainment. On average across OECD countries, adults with a college diploma earn 23% more than those with just a high school education. With a bachelor's degree they earn 45% more. But adults with a master's or doctoral degree earn a full 95% more. Aside from the individual earnings advantage of higher education, Canadians with higher levels of education are much more likely to be entrepreneurs, researchers, and innovators, and therefore, much more likely to be drivers of prosperity and economic growth.

To ensure Canada's universities can continue to educate skilled workers ready to solve the world's challenges, the University of Waterloo recommends increasing the current award amounts of the Canada Graduate Scholarships (CGS) Program by 45%; doubling the number of Doctoral awards and triple the number of master's awards; and indexing all subsequent awards to inflation.

This investment in students will ensure that Canadian graduates have the skills to help Canadian companies, governments and institutions solve the global challenges facing us today.

Another recommendation to close Canada's productivity gap is investing in Canadian researchers. University of Waterloo researchers have clearly demonstrated their ability to translate the economic and social benefits of research into private and public sector prosperity.

Building a robust pipeline of top research talent also requires a strategic approach to attraction and retention. The University of Waterloo strongly encourages the federal government to increase funding to the granting councils to ensure that Canada remains competitive as a leading science nation. Not only do increases to tri-council funding increase the number of high-impact research projects in Canada, but they also provide opportunities for students to deepen their expertise and abilities, positioning our early- and mid-career researchers for success over the course of their careers. Further expansion of the Canada Research Chairs program to include 1,000 new chairs will provide important research support over the trajectory of a research career, and we ask that the federal government complement this expansion with adequate funding for research and infrastructure.

Recommendation 2: That the Government of Canada regularize the immigration system so Universities can welcome the world's best students to campus.

The University of Waterloo attracts the best students from across the globe. In 2021-22, 8,884 international students studied at the University of Waterloo, comprising 21% of our undergraduate and 40% of our graduate student population. These students graduate with future-ready skills to help Canadian companies take on serious global challenges like climate change, create high-paying jobs, and drive Canada's health and social innovation. However, delayed processing times for study and work permits are reducing the Canadian advantage in a global competition for talent.

The University of Waterloo asks the Government of Canada facilitate the recruitment of international students in keeping with investments in previous federal budgets, by streamlining immigration processes and re-setting service standards to world-class levels. There were nearly 750,000 international students in Canada in 2018, and they spent over \$21.5 billion on tuition, accommodation, and other expenses. We would ask that the Government of Canada continue to work to ensure as frictionless an entry as possible for this vital cohort.

Recommendation 3: That the Government of Canada leverage the skills of academic researchers to grow research and development and commercialization opportunities.

The University of Waterloo was pleased to see a range of commitments in the 2021 election platform and in Budget 2022. Strategic, long-term funding for quantum and AI, establishing a Canadian Innovation and Investment Agency and investing in commercialization of university research will all contribute to a more resilient economy and increase Canada's productivity rate. We look forward to details on these investments and partnering on a comprehensive approach to research and innovation.

We also urge the Government of Canada to look at novel ways to ensure that universities can participate in federally funded commercialization initiatives. While we commend the government for efforts to increase R&D expenditures by Canadian businesses, it remains true that the majority of our R&D capacity continues to reside in our postsecondary institutions. Funding private or university-based R&D is not zero sum – they are parts of an innovation continuum with investments in one area supporting success in the other. The University of Waterloo has a proven track record of commercializing research via programs such as the [Velocity Incubator](#) and the [Advanced Manufacturing Consortium](#).

Businesses understand the value of the huge research capacity residing in our universities – in 2021, business expenditures on university-based research reached nearly \$1.3 billion, an all time high. University of Waterloo researchers have created innovative partnerships with private companies to ensure cutting-edge research can be commercialized and quickly adopted. Alternatively, researchers also choose to create their own companies and grow with the support of programs like the Velocity Incubator. This proven pipeline of innovation and commercialization will be crucial in closing Canada’s productivity gap.

In order to combat the challenges facing the global community, including reaching a net-zero economy, combatting climate change, preventing future pandemics and reducing global inequality, extracting critical minerals, and more, it is critical that federal innovation programs support the innovative commercialization work researchers, like those at the University of Waterloo, are currently undertaking to bring their research to market either with industry partners or by creating their own companies. Ensuring that these innovators can access funds through programs like the new Innovation and Investment Agency will ensure that we leave no talent or research capacity on the sidelines.