



*Inspiring innovation
Inspirer l'innovation*

Mitacs submission to the House of Commons Standing Committee on Finance

August 2020



Recommendation 1: That the government provide financial support for Mitacs to expand programming in support of innovation and skills.



Mitacs: Supporting economic recovery

Mitacs, a trusted partner to the Government of Canada for over 20 years, is pleased to submit its recommendations to support Canada's economic recovery following the COVID-19 pandemic. An established leader in building innovation across the country, with close connections to both industry and academia, Mitacs is uniquely positioned to help Canada meet its innovation and skills objectives to drive economic recovery and future prosperity.

Context

The COVID-19 pandemic has caused devastating economic shocks to Canada and the world as economies have closed down to prevent the spread of the virus. In these unprecedented times, many Canadian companies are struggling to survive the crisis and to rebuild once restrictions ease across the country. Past recessions have shown that companies that can pivot to new products and new markets, retain and hire qualified employees and invest in growth strategies will emerge from a recession stronger and faster than those that focus primarily on cost-cutting measures.

Fortunately, Canada has significant strengths on which to build: an excellent post-secondary education system that graduates highly qualified students into our workforce, world-class researchers and research facilities, a highly entrepreneurial culture, and a strong and stable financial system. We have seen the agility of our industries as they revamped production facilities to produce critical PPE; we have seen companies design, develop and produce needed new products in very short timeframes; and we have seen the mobilization of talent and facilities to address urgent needs across the country.

Canada's innovation ecosystem will play a critical role in our national economic recovery and prosperity. Building on our strengths in new and collaborative ways will allow us to fill the gaps, provide companies with the support they need, and ensure our highly trained talent is deployed across all sectors of our economy. Capitalizing on our strengths will allow Canada to adjust patterns of manufacturing and trade, strengthen, protect and benefit from intellectual property developed in Canada, support entrepreneurs, and grow our economy in a sustainable manner.

Mitacs is a critical player in Canada's innovation ecosystem, bridging the academic and industrial sectors through an extensive network of partnerships in order to power innovation. We deliver cutting-edge solutions to industry challenges while providing PSE students with high-quality real-world opportunities. Mitacs quickly mobilized our network to support the immediate COVID-19 response, effectively delivering support/expertise where needed.

With generous support from the federal government, Mitacs introduced time-limited initiatives to expedite R&D and student opportunities:

- A call for projects focused specifically on research related to COVID-19 and the virus, that has resulted in submitted projects from more than 280 companies, comprising more than 1,400 internships;
- A reduced financial requirement for SMEs to take part in Mitacs programming to 25 percent of project cost, resulting in more than 450 companies submitting projects (involving 1,600 internships) to maintain R&D activities while accessing highly qualified talent;



- An expedited review process to get projects up and running within a few weeks;
- A COVID-19 call for Mitacs Canadian Science Policy fellows to bring PhD level expertise and scientific evidence into the policy-making process for all levels of government, which has received applications from both federal and provincial jurisdictions;
- A new Business Strategy Internship to allow business, marketing, and law students to work with companies to develop strategies to cope with the new economic realities of a post-COVID world;
- A COVID-19 Industrial Postdoctoral Fellowship Call — one-year collaborative research projects between universities and industry or not-for-profit partners that demonstrate a strong benefit to Canada in battling COVID-19; and
- Expanded program eligibilities to include college, undergraduate and professional students, municipalities, foundations and hospitals.

By adjusting the eligibility to our programs and developing new initiatives to meet the emerging needs of companies during the pandemic, Mitacs saw a dramatic increase in uptake of our programs, demonstrating the significant needs of the ecosystem for R&D support and access to talent during the pandemic. From April to the end of July, 4,500 internships have been processed with an additional 2,300 pending peer review. The combined 6,800 internships surpasses our total delivery in 2018–19 and is well beyond targets set for reaching 15,000 internships by the year's end.

As Canada moves to re-open its economy while managing numerous uncertainties about the pandemic, many challenges remain. The COVID-19 crisis threatens to undo important, long-term, and recent investments made to improve our innovation performance and reduce the widening productivity gap between Canada and peer nations.

There is an urgent need to safeguard and advance Canada's innovation ecosystem. Canada's innovative, research-intensive enterprises are simultaneously vulnerable to economic shocks and indispensable to future prosperity. They have made significant investments in intellectual property and in developing highly qualified personnel (HQP), but the longer the market for their innovative products is closed, the greater the risk of losing the benefits of those investments

At the same time, we have seen the emergence of new companies, and the pivot of existing companies to develop and manufacture new products to assist in COVID response. These companies hold significant promise and need support to continue to grow, expand market share and provide jobs.

Mitacs urges policy-makers to support Canadian innovators across all sectors to retain skilled talent, invest in R&D activities, and hire highly qualified personnel from our postsecondary institutions.

Recommendations: Supporting innovation for economic recovery

Continued federal funding support will enable Mitacs to deliver additional high-quality internships designed to have an immediate and long-term benefit for industry, academia, PSE students, and postdoctoral fellows.

Mitacs is proposing to enhance our current programming by:



1. **Extending new program flexibility and eligibility criteria**

Mitacs has increased the flexibility of its programs to help address some of the most urgent challenges brought on by the COVID-19 pandemic and the associated economic downturn. For example, Mitacs has expanded access to its programs for recent graduates, recognizing that post-secondary graduates are entering an extremely challenging and competitive job market. Research has shown that the negative effects of entering the labour market during a recession can persist for decades, resulting in a lost generation of talent. Extending access to Mitacs internships to this group of new workers provides additional opportunities for them to gain the skills, networks, and experience they will need to launch their careers, while also helping companies maintain their R&D activities at a time when many are facing significant cost pressures.

Expected benefits:

- Creation of strong talent pipelines in various sectors across the country
- Provision of turn-key solutions for companies and not-for-profits who may require different levels of expertise
- Keep recent graduates meaningfully employed and contributing to economic activity, while mitigating the long-term negative employment effects

2. **Expanded Accelerate delivery**

Mitacs continues to successfully deliver high-quality, research-focused work-integrated learning opportunities for PSE students across Canada. Over the past year, our delivery has met and exceeded targets, and despite the pandemic we are on track to meet and exceed our original delivery targets. In order to meet this demand and maximize Mitacs support to businesses and particularly SMEs throughout the period of economic recovery, Mitacs is proposing to continue its expanded Accelerate delivery.

Expected benefits:

- Provide Canadian companies and not-for-profits with low-risk access to talent
- Support innovation ecosystem across the country
- Provide meaningful work-integrated-learning experiences for PSE students

3. **Extending the discounted rate for SMEs**

Canadian SMEs will be coping with very restricted cash flow and financial support as they attempt to resume operations in uncertain economic times. Supporting SMEs will be key to Canada's economic recovery. During the crisis, Mitacs has discounted the rate for SMEs to participate in Mitacs programs, from a \$7,500 commitment to a \$3,750 commitment per internship. As economic recovery will be a slow climb back to pre-COVID levels, extending this discount to a larger number of SMEs who are investing in research to carry their business forward will strengthen and hasten Canada's economic recovery. Initial response from the SME community across Canada has been extremely positive to date.

Expected benefits:

- Provide SMEs with much-needed financial support to carry on their R&D activities
- Help SMEs manage their cash flow during tight economic conditions
- Provide SMEs with highly qualified talent from within the Canadian PSE system



4. Academic placements to enhance the skills of a displaced workforce

Mitacs, with its extensive network of partner companies, not-for-profits, and academic institutions, is uniquely placed to help workers displaced by the economic downturn. As companies, particularly SMEs, adjust their businesses to the new economic realities (new supply chains, new markets, adopting new technologies, etc.), they will need access to training that can help their employees prepare for new business directions.

In many cases, SMEs have been forced to reduce, or in some cases completely stop, R&D activities as part of cost-cutting measures to survive the downturn. Mitacs can support these SMEs by bringing their staff back into the PSE system for added training, through a “reverse Accelerate” model.

R&D staff members working on an R&D project for the company, can participate in academic programming to upgrade their skills, learn new technologies/approaches, and access research facilities on campuses. Depending on the nature of the R&D, this model could apply to different disciplines and at different levels, from college to continuing education programs or micro-credentials from universities, to full academic programs (master’s or PhD).

Expected benefits:

- Allow SMEs to keep R&D staff onboard during a significant slowdown of R&D activity
- Allow SMEs to build new skills and abilities in their R&D staff so they can better contribute to the company when R&D operations resume and ramp up
- Build new connections between SMEs and academic institutions

5. Business Strategy Internships

Business Strategy Internships allow students to work directly with companies to help them develop strategies and systems as they pivot to new economic conditions resulting from the pandemic. As companies emerge from a prolonged period of economic shutdown, they will be faced with a new reality that may have a profound effect on the very nature of their business.

Business Strategy Internships will place business, marketing and law students with host companies to conduct an evaluation of the company’s internal and external environments and develop recommendations to help the company develop new products/technologies, business processes, supply chains, marketing and sales strategies, or other aspects of business planning and execution such as intellectual property.

It will be critical for Canadian companies, and particularly SMEs, to have solid strategies for developing and protecting their IP, as evidence shows that business with more advanced understandings of IP are more likely to experience higher growth, expand their markets and receive various types of financing¹.

Expected benefits:

¹ IP Canada Report, 2019, Canadian Intellectual Property Office, retrieved from https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h_wr04682.html



- Provide companies with sound business advice and expertise
- Provide companies with low-risk means of accessing needed talent
- Provide students with the opportunity to make meaningful contributions to the economic recovery of Canada post-pandemic in a difficult job market

Summary

As the economy recovers from the severe slowdown caused by the COVID-19 pandemic, Canada must fully leverage its world-class education and research ecosystem to ensure competitiveness and resilience, and to meet constantly evolving workplace needs. Properly supported and deployed, Canadian PSE students will become tomorrow's innovation leaders, helping Canadian businesses overcome challenges, commercialize ideas, and compete globally.

The Mitacs program expansions and initiatives are designed to:

- Leverage the Mitacs network to maintain and accelerate innovation activity across the country;
- Support Mitacs in helping SMEs adjust to new economic realities by pivoting their businesses; and
- Provide meaningful experiential learning opportunities to PSE students, and ensure that PSE students and graduates today avoid becoming a lost generation.

Mitacs looks forward to working collaboratively with the Government of Canada and other stakeholders to advance Canadian competitiveness, while equipping the next generation with the skills, talent, and experience they need to succeed.

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