

Written Submission for the
Pre-Budget Consultations in
Advance of the 2019 Budget

The University of Waterloo



- Recommendation 1: The government support the recommendations of the U15 regarding eliminating Canada's HQP deficit, expanding international research opportunities for our students, exploring new types of engagement programs for Canada, addressing the gap in providing the full costs of research, and expanding undergraduate student research awards.
- Recommendation 2: The government support the CEWIL and BHER submissions regarding the expansion of work-integrated learning opportunities through various direct and matching funding programs, and the creation of a pan-Canadian WIL strategy, working in collaboration with the new Future Skills Centre.
- Recommendation 3: The government provide funding for a renewal or targeting of the Campus Accelerator and Incubator Program to those recipients who have provided the greatest impacts.
- Recommendation 4: The government continue to support equity and inclusion on all campuses.
- Recommendation 5: The government continue to support and invest in programs linking on-campus innovation capacity with external industry and community needs.
- Recommendation 6: The government provide funding for a new, targeted infrastructure program, funded jointly with the provinces, for projects that will expand the capacity of institutions who are fully utilizing their existing space but are faced with prevailing high-levels of industry and student demand.

The University of Waterloo thanks the Government of Canada for its continued interest and investments into Canadian innovation. Through the Innovation Superclusters Initiative, the Budget 2018 investments in response to the Fundamental Science Review, and leading necessary discussions about equity and inclusion in all facets of our society, this country is poised to harness its innovation capacity to ensure Canada's competitiveness.

In order to do this, we must take stock of the challenging global environment in which we live. Technology is transforming the workplace. Thanks to automation, AI, robotics, and other innovations, the skills that Canadians need to be successful in the current labour market are quite different from the skills needed in the past, and are likely to be quite different from the skills needed for the future.

The University of Waterloo has been using its position as Canada's most innovative university to respond to these challenges and prepare Canada to succeed in the changing global economy. The University of Waterloo is signaling its intent and ability to continue to lead the country in innovation, entrepreneurship and research excellence in not only developing the talent and technologies that will continue to shape our future, but the societal and industry collaborations and engagement. We believe that this will allow Canada to increase its competitiveness and adapt quickly to the impacts of changing technologies and global markets.

The University of Waterloo is an enormous employment ecosystem. It operates the largest post-secondary co-operative education (co-op) program in the world. Each year, the University of Waterloo assists students to secure more than 21,000 work-integrated learning (WIL) opportunities across all industries. This involves supporting these youth in a full spectrum of career development activities – from professional development training, searching and competing for work opportunities, identifying and transferring skills across sectors, and transitioning into full-time employment terms across our network of over 7,000 employers located in more than 60 countries. This employment ecosystem is fertile ground for further investigation into emerging skills and trends in the labour market, for developing and testing educational innovations related to skills development, and for exploring unique approaches to matching talent to employer needs. Collaborating with our partners will allow for cross-pollination outside of the university context to develop best practices for other diverse ecosystems across and Canada as a whole.

The University of Waterloo believes strongly in the value of WIL, and we would welcome a new Canadian strategy and supports to create additional opportunities for our students.

For over 60 years, the University of Waterloo has worked to find innovative and effective ways to best to prepare Canada's workforce for the changing nature of work. Considering our extensive investments and expertise in artificial intelligence, robotics, automation, and data science, we have the best minds in the world to understand what future "disruptive" changes to the workforce will be. For example, 275 patents are currently under management with the Waterloo Commercialization Office.

We would also encourage the government to consider a renewal or additional targeted investments through a program like the Campus Accelerator and Incubator Program. With the support of this program, the University of Waterloo's Velocity, has become Canada's most productive startup

incubator. From idea to development to commercialization, Velocity provides the knowledge, tools, space and network that startups and entrepreneurs need for success. Velocity has created over 300 companies who have raised over \$750 million in funding and creating over 2300 jobs so far, and we believe that the government's investment into programs like this will continue to pay off and ensure Canadian startups are competitive in the future.

Finally, we would like to thank the government for the Strategic Infrastructure Fund (SIF) investments made as part of Budget 2016. This fall we will welcome thousands of new engineering students who will benefit from the additional capacity and experiential opportunities that our new Engineering 7 building will afford, thanks to the SIF investments. Waterloo's capacity to train more top global talent will continue to grow with further investments in teaching and research infrastructure and programs. We would encourage the government to review the significant returns that the SIF program will be having on campuses. The University of Waterloo suggests that the Government of Canada consider creating a SIF2, in collaboration with the provinces, to ensure that those institutions needing additional capacity to meet student and industry demands will be able to continue to train highly sought-after global talent and improve Canada's competitiveness.

The University of Waterloo is a research leader and has an international reputation for innovation and collaboration. It is home to more than 40 senate-approved centres and institutes, two Canada Excellence Research Chairs, and more than 100 other funded research chairs. In 2016/2017, our faculty, staff, and students attracted \$205 million from public and private sources to fund research across a spectrum of challenges.

We encourage the government to consider investments to cover the full cost of research for our research enterprise. As identified in the U15 submission, the Research Support Fund funding gap seriously compromises the quality of the research and learning environment and hinders the ability of our research-intensive universities to: a) attract world-class professors and students; b) retain our own future leaders; c) invest in activities that support our ability to commercialize research and partner with industry.

We thank the Committee for their invaluable work with these pre-budget consultations and for the opportunity to share the University of Waterloo's priorities leading up to the 2019 Budget. We look forward to working with the Government of Canada to ensure Canada's competitiveness moving forward.