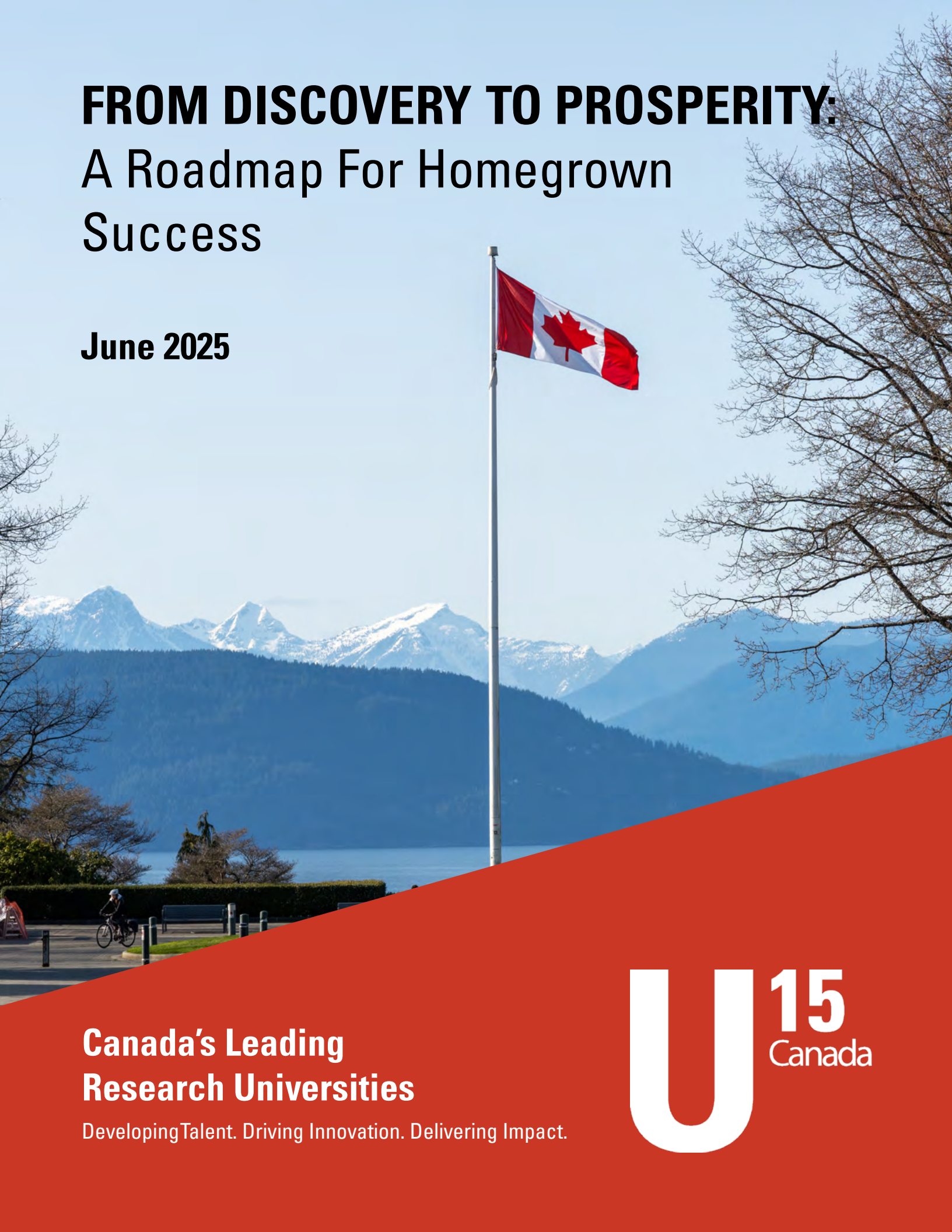


FROM DISCOVERY TO PROSPERITY: A Roadmap For Homegrown Success

June 2025



**Canada's Leading
Research Universities**

Developing Talent. Driving Innovation. Delivering Impact.





Executive Summary

Canada stands at a crossroads, with the rules-based international order, global trading system, and even our sovereignty under question. Canada's leading research universities, which develop talent, drive innovation, and deliver impact across the country, are a national asset that must be leveraged as our country comes together to meet this moment.

To achieve the national objective for a strong Canada, the new government should focus on supporting talent, research, and innovation that are essential to strengthen Canadian industry, secure supply chains, and turn Canadian discoveries into Canadian prosperity, sustainability, and resiliency.

The role U15 universities can play has never been more critical. We are ready to get to work towards a stronger and more prosperous Canada.



Key Takeaways:

- **People lead innovation.** Scientific breakthroughs, medical advances, and economic growth all begin with talented people—without them, businesses cannot scale, industries cannot compete, and communities cannot thrive.
 - **Recommendation:** The new government should commit to expanding Canada's highly qualified talent pipeline by closing the graduate degree gap with OECD peers, strengthening research training programs, and rebuilding Canada's global reputation to attract the best and brightest from around the world.
- **Innovation underpins prosperity.** Research and innovation help build a strong, resilient, and technologically enabled economy.
 - **Recommendation:** The new government should utilize Canada's research ecosystem to build domestic capacity by delivering the proposed capstone governance mechanism, establishing a Sovereign Technologies Fund to advance critical new technologies in a competitive world, and better supporting academia-industry collaboration to accelerate innovation-based growth.
- **Research delivers impact.** From new health therapies to clean energy solutions and better social policies, research improves people's lives, strengthens communities, and supports Canada's global competitiveness.
 - **Recommendation:** The new government should leverage Canada's research hubs to expand capacity and impact across key sectors, secure participation in Horizon Europe's successor program to maintain global collaboration, and engage leading universities to advance evidence-based solutions for complex policy challenges.

Canadian Success in an Uncertain Time

Canada's future prosperity depends on its ability to develop talent, drive innovation, and deliver the impact needed to help Canadians, businesses, and communities thrive.

In today's global context, strengthening Canada's research and innovation ecosystem towards building greater domestic capacity and technological and economic sovereignty is no longer just an opportunity but a national necessity. A stronger research ecosystem means high-paying jobs, better healthcare, cleaner energy, and new technologies that improve the quality of life for everyone. Canada's leading research universities are at the heart of this effort by:

- **Developing Talent:** Developing the next generation of leaders, innovators, entrepreneurs, and healthcare professionals who will realize Canada's future success.
- **Driving Innovation:** Driving breakthrough research and technologies that strengthen our society, power economic growth, and support Canada's global competitiveness.
- **Delivering Impact:** Delivering real-world solutions to Canadians' most pressing challenges, creating lasting impact in communities from coast to coast to coast.

Canada has the foundation to lead, but achieving long-term prosperity and resilience requires urgent action to meet growing challenges and build the economy of the future—from securing energy and advancing sustainability to rebuilding defence capacity, protecting the Arctic, and harnessing transformative technologies like AI.

Canada's leading research universities are central to this effort, and meeting these challenges demands more collaborative, strategic approaches to scale solutions and accelerate impact. No single sector holds all the answers, but by working together across government, industry, academia, and communities, we can deliver the solutions Canada and Canadians need.



Expanding Canada's Talent Pipeline:

U15 universities are the backbone of Canada's highly qualified talent pipeline, enrolling nearly 50% of all university students. Over **156,000 students graduate** annually from a U15 university, including **48,000 graduate students**. To stay competitive, Canada must invest ambitiously to grow this talent pipeline and close the talent gap with our peers.



RESEARCH IN ACTION



Reliable Energy Leaders:

Renewable, reliable energy is essential for Canada's sovereignty, economic resilience, and sustainability. At McMaster University—home to one of North America's largest research reactors—scientists are pioneering advances in small modular reactors (SMRs) to deliver safe, affordable, low-carbon energy across Canada, including to remote and northern communities. This research is helping build the workforce and technological expertise critical to Canada's energy transition.



Developing Talent: Prosperity Begins with People

Recommendation: To meet the urgent need to expand Canada's talent capacity for an innovative and productive economy, the new government should commit to growing Canada's highly qualified talent pipeline by:

- **Setting a national goal to close the talent gap with our OECD peers on graduate degree attainment.**
- **Expanding the pipeline of graduate students, postdoctoral fellows, early-career researchers, and world-leading experts through research support programs.**
- **Rebuilding the reputational damage to Canada's immigration system with a distinctions-based approach to attract the best and brightest talent.**

People are the cornerstone of an innovative and productive economy. Yet, Canada ranks 25th among OECD countries and last in the G7 for advanced degree attainment. To close this gap, the government should set a national target and leverage existing pathways, including Budget 2024 investments, to expand graduate degree attainment, postdoctoral fellowships, and world-leading research training.

A persistent shortage of talented people is already constraining our economy, impacting our healthcare system, and hurting our companies. Canadian businesses across high-growth and established sectors identify difficulties recruiting the people needed to innovate and adopt new technologies as a major obstacle year after year. Canada must prioritize expanding the pipeline of highly qualified talent to create greater opportunity for Canadians and ensure employers have sustained access to the expertise needed to drive innovation, strengthen industries, improve healthcare, compete globally, and tackle complex policy challenges.

Closing our talent gap also means Canada must keep pathways open to attract and retain top international talent. Following disruptive reforms to the immigration system, a distinctions-based approach that upholds the highest standards in recruitment and international education would better ensure a managed international student program that attracts the best and brightest from around the world who can contribute to a stronger Canada.

Canada's leading research universities are critical drivers of the talent pipeline, developing and attracting individuals through advanced education, hands-on research training, and mentorship that prepare talented people to lead across society and the economy. U15 Canada stands ready to work with the new government and partners to realize this vision.

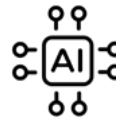


Developing Talent Through Research:

Research is Canada's talent engine. Federal investments through Canada's granting councils support over **75,000** graduate students—about one-third of the entire graduate population—in cutting-edge research every year, fostering the next generation of innovators, scientists, and experts.



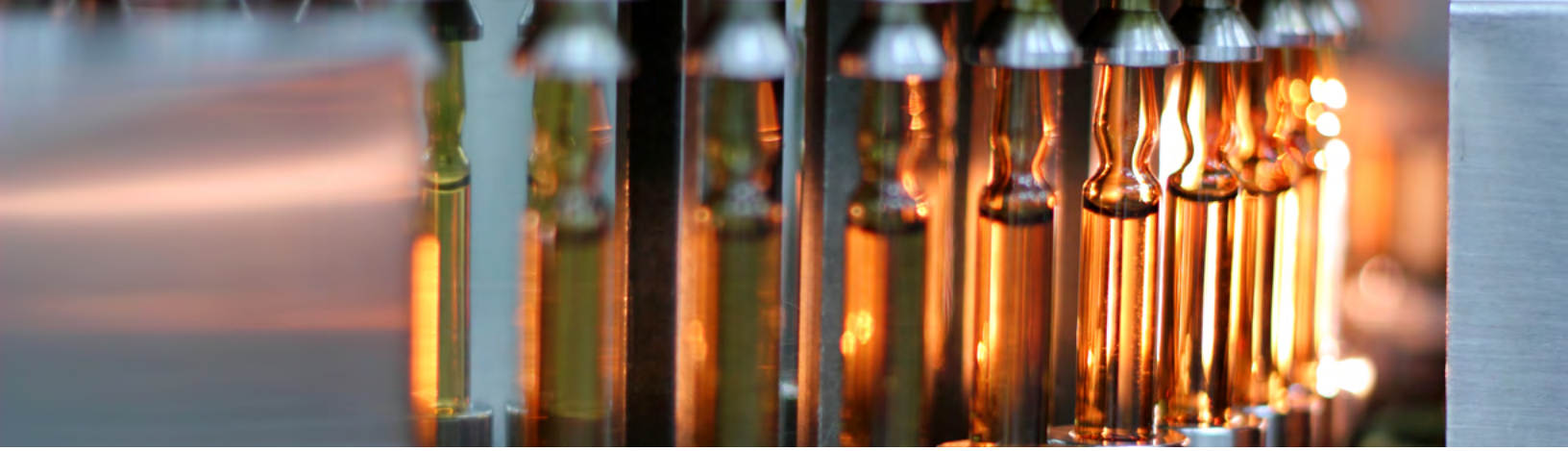
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Fueling the AI Economy, From Lab to Global Leadership:

Artificial intelligence is revolutionizing global industries, and Canada has been a foundational force—home to renowned AI pioneers like **Yoshua Bengio**, **Geoffrey Hinton**, and **Richard Sutton** and their talented teams of students and collaborators. Their work helped position Canada as a world leader in both innovation and responsible AI development, laying the groundwork for breakthroughs in healthcare, cybersecurity, and advanced manufacturing.





Driving Innovation: Canadian Discoveries to Canadian Prosperity

Recommendation: To help secure Canada's economic future, the government should look to expand and leverage the research ecosystem towards achieving national objectives by:

- **Finalizing and positioning a new capstone organization to mobilize Canada's research capacity in solving pressing challenges and advancing strategic priorities.**
- **Establishing a Sovereign Technologies Fund—delivered through the new capstone organization—to build out domestic research and innovation capacity in critical areas such as AI, life sciences, energy, and defence.**
- **Strengthening academia-industry connections through mechanisms like industrial research chairs, commercialization supports, and collaborative R&D initiatives to help Canadian firms access the expertise and facilities they need to innovate and grow.**

Innovation is the foundation of a resilient, productive, and sovereign economy. Canada's leading research universities are at the heart of this success—enabling breakthrough discoveries, fostering innovative new products, and forging partnerships with industry, government, and communities. By advancing research, supporting commercialization, and scaling industry partnerships, they help turn ideas into real-world solutions.

With the government's commitment to finalizing a new capstone organization, we have a transformative opportunity to leverage the research sector to advance national priorities and tackle complex challenges—including defence, food security, and decarbonization. As the new capstone organization takes shape, it must uphold the core principles that have made Canada's research enterprise a global leader, committing to excellence, openness, collaboration, and investigator-led inquiry.

To stay competitive globally, Canada must identify the key discoveries and insights, technologies, and capacities it needs. A Sovereign Technologies Fund would provide targeted, mission-driven investments in critical fields like AI, cybersecurity, quantum, and energy, with a potential early focus on advancing dual-use defence technologies to support the new Bureau of Research, Engineering and Advanced Leadership in Science. Such a strategically focused fund would help strengthen Canada's national security and our industrial competitiveness.

Canada's leading research universities stand ready to contribute expertise, talent, and infrastructure to advance national priorities and tackle pressing challenges. U15 universities alone account for over 75% of the \$1.2 billion in industry-sponsored research across Canadian academia, providing businesses with the knowledge, resources, and solutions they need to innovate and grow. By scaling collaboration and fully leveraging this foundation, we can help scale Canadian innovations, grow industries, and deliver solutions to urgent challenges.



Invention and Innovation by the Numbers:

Since 2010, U15 universities have filed over **18,000** invention disclosures, **11,000** patent applications, and launched more than **1,100** research-based startups—including nearly 120 in 2023 alone. This fuels new technologies, companies, and expertise that secure made-in-Canada solutions.

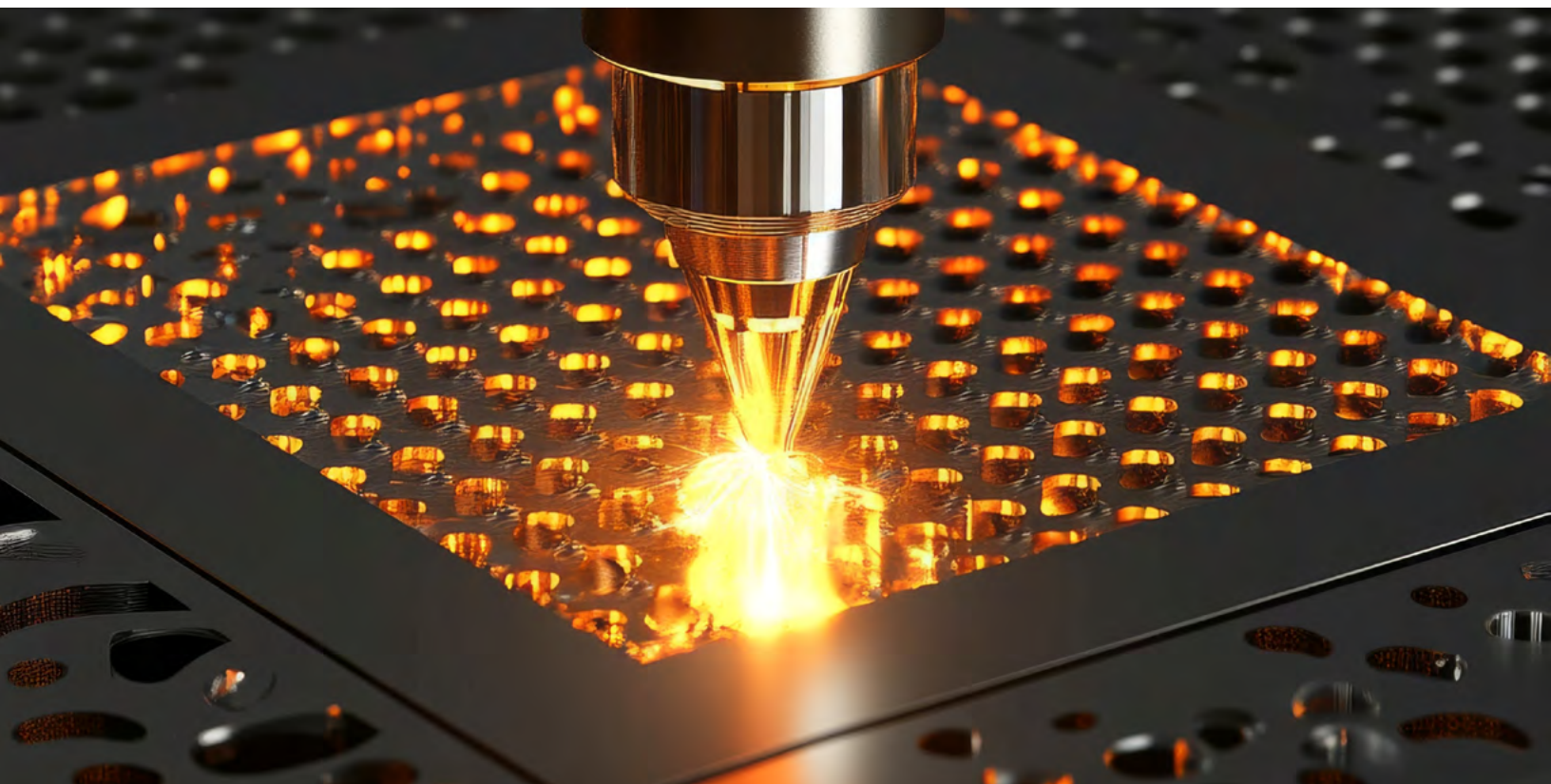


RESEARCH IN ACTION



Safeguarding Canadian Livelihoods and Trade:

Canada is the world's third-largest pork exporter, with **\$5 billion** in exports to **93 countries** in 2020 alone. An outbreak of African Swine Fever would be catastrophic—threatening thousands of jobs and billions in economic activity. At the University of Saskatchewan, researchers at the Vaccine and Infectious Disease Organization (VIDO) are developing a new vaccine to protect Canada's pork industry, safeguarding our economy and preparing us for the threats of tomorrow.





Delivering Impact: Strengthening Communities and Saving Lives

Recommendation: To unlock the full potential of research and innovation for Canada's sovereignty and prosperity, the next government should:

- **Leverage Canada's leading research hubs to expand capacity and maximize real-world impact across health, climate, technology, and societal challenges.**
- **Secure Canada's participation in Horizon Europe's successor program, FP10, and deepen collaboration with trusted global allies to maintain access to the international pool of expertise.**
- **Establish mechanisms to engage leading research universities towards supporting evidence-based solutions for complex public policy challenges.**

The research happening across Canada isn't just about advancing fields of knowledge—it's about delivering real solutions that improve lives, strengthen industries, and support communities. Whether advancing life-saving cancer treatments, training the next generation of healthcare professionals, or developing clean energy technologies to meet Canada's sustainability ambitions, these discoveries are helping drive impact from coast to coast to coast.

U15 universities are hubs of excellence that connect communities, businesses, and organizations to new ideas, turning research into real-world impact. In 2022/23 alone, researchers at U15 universities partnered with over 3,600 organizations on federally funded projects spanning 325 federal electoral districts, providing impact to Canadians across the country.

Research and innovation do not happen in isolation. Through international partnerships, Canada's globally leading research universities connect Canadian communities to the global pool of knowledge and innovation—bringing people, ideas, discoveries, and technologies back home to drive progress and build domestic capacity. In an increasingly competitive international environment, Canada must strengthen partnerships with trusted partners to ensure we continue to access talent and knowledge. To ensure Canadian institutions remain internationally engaged, the new government must expand collaborations and enhance access and support for key initiatives like Horizon Europe and its successor program, FP10.

U15 universities stand ready to mobilize talent and ideas to deliver deeper impact for communities, businesses, and policymakers. By leveraging our country's research hubs and scaling domestic and international collaboration, the next government can ensure research and innovation translate into better jobs, improved healthcare, and a more sustainable, prosperous future for all Canadians.



Connecting Research to Communities:

In just 2022-2023, researchers at U15 universities worked with over **3,600** organizations on federally-funded research grants—including over **1,000** non-profits, **1,800** businesses, hundreds of educational institutions, nearly **500** healthcare providers, and government bodies at the municipal, provincial, and federal levels.



RESEARCH IN ACTION



Navigating Arctic Opportunities:

Located beside Canada's only deep-water Arctic port, the Churchill Marine Observatory (CMO) is advancing our understanding of a rapidly changing Arctic. Led by the University of Manitoba, the CMO is helping Canada respond to climate change, protect northern ecosystems, and prepare for increased Arctic marine traffic. As the Arctic becomes increasingly central to Canada's sovereignty and prosperity, leveraging research across Canada's north will be essential to realize economic reconciliation with Indigenous communities and position Canada to access new trade routes.



Conclusion

U15 Canada is ready to work with the government to help achieve the urgent objectives for a prosperous, resilient, and secure Canada in the turbulent 21st century. Our universities develop talent, drive innovation, and deliver impact across our country.

At this moment of real uncertainty, Canada's leading research universities can help realize homegrown success for Canada—whether by cultivating the talent and ideas needed to drive progress or convening leading experts from across the country to help navigate public policy challenges. By drawing on the depth and breadth of our institutions, U15 Canada is committed to supporting the government's efforts to achieve shared national priorities.

The time to act is now. Together, we can build a more prosperous and resilient future for all Canadians.



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UNIVERSITY OF BRITISH COLUMBIA
UNIVERSITY OF CALGARY
DALHOUSIE UNIVERSITY
UNIVERSITÉ LAVAL
UNIVERSITY OF MANITOBA
MCGILL UNIVERSITY
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