



Canada's universities:
Mobilizing people and ideas
for an innovative, inclusive
and prosperous Canada

Universities
Canada.



October 2016

In 2017, Canada celebrates 150 years as a nation.

Our sesquicentennial is a time for Canadians to come together, look ahead and continue to work towards a more innovative, inclusive and prosperous future.

Budget 2017 presents an opportunity for Canada to position itself as an international centre for discovery and innovation, to invest in our youth, to advance reconciliation between Indigenous and non-Indigenous people, and to establish ourselves as global champions of pluralism and diversity.

Canada's universities have a crucial role to play in realizing these ambitious goals. Universities transform lives, strengthen communities, and find solutions to the most pressing challenges facing our country and world.

Our universities are ready to collaborate with the federal government, as well as private sector and community partners, to build a better Canada through investments in people and ideas.

**Our recommendations
for Budget 2017
encompass three
strategic areas:**

**1.
Driving innovation
through discovery**

**2.
Mobilizing
Canada's talent**

**3.
Developing tomorrow's
Indigenous leaders**

Driving innovation through discovery

University research drives innovation, strengthens the economy and improves quality of life for all Canadians. In the past 20 years, since the creation of the Canada Foundation for Innovation, Canada has made remarkable strides towards becoming a global leader in research and innovation, and the government has invested in a new generation of world-class researchers and advanced research facilities.

Those early investments are now bearing fruit, with Canadian researchers like Dr. Maryam Sadeghi solving problems and improving the lives of people around the world.

The pace of these investments, however, has slowed over the past decade. Canada is now falling behind other OECD nations' investments in R&D. We must reverse this trend in order to support researchers and innovators and attract new talent to help build an innovation nation.

Recognizing that today's biggest challenges are global in nature, we must also ensure that Canada's top researchers are connected with the best minds around the world.

Dr. Maryam Sadeghi



A researcher, engineer and entrepreneur, Dr. Maryam Sadeghi originally came to Canada as an international student. With the support of Simon Fraser University's Venture Connection business incubator program, she developed MoleScope, a smartphone app that helps detect potentially cancerous moles. Today, the app is being used in cancer centres and hospitals in countries around the world, and Dr. Sadeghi calls Canada home.

“It’s very rewarding when you see what you’ve built is being used in cancer centres and [by] thousands of patients and dermatologists and oncologists.”



Dr. Arthur B. McDonald

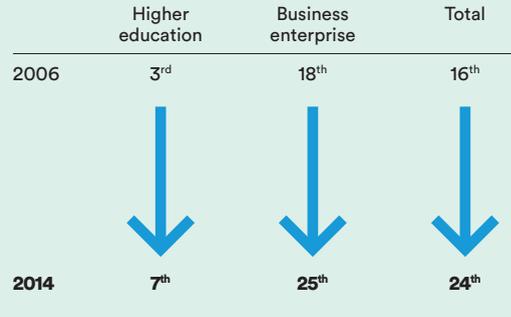
“Discovery research...is very important because it turns out that if you attempt to only do direct commercializable research, then you find that you run out of ideas fairly quickly.”

Dr. Arthur B. McDonald, Nobel laureate in physics and professor emeritus of Queen's University, interview with Universities Canada, January 21, 2016

Between 2006 and 2014, Canadian investments in research and development have slowed compared to those of other OECD nations.

Eroding competitive advantage in R&D investment

R&D expenditures by sector as a share of Gross Domestic Product (GDP), 2006 & 2014



Research Intensity measures from the OECD Main Science and Technology Indicators (2006, 2014)

RECOMMENDATIONS

- Provide transformative investments in discovery research through the federal research granting councils.
- Invest in sustained support for the Canada Foundation for Innovation, and mandate it to play a leadership role in developing and implementing a big science strategy for Canada.
- Address gaps in Canada's research and innovation ecosystem, including a new fund to support international research collaboration.

Mobilizing Canada's talent

To succeed in the ever-changing and competitive global economy, Canada's next generation of entrepreneurs, researchers and innovators must be bold, well-educated, flexible and open-minded. Global study and work-integrated learning opportunities are fundamental to developing Canadian talent.

Learning across borders

Studying abroad helps young Canadians like Frida Masago develop the cross-cultural competencies and skills that are essential to helping our country become a global innovation nation.

Currently, only 3.1 per cent of full-time Canadian undergraduate students (or 25,000 a year) go

abroad, despite 97 per cent of universities offering international experiences.

Canada needs to do more to encourage a culture of mobility among Canadian students and support international opportunities.

Frida Misago



Frida Misago's international study experiences helped her discover her passion. A recent graduate of l'Université de Moncton in business administration, she completed a semester abroad in Switzerland, in addition to a UN International Development & Diplomacy Internship in Senegal. In fall 2016 she will pursue a master's degree in international relations at l'Université Laval.

“[Global study is] one of the best investments you can make in yourself, both personally and professionally... It broadens and deepens your perspective, and also enables you to identify other, unrealized qualities and skills that you may not have known you possess.”

Queen Elizabeth Scholars Program

A new platform for global talent exchange, the Queen Elizabeth Scholars program is building a dynamic community of thousands of young Canadian and global leaders. Students at 37 universities across Canada are undertaking cross-cultural exchanges encompassing international education, research and work-integrated learning.

The QES is a collaborative mobility program led by the Rideau Hall Foundation, Community Foundations of Canada and Universities Canada, with contributions from the private sector, the Government of Canada (through Global Affairs Canada, the International Development Research Centre and the Social Sciences and Humanities Research Council), provinces and Canadian universities. More information can be found at www.queenelizabethscholars.ca.

“Studying abroad helps students to develop the skills and mindset needed to collaborate and compete on a global stage.”

Betty Miao, executive vice president and head of retail banking and wealth management, HSBC Bank Canada

“Young people understand that we’re in a globalized world right now, and the more we can challenge ourselves to understand different realities, different perspectives, different cultures, the more we discover about ourselves and our place in an increasingly complex world.”

Prime Minister Justin Trudeau during a June 28, 2016 town hall with Mexican President Enrique Peña Nieto and university students to discuss the value of international experiences



RECOMMENDATION

- Invest in international mobility opportunities for Canadian youth that will benefit 50,000 students per year by 2022.

Mobilizing Canada's talent

Learning by doing

To prepare students to meet the changing needs of employers and society, universities are equipping students like Yannick D'Mello with career-boosting learning experiences, such as paid co-ops and internships.

But more needs to be done. Universities support the call by the Canadian Business Higher Education Roundtable for access to work-integrated learning for 100 per cent of Canadian postsecondary students.

RECOMMENDATION

- Invest in new measures, such as vouchers and tax credits, to incentivize the private and not-for-profit sectors to create more paid co-op and internship placements for university students.

Yannick D'Mello



During the final year of his undergraduate degree in engineering physics at Carleton University, Yannick D'Mello completed a work placement with the Institut National de la Recherche Scientifique's Énergie Matériaux Télécommunications Research Centre in Montreal. He designed, constructed and automated a project involving high-speed photonics, all while mentoring a peer on the same project. The experience gave him confidence and leadership skills, and also helped him discover a love of teaching.

“[This] internship was a turning point...in my career...not only did I have a chance to work in quantum photonics, I had a chance to run my own project... and I ended up starting a peer mentoring program... because of my love for teaching. And all of that really came together in this program.”



**David McKay,
president and CEO,
Royal Bank of Canada**

“Work-integrated learning improves economic access for minority groups, especially Indigenous Canadians and new Canadians...It’s a social leveller.”

David McKay, president and CEO, Royal Bank of Canada, in a speech at Universities Canada’s April 27, 2016 membership meeting

Quick facts

80%

of employers surveyed say co-op and internship students are a source of new talent and potential future employees.

Source: Leger Marketing SME employer survey for Universities Canada, 2014

55%

of today’s undergraduates benefit from experiential learning – such as co-ops, internships and service learning – as part of their university education.

Source: Canadian University Survey Consortium, Graduating University Student Survey, 2015

Informed choices through labour market information

Students and families need reliable labour market information to make informed choices about their education and careers. Governments and employers need this data to ensure informed decision-making.

Research conducted by the Education Policy Research Initiative at the University of Ottawa shows that university graduates across disciplines – including the liberal arts – have strong long-term earnings. Studies like this are essential for helping young Canadians plan for their future.

RECOMMENDATION

- **Provide additional funding to enhance Statistics Canada’s role and resources in collecting, analyzing and disseminating labour market information to support the Labour Market Information Council.**

Developing tomorrow's Indigenous leaders

Education is key to the reconciliation process and universities are committed to helping talented Indigenous students like Jack Saddleback achieve their potential. These students will be Canada's next generation of Indigenous leaders and role models.

Across Canada, universities partner with Indigenous communities to develop unique programs that support Indigenous students' access and success in higher education. But more must be done to invest in the knowledge, skills and talent of Indigenous youth to support them, their families and their communities in building a better future.

Jack Saddleback



Jack Saddleback is a sociology and entrepreneurship student at the University of Saskatchewan, originally from the Samson Cree Nation. The former president of the University of Saskatchewan Students' Union, Jack plans to work as a social entrepreneur after graduation.

“I am more than...optimistic about the future for Indigenous students when it comes to education. There are so many options for us to grow as a nation, as a people, as a society when it comes to including Indigenous people.”

“If we can support...[Indigenous] students today, they will become the change agents to enable our communities to create their own sustainable future, and Canada will be the stronger for it.”

Roberta Jamieson, president and CEO, Indspire, “A Call for Quality Education,” *Policy*, September/October, 2016

Quick facts

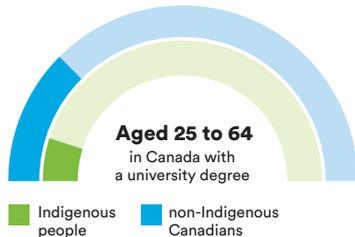
69%

of Canadian universities offer programs to help Indigenous students transition into university studies, including outreach programs in Indigenous communities, academic support and mentorship for students starting as early as the elementary school level.

Canadian universities offer 233 undergraduate programs and 62 graduate-level programs with a focus on Indigenous issues or specifically designed for Indigenous students – a

33% increase since 2013.

Source: Universities Canada survey of members, 2015



Only 11%

of Indigenous people aged 25 to 34 in Canada have a university degree, compared to 33 per cent of non-Indigenous Canadians in the same age group.

Source: Statistics Canada, National Household Survey, 2011

RECOMMENDATIONS

- **Commit to additional financial assistance for Indigenous students pursuing a university education by funding the platform commitment to grow the Post-Secondary Student Support Program, lifting the two per cent funding cap and enhancing support for successful initiatives through Indspire.**
- **Invest in Indigenous student success at university by supporting measures to develop new or scale up existing campus initiatives that encompass outreach and transition programs and services, cultural support, mentorships etc.**
- **Invest in enhanced support through the federal granting councils to enable more Indigenous students to pursue graduate and post-doctoral studies.**

Conclusion



Some 300,000 students will graduate from Canada's universities in 2017. During their studies they'll have acquired skills, knowledge and learning opportunities that will do much to shape their future contribution to Canada.

Our universities are committed to working with the federal government, businesses and communities to ensure Canada's youth are well-equipped to help build a more innovative, inclusive and prosperous country.

Budget 2017 is Canada's sesquicentennial budget. It's our opportunity to support a bold and ambitious vision for the future. Let's make it count.

“Education is one of the most important drivers of a country's competitiveness.”

Dominic Barton, managing director, McKinsey & Company, and chair of the Government of Canada's Advisory Council on Economic Growth

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