ITACS STRANGE IN THE S FUTURES: FROMIDEA TO IMPACT









AMESSAGE FROM THE CEO



For over two decades, Mitacs has been driving innovation in Canada. From its research network to the present day as a national not-for-profit dedicated to fuelling innovation across all sectors of the economy and society, Mitacs has always focused on the core idea that talent and partnerships power innovation—and innovation creates a better future. Over the past decades, Mitacs has changed and grown thanks to strong support from governments across Canada, international partners, universities, colleges, companies, and community organizations. Though we have developed and broadened the ways in which we support innovation, our core principles have remained the same:

We nurture talent through innovation internships where students and postdocs apply their academic skills to solving real-world problems across the continuum of innovation.

We drive innovation through cooperative partnerships that link expertise in our post-secondary institutions to needs in industry and society.

For over two decades, Mitacs has been driving innovation in Canada. From its beginnings as a national academic canada's innovation ecosystem and make it research network to the present day as a more inclusive.

In 2016 we promised to build on our proven success by expanding to 10,000 internships per year within five years. In fact, the demand for Mitacs programs meant that we hit this goal two years ahead of schedule thanks to strong support from our government, industry, and academic partners. When the COVID-19 pandemic hit, we were charged with helping companies pivot, keeping students employed, and supporting innovation that would fuel Canada's recovery. Over the past year, we have explored new possibilities for Mitacs through engagement with our staff and stakeholders and through reflection on our values and possible expanded role in driving industrial and social innovation.

The result is a vision of Mitacs working to build a stronger, more inclusive innovation ecosystem through student internships, partnerships, and networks. Our success will be built by fostering and supporting partnerships between academic institutions and industry or social organizations and will rely on continuing support from governments, post-secondary institutions, and international partners. Our new strategy lays out an ambitious future for Mitacs with goals to help create a better Canada and transform the world.

Mitacs has always focused on the core idea that talent and partnerships power innovation—and innovation creates a better future.

John Hepburn, PhD, FRSCCEO, Mitacs

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INTRODUCTION: CONNECTING CANADA'S INNOVATION **ECOSYSTEM**

Canada's future prosperity will be built on innovation that is driven by connecting the knowledge and talent in our excellent post-secondary institutions to all sectors of the economy. For over twenty years, Mitacs has answered this call, playing a pivotal role in the Canadian ecosystem by fuelling increased innovation through the development of partnerships between our post-secondary institutions, industry, and community, as well as creating international networks that benefit Canada. These partnerships have proven to be a catalyzing force among the players in Canadian innovation—matching needs with expertise to create ambitious solutions to our most pressing social and economic challenges.

And still, there is much to do for Canada to fully seize its transition to a more innovation-based economy. We know that Canada is a remarkably strong performer when it comes to research output and impact. In fact, our university research performance has consistently been ranked as world leading and many of our universities are ranked among the very best in the world. This is complemented by a strong system of that Canada has one of the world's Canadian economy and society. most highly educated populations.

Yet, at the same time, it is well documented that Canada struggles with an innovation paradox. Despite this strong research capacity and output, Canada has steadily declined in international rankings in terms of research and development (R&D) expenditures as well as productivity growth. The ability for Canada to unleash its innovation potential hinges on connecting our research strengths and deep pools of talent to the needs of Canadian industry and society. Mitacs will lead this charge.

As a truly national organization supported by universities, colleges and polytechnics, industry, and working closely with provincial and territorial governments and the federal government, Mitacs plays an unparalleled role in Canada's broader innovation ecosystem. We build cooperative innovation internships that are based on challenges identified by industry and community partners, and that tap into the vast talent and resources of Canada's post-secondary system. By bringing together the right partners from across academia, industry sectors, the international sphere, wand governments in a way that no other organization is able to do, Mitacs is actively colleges and polytechnics, with a result driving demand for innovation across the Mitacs uses its proven strength in cooperative innovation to address some of the key challenges in building a more productive and prosperous Canada:

Increasing industrial innovation through strong academic-industry partnerships that are based on solving business and societal challenges.

Creating better training for Canadian students through innovation internships and focused skills-enhancing opportunities.

Expanding career opportunities and creating jobs for students through strengthened multi-sector innovation.

Attracting and retaining the best talent from Canada and internationally and creating pathways to innovation that are more inclusive.

MITACS SACTIVELY DRIVING DEMAND INIOVATION

WE HELP COMPANIES IDENTIFY THEIR CHALLENGES AND OPPORTUNITIES.



We help companies identify their challenges and opportunities, formulate innovation roadmaps and research projects, and then connect to the right source of academic expertise and know-how from Canada and around the world—all within our existing networks. Our extensive international partnerships allow Mitacs to connect domestic partners—whether industry or academia or governments—with key innovation players from around the world, thereby ensuring Canada's place in the global knowledge economy.

With our nationally distributed workforce, we are active in every province and territory. We are agile and able to adapt solutions to local contexts, while still tapping into our full domestic and international networks. We are uniquely positioned within the Canadian innovation ecosystem to meet the challenges of industry and community, while also building a highly qualified and skilled workforce to meet talent needs. Our

programs allow graduates to acquire workplace experiences during their studies, so they can be deployed smoothly and successfully into the economy. This kind of experience and exposure to industry challenges strengthens the education provided by our institutions, particularly at the graduate level.

In this plan, we outline a comprehensive strategy for Mitacs to provide the bold leadership needed to make Canada a world leader in innovation. Mitacs commits to building on our strengths, leveraging the depth and breadth of our network, collaborating with our federal and provincial governments, and capitalizing on our unique business model to:

INNOVATION

Drive innovation and increase productivity

TALENT

Deploy highly qualified talent into the economy

PARTNERSHIPS AND NETWORKS

Build partnerships and networks for success

We are uniquely

positioned within the

Canadian innovation

ecosystem to meet the

challenges of industry

and community.

INNOVATION

Drive innovation and increase productivity

Mitacs's proven ability to advance innovation via cooperative academia-industry partnerships is unparalleled. The agility and responsiveness of the Mitacs platform allows us to operate at the speed of the industry, while maintaining the quality and integrity of projects.

The Mitacs model starts with the needs of the industry to develop new products, processes, and services, thereby stimulating demand for innovation.

From idea to adoption, Mitacs enables the full continuum of innovation.

TALENT

Deploy highly qualified talent into the economy

Through thousands of innovation internships every year, Mitacs is equipping the next generation with the professional and entrepreneurial skills—through hands-on industry experiences and training—needed for success in an innovative global knowledge economy.

Throughout our evolution over the last 20 years, Mitacs has attracted and helped retain international talent, and has deployed highly skilled talent from Canada's universities and colleges and from around the world into all sectors of the Canadian economy.

Mitacs is building on the success of our Indigenous engagement strategy with an ongoing commitment to inclusive innovation and creating pathways into innovation for underrepresented groups.

PARTNERSHIPS AND NETWORKS

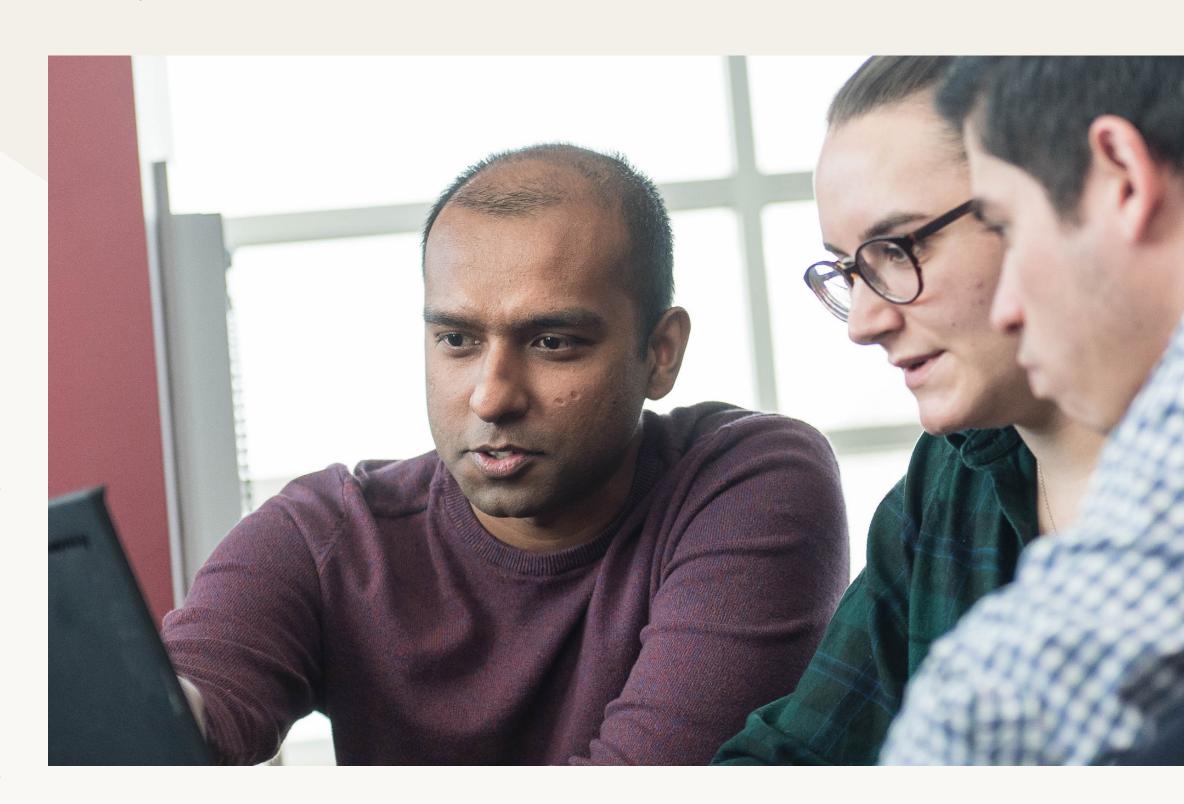
Build partnerships and networks for success

The Mitacs model of delivery is driven by our national team of business development experts who meet regularly with thousands of companies and organizations and work closely with the academic community to identify pressing challenges that can be addressed through cross-sector research collaboration.

Mitacs has built a strong international network of innovation partners around the world, providing invaluable collaboration opportunities to Canadian academics and companies.

By strengthening connections among innovators across the country, Mitacs aims to increase their collective ability to generate knowledge, commercialize, and compete. Today, Mitacs's innovation network includes thousands of companies, not-for-profit organizations, researchers, and post-secondary institutions from across Canada and around the world.

With over 20 years' experience working at the nexus of academia, government, and the private sector, Mitacs has gained significant expertise and insight into the complexities of innovating in Canada—sharing this knowledge with companies, policy-makers, and across the ecosystem will help drive future success.



VISION

Canadian innovation will create change that transforms the world.

PURPOSE

Mitacs empowers Canadian innovation through partnerships that deliver solutions to our most pressing problems.

We drive economic growth, productivity, and meaningful change to improve quality of life for all Canadians.

MISSION

Mitacs is a catalyzing force in the Canadian innovation ecosystem. We will build a world-class, diverse community of innovators through our collaborative model, attracting and deploying top talent to industry, and matching need with expertise to create ambitious solutions to real-world challenges.

CORPORATE VALUES

Our values motivate us and shape our behaviour. As an organization, we strive to live our values in everything we do, the decisions we make, and the actions we pursue.



ACHIEVEMENT

WE COMMIT TO FOLLOWING THROUGH ON OUR WORD AND TO CONTINUAL IMPROVEMENT THROUGH TAKING INFORMED RISKS, LEARNING FROM OUR SETBACKS, AND CELEBRATING OUR SUCCESSES.

COLLABORATION

WE WORK COLLECTIVELY TO OPTIMIZE THE KNOWLEDGE, ENERGY, AND SKILLS OF BOTH STAFF AND STAKEHOLDERS TO ACHIEVE OUR MISSION AND VISION.

CREATIVITY

WE TRANSFORM IDEAS, IMAGINATION, AND KNOWLEDGE INTO INNOVATIVE, AGILE, AND HIGH-QUALITY SOLUTIONS TO CHALLENGES LARGE AND SMALL.

DECOLONIZATION

WE COMMIT TO BUILDING A SHARED, EQUITABLE FUTURE WITH INDIGENOUS AND NON-INDIGENOUS PEOPLES TOGETHER.

EQUITY, DIVERSITY, AND INCLUSION

WE COMMIT TO ADVANCING EDI IN ALL OUR ACTIONS AND DECISIONS.

UNITY

WE ARE ONE TEAM—WE SEEK OUT AND RESPECT THE PERSPECTIVES AND CONTRIBUTIONS OF ALL TEAM MEMBERS AS WE STRIVE TOWARD ACHIEVING OUR COMMON GOALS.

BOARD STATEMENT ON EQUITY, DIVERSITY, AND INCLUSION

PROMOTING EQUITY, DIVERSITY, AND INCLUSION

To underscore our strong agreement that a successful and prosperous Canada is directly linked to promoting equity, diversity, and inclusion (EDI), the Mitacs Board of Directors expressly:

Believes inclusive innovation is key to Canada's prosperity and economic growth Acknowledges systemic barriers of discrimination and inequity, and power imbalances related to privilege Embraces diversity through continually seeking to learn, engage, reflect, and act to meet the needs of our members, employees, and stakeholders Recognizes that the strength and credibility of our commitment rests on embedding EDI across our internal systems, policies, and practices, as well as our external programming and community engagement.

In recognition that improving EDI complements reconciliation with Indigenous peoples, which is premised on specific historical and current contexts that require concrete and meaningful actions, the Mitacs Board of Directors:

Recognizes the complexities of the relationship between Indigenous and non-Indigenous peoples and strives to engage with Indigenous peoples in a non-colonial, respectful manner

Works to ensure equitable access to opportunities and build meaningful relationships with Indigenous partners by adopting the principles, norms, and standards of the UN Declaration on the Rights of Indigenous Peoples, and in support of the Truth and Reconciliation Commission Calls to Action

Commits to working in partnership with Indigenous communities/peoples and commits to listening and learning from our partners

STRATEGIC DIRECTIONS

In this section, we outline five strategic directions for the years ahead. They set forth a roadmap for Mitacs to achieve transformational impact in the Canadian innovation ecosystem and beyond.



CANADIAN INIOVATION WILL CREATE CHANGETHAT TRANSFORMS

STRENGTHEN **CANADA'S** INNOVATION **ECOSYSTEM**

challenging to navigate and inefficient.

As part of this complex ecosystem, Mitacs has long played a significant role in fostering Canadian innovation through our unique model of creating cooperative innovation partnerships and strengthening networks. As a national bilingual not-for-profit organization, Mitacs operates independently, but spans relationships with provincial, territorial, and federal governments, innovation-focused organizations, and post-secondary institutions. Mitacs will leverage this position to bridge gaps and create a stronger and more productive innovation ecosystem through greater cross-fertilization of expertise, knowledge, and talent, creating

synergies with other players in the Canadian ecosystem for greater impact. Strengthening the connective tissue among the myriad of innovation players will serve to align Canada's priorities, strategies, and efforts to improve competitiveness and productivity.

Our unique model—including our proactive business development team combined with our in-house expertise, infrastructure, and international connections provides Mitacs with hands-on experience and insight into Canada's innovation challenges. We have developed a deep knowledge of the nexus of relationships, expertise, market insights, and data capture that marks an understanding of innovation in Canada like no other organization. Mitacs will further leverage this intelligence to support increasingly sophisticated collaborations in Canada and internationally, while providing data and insights to policy-makers charged with addressing Canada's productivity and innovation challenges.

Mitacs will

Optimize our business intelligence, data analytics, and trend-forecasting capacity to expand our role as trusted advisor to clients and stakeholders across the Canadian innovation ecosystem.

Use our international networks to support global connections for Canadian researchers and entrepreneurs, and to strengthen Canada's priority strategic areas and emerging industries.

Mobilize knowledge generated by the Mitacs model as actionable intelligence and leadership for stakeholders and policy-makers.

Canada's innovation ecosystem is comprised of thousands of independent entrepreneurs, businesses, academic institutions, not-for-profits, investors, and others that engage in an array of industrial and social innovation projects to develop, diffuse, and implement new or improved products, services, and processes. While these organizations are supported by numerous diverse partnerships, programs, and funding, these supports are often without coordination or collaboration, making the overall ecosystem

Mitacs has long

played a significant

role in fostering

Canadian innovation.

ADVANCE A CONTINUUM OF INNOVATION



Increasing Canada's productivity and prosperity will be driven by successful innovation across our design, and creativity from Canada's university, economy. While our strong post-secondary polytechnic, and college systems to ventures sector does an excellent job of producing at every stage of development from start-up world-leading ideas, knowledge, and talent, through scale-up to multinationals. Across the Canada needs to improve in transferring these continuum, we will focus on providing advantages effectively into innovation that in-demand skills and know-how to increase benefits industry and community.

critical role in strengthening academia-industry commercialization of new technologies, the cooperation in research and development and development of novel products and services, improving the attraction and training of highly advancements in social and cultural qualified personnel. In addition, we will further entrepreneurship, the development of global strengthen Canada's innovation performance markets and international connections, and by expanding to support commercialization and the many standout innovations that are yet adoption activities. Mitacs will strive to become to be imagined. an innovation catalyst, supporting the translation of ideas into impact for all sectors across the Canadian economy.

We will connect cutting-edge research, productivity and competitive advantage. By building smart, symbiotic partnerships, Mitacs will continue to play our unique and we advance innovation impact with the

> By supporting the full continuum of innovation, Mitacs becomes a trusted strategic partner to all our clients, creating real, sustained impact, and contributing directly to the economic and social prosperity of Canada.

Mitacs will

Increase productivity and investment in innovation through expanding the Mitacs platform beyond R&D to support innovation projects from inception all the way to commercialization and adoption.

Increase innovation employment in the Canadian economy by creating absorptive capacity within industry and enhancing access to skilled talent, both national and international.

Catalyze growth of emerging sectors and industries to strengthen Canada's competitiveness.

DEPLOY BRIGHT MINDS FOR A BETTER FUTURE



Innovation needs highly skilled talent, with the knowledge and drive to push boundaries and effect change. While Canada's post-secondary institutions provide excellent technical training, many graduates, especially in advanced programs, do not get the full spectrum of skills training they need for the careers they will likely have. Canada also needs to attract talent from around the world to support the growth of our knowledge economy.

Mitacs will focus on the attraction and deployment of highly qualified talent, becoming a national leader in developing the diverse workforce of the future with the skills to drive innovation. Mitacs occupies a vital place in the innovation ecosystem; our ability to attract and retain top talent-both domestic and internationalbrings together each component of the ecosystem to will help address skills shortages and generate innovation of interest and benefit to Canada. The talent participating in our internships acts as an talent pools that can be deployed to essential bridge between academia and the partner organization while carrying out the work that results in truly innovative solutions.

We will advance our commitment to offering high-quality experiential learning and professional development training to domestic and international students that builds on their academic programs to equip them with the skills needed for the Canadian innovation economy. This includes building a community of learners, providing mentorship, engaging alumni, expanding our training partnerships, supporting international mobility, continuing delivery of experiential learning opportunities, and enriching the student experience at every step along the way with training in professional competencies areas.

By mobilizing the brightest minds, Mitacs gaps across sectors in Canada, develop high-demand areas of need, and build receptor capacity in our economy for highly qualified personnel (HQP).

Mitacs will

Attract, train, retain, and provide opportunity for domestic and global talent to be deployed into Canada's innovation ecosystem to mobilize knowledge and effect change.

Increase opportunity for the next generation of innovators to find skilled employment by providing them with a continuum of opportunities from professional skills development to industrial problem-solving.

Partner with Canada's post-secondary institutions to embed innovation training and experiences as seamless components of post-secondary education, especially in graduate programs.

Mitacs will focus

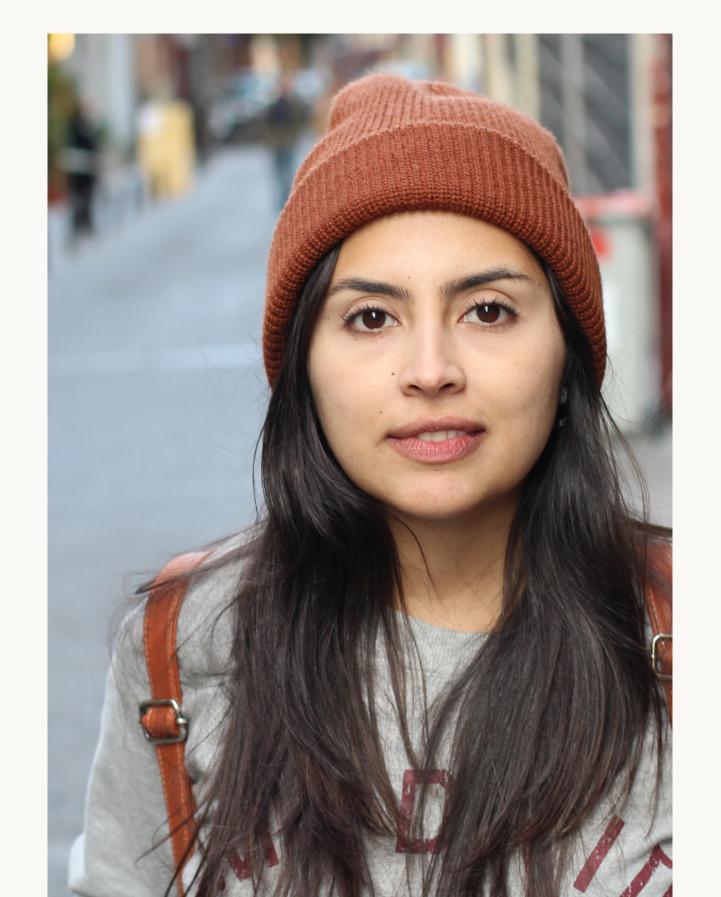
on the attraction

and deployment

of highly qualified

talent.

DRIVE INCLUSIVE INNOVATION BY DESIGN



Today, more than ever before, Canada needs to draw on the ingenuity and creativity of our greatest strength—our people—to drive innovation and economic growth. By recognizing the talent in underrepresented communities and removing systemic barriers that prevent these groups from taking an active role in driving innovation, all of Canada will benefit. Vibrant diversity and social and economic inclusion are central to a successful and prosperous Canada.

Mitacs will take a thoughtful, long-term approach to inclusive innovation. By actively listening to underrepresented communities' needs, partnering with them, and adopting a "nothing about us, without us" approach, Mitacs will collaboratively design pathways to innovation that are inclusive and accessible. This work is at the heart of what innovation truly is: bringing together diverse knowledge, experiences, and networks to solve challenges that can't be solved by a single person or sector of society.

Mitacs recognizes that barriers to access across the innovation ecosystem result in significant systemic marginalization of underrepresented groups. Removing those barriers and ensuring equitable access is paramount to unleashing the extraordinary creativity, ingenuity, and capacity of those whose lived experience offers diverse ways of knowing and being in the world. Indeed, mobilizing inclusive innovation is vital to ensuring that innovation not only addresses economic impact but, crucially, addresses inequities across Canadian society.

This direction also represents a purposeful shift, putting the organization's vision into practice with a deep commitment to EDI, and building on our efforts to engage more effectively with Indigenous peoples. Mitacs will enact these internally by formalizing an EDI strategy to ensure a safe, accessible, diverse, and inclusive workplace, while fostering a culture of continued learning grounded in trust, transparency, and action.

Mitacs will

Enable underrepresented groups to fully participate in the continuum of innovation by creating sustainable pathways and reducing barriers for diverse organizations and students.

Strengthen Indigenous innovation and participation by reducing barriers, ensuring equity of access to programs, and respecting traditional knowledge and ways of working.

Increase social innovation in Canada to effect social and environmental well-being by broadening the types of innovation Mitacs enables and ensuring the impact is inclusive by design.



EMPOWER ORGANIZATIONAL EXCELLENCE



Mitacs has grown rapidly and has become an important including a strong commitment to EDI. We contributor to innovation in Canada. Our aspiration is to play will build the workplace of the future by a much more important role, underpinned by the people who ensuring our distributed workforce has make up Mitacs, and the processes that support our vital work. the flexible work practices and resources Our commitment to driving innovation in Canada is met daily needed to be empowered, productive, by our highly motivated employee team of problem solvers and and healthy. creative thinkers. They are our greatest strength.

As we grow, we must continue to turn the innovation of change will most certainly quicken, lens inward to constantly improve the ways we work. We the unforeseen will come our way, and will create conditions in which all our staff feel a deep sense that powering the economy through of connection to the purpose and values of Mitacs. Through innovation requires vision, agility, and leadership and collaboration, we will embrace new ideas, new risk taking. We will invest in the systems methods, and new modes of achieving them—at all levels of the and processes needed to transform organization. By doing so together, we will focus our sightline our operational capacity to facilitate on the pursuit of organizational excellence.

At Mitacs, we are innovators who believe in purpose that we are dynamic and focused on the and impact as core to our success. Our path toward priorities that support our drive toward organizational excellence is composed of meaningful steps organizational excellence. to continually cultivate a culture of trust and transparency,

We also recognize that the pace data-driven insights, improve efficiency, and augment our client experience to ensure

Mitacs will

Build and maintain high-performing teams by enabling a positive physical and mental work environment, leadership development, and strong collaboration.

Promote a values-driven culture that inspires creativity, purpose, and potential by designing roles and careers that attract, engage, and retain the best talent.

Advance purposeful action on EDI, including dedicated leadership and creating an environment which fosters and encourages continuous learning and improvement.

Increase operational agility and mobilize Mitacs's business intelligence by investing in digital transformation and infrastructure which demonstrates a focus on achievement and enables Mitacs's vision and mission.

We embrace

new ideas,

new methods,

and new modes

of achieving them.

BEING ACCOUNTABL

To ensure Mitacs is fully accountable to our stakeholders, we commit to:





Demonstrate the impact of our funding

We will continue to evolve and refine our evaluative methodologies to better know the impact of the innovation enabled by Mitacs. We will strengthen our Economic Impact Initiative to further enhance understanding of the long-term impact of Mitacs's collaborative innovation partnerships on the economy as a means of accountability. In addition to our impact on employment and economic growth, we will demonstrate accountability in advancing our impact on EDI across our funded initiatives. We will advance our data capacity, harmonizing where possible with other partner organizations in the ecosystem, to produce robust analytics and insights to effectively demonstrate the impact of our funding from our federal, territorial, and provincial partners, ensuring we are directly contributing to their innovation priorities.



Pursue excellence in financial management

We will steward and respect the investment from our funders and demonstrate accountability in our role in ensuring public funds are deployed to improve the economic and social well-being of Canadians. To do so, we will employ best practices and transparency in financial reporting, management, and risk mitigation. We will also ensure we comply with all financial regulations and ensure sustainability of our operations through prudent financial and capital planning.

Communicate success A central aspect of our accountability is

A central aspect of our accountability is effectively and creatively telling the stories of our innovation partnerships and how their impact benefits Canada. We will capably demonstrate and recognize the investments made in Mitacs by continually sharing the impact of our work and increasing its visibility to Canadians. Moreover, we will maximize our communication channels and modes of engagement to share the successes of our contributions to the innovation sector, including our purposeful commitment to inclusive innovation.



Practice robust and effective governance

We will employ best practices in board governance, with the needs of employees, stakeholders, and partners foremost in decision-making. We will effectively advance and integrate our EDI objectives into our governance structures. We will maintain a corporate policy framework to support our core values, including ethical and transparent decision-making and accountability. Moreover, we will integrate and align our strategic plan into corporate, operational, and individual performance plans and evaluate through proven measurement tools.

5

Ensure leadership accountability to our employees

Our executive and senior management teams commit to ensuring leadership accountability to our employees on the specifics of the strategic plan. One of the common misconceptions of strategic planning is that it is considered as an event rather than a process. The executive and senior management teams will continually champion the strategic plan and embed it in our leadership practices and processes, so that it becomes a part of the operating culture of Mitacs. An additional area of leadership accountability will be to ensure effective resourcing of the plan, support high-performing teams, and demonstrate an actionable focus on achievement.

6

Deliver continuous improvement and accountability to our clients

We commit to continuously improving our client experience, strengthening our internal processes and external touchpoints to better serve their needs. Our accountability will extend to ensuring that we are making the client experience easier and more efficient with every interaction, adding significant value and capacity to their innovation ambitions by demonstrating responsive, insightful, and customized service. Building a "customer-first" culture at Mitacs signifies taking accountability for making certain our strategies, programs, and feedback mechanisms are informed by a client-centric approach from start to finish.



OUTCOMES

As a result of implementing this strategic plan, we expect the following outcomes:



01

Mitacs's innovation impact results in increased economic, social, and environmental well-being for Canadians.

05

Mitacs is a leader in providing agile, client-centric operations and programs to match needs with expertise.

02

Mitacs is Canada's leader in building collaborative partnerships that drive innovation and student training.

03

Mitacs is the leader in supporting talent for Canadian innovation—across the full spectrum, from idea to adoption.

04

Industry and students participating in Mitacs's programs are representative of the diversity of the Canadian population.

06

The Mitacs brand is recognized as the leader in attracting and deploying top talent into the Canadian innovation ecosystem, delivering increased value and equity for all stakeholders.

07

Equity, Diversity, and Inclusion have been established as a core value by Mitacs, creating a stronger culture and attracting and retaining employees and board members who exemplify these values and perform to the highest standard.

MITACS SUCCESS STORIES



SmartICE

Skating on thin ice no more: technology and Inuit knowledge align to improve safety.





From ideation to practical application, the continuum of innovation in action

The Challenge

A consequence of climate change and thinning ice in Canada's North creates hazardous travel conditions, endangering people, and increasing the need for search-and-rescue missions.

The Solution

SmartICE, a 2018 Governor General Innovation Award winner that traces its origins to Mitacs-funded research talent, aligns technology with Inuit knowledge to gain insight into ice conditions. Through remote monitoring technology and local knowledge of ice, they developed a smartphone app which allows northern communities to access real-time measurements. The app allows travellers to view and plan the safest routes.

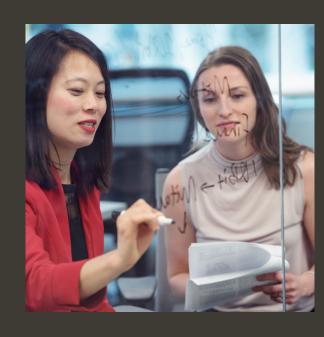
The Outcome

SmartICE's innovative technology has made northern communities safer. And the company has provided a unique pre-employment training opportunity for local youth. "We are a social enterprise first and foremost, and we take that very seriously. To us, maximizing a positive social impact with our community partners is our top priority."

Carolann Harding, Executive Director, SmartICE

1QBit

Accessing the talent pipeline: top Canadian tech company traces its roots through partnership.





Bright minds drive company growth

The Challenge

As 1QBit—one of the world's most promising technology companies—scales up its business to address the global demand for quantum computing, they need top talent to advance.

The Solution

They turn to Mitacs, a trusted partner, to source highly qualified talent. Mitacs interns—equipped with essential skills that bridge the gap between academic research and commercial development—bring cutting-edge advances to market.

The Outcome

In seven years, 1QBit has grown from a four-person start-up to a global leader in advanced computing, employing over 130 people located across Canada and the U.S.

Over the years, Mitacs has connected 1QBit with more than 55 interns, including graduate and undergraduate students from Canadian and international universities. These former interns now comprise roughly one-third of the 1QBit team, including four key senior researchers.

According to 1QBit, Mitacs has been an invaluable resource supporting their growth, connecting them to universities, and helping source top talent.

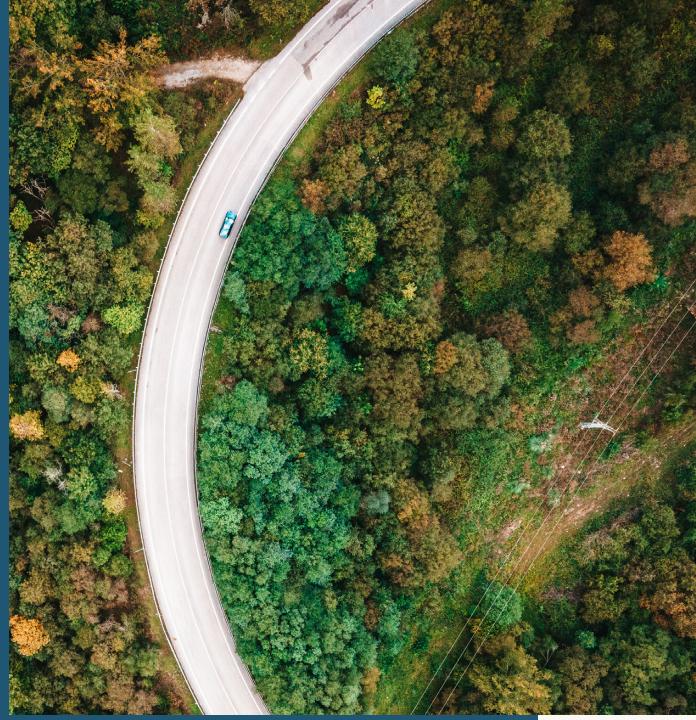
"Without access to the local and international research programs that Mitacs provides across specializations like quantum computing, optimization, and machine learning, 1QBit would not have achieved the same industrial impact and successful growth across Canada."

- Andrew Fursman, CEO, 1QBit

Fluent.ai

Listen up! International intern improves speech-recognition accuracy.





Strengthening the innovation ecosystem with global talent

The Challenge

Voice recognition systems like Siri and Alexa have taken off in recent years by interpreting vocal commands in the cloud. But these commands are more challenging for offline devices like lights, remote controls, and appliances.

The Solution

Fluent.ai is developing systems that can operate entirely offline, and Mitacs intern Semah Aissaoui is a key part of the development. He first came to Canada from Tunisia through a Globalink Research Internship in 2018, later began a master's program at Polytechnique Montréal, and started working with Fluent.ai through Mitacs.

The Outcome

Aissaoui's coding work will continue after his internship in an enhanced system application. He and the whole team at Fluent.ai expect the project will positively impact offline voice-activated technology in the near future.

"Imagine that you are building the solution, and after you build it, you are going to see the solution work. It is amazing."

Semah Aissaoui, Mitacs intern at Fluent.ai

"This type of exchange helps the company define problems and find innovative solutions. Eventually, the interns could return as already trained permanent employees."

Vikrant Tomar, Founder and Chief Technology
 Officer, Fluent.ai

Humanitas

Technology to the rescue: from natural disasters to global pandemics, innovative tools support relief.





Quick pivot in time of crisis demonstrates value in investing in continuum of innovation

The Challenge

Upon visiting Haiti in the aftermath of the 2010 earthquake, Dr. Abdo Shabah focused on the benefits of tech tools applied to emergencies. When the COVID-19 pandemic hit, he envisioned that technology could improve outcomes.

The Solution

In 2010, Dr. Shabah founded Humanitas, a company that designs ways to protect human life using simple, affordable tools to collect and process data in real time. In the spring of 2020, four Mitacs interns worked with the company to adapt the systems initially developed for natural disasters to address the COVID-19 pandemic.

The Outcome

The interns developed data coordination between elements of the hospital—staff, equipment, structures, and processes—that was swiftly integrated into pandemic management in a Montréal hospital.

According to Humanitas, the success is directly related to the established collaboration with Mitacs.

"The fact we've been able to get this project going so quickly and mobilize interns in the fight against the pandemic is because most of the people involved knew each other already, knew how to work together, and shared a common vision."

Luca Giovanni Gianoli, CTO and former Mitacs intern,
 Humanitas

JLABS @ Toronto

Heartbeat of life science incubator: collaboration creates jobs.





Strengthening Canada's innovation ecosystem

The Challenge

Canadian universities are producing more highly qualified talent than they can employ, and Canadian industry is looking for highly qualified personnel; how can we give businesses the tools to leverage the talent that we have for the benefit of our economy?

The Solution

Since 2018, Mitacs has built a collaboration with JLABS @ Toronto, a life science incubator, providing the necessary training and support to transfer research expertise to the workplace. Together, Mitacs and JLABS have been able to help companies diversify their businesses, create jobs, and scale up.

The Outcome

Mitacs has funded over 45 JLABS @ Toronto projects in partnership with 24 resident companies and 38 professors from seven Canadian universities. As a result, more than 50 interns and postdoctoral fellows have benefitted from research and employment opportunities.

"Exposing these talents to these companies—and exposing these companies to technology—gives us the chance, as Canada, to help develop homegrown assets. I feel it gives the opportunity to keep these people employed by Canadian companies."

Allan Miranda, Head, JLABS Canada

AVL Manufacturing

COVID-19 response: intern enables company to pivot from green tech to mobile health units.





Research progresses through full continuum of innovation from ideation to adoption

The Challenge

As COVID-19 rocked the world, the Canadian government called upon its researchers and manufacturers to address the unprecedented challenge. With much unknown about the disease and its spread, hospitals struggled to keep people safe.

The Solution

Tapped by the CEO of AVL Manufacturing, Mitacs intern Ramtin Rasoulinezhad answered the call, moving from the Net Zero Energy Building Project to the Hybrid Solution Division of the company. He helped AVL pivot from green technology to mobile health units thanks to his power-grid expertise.

The Outcome

AVL rapidly developed Mobile Medical Modules, a self-sustaining solution that can be deployed in minutes, complete with virus filtration systems. Rasoulinezhad's innovation created a safe and controlled environment for hospital triage, change rooms for medical staff, and extra bed space for hospitals.

"Ramtin's expertise has been invaluable to our business. As a power-grid specialist, he brings unique experience in electrical integration and out-of-the-box solutions that are enabling our company to successfully propel forward with new and better ways of doing things."

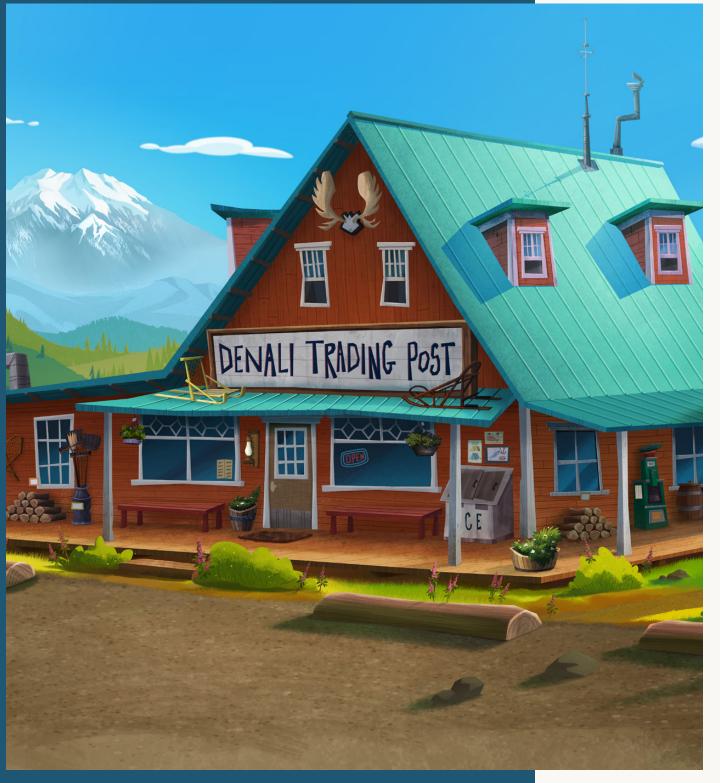
Vince Discristofaro, CEO, AVL Manufacturing

Atomic Cartoons

Nothing funny about it: Atomic Cartoons internship helps undergrad follow her dreams.



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Mitacs's Indigenous call opens doors for Emily Carr University intern

The Challenge

Many young artists and animators face barriers when following their dreams and lack the requisite connections to realize them.

The Solution

Emily Carr University student Lia Fabre-Dimsdale found the solution in an internship at Atomic Cartoons, gaining experience as an animator. Fabre-Dimsdale, a member of Liidlii Kue First Nation, was offered the opportunity to participate in Mitacs's Business Strategy Internship program by one of her professors. Her internship was facilitated by Mitacs's Indigenous call, which offers additional benefits for Indigenous-owned companies to hire interns or for companies that hire Indigenous interns.

The Outcome

Fabre-Dimsdale is thrilled and proud to be a part of the team working on Molly of Denali and says she relates to the main character, Molly, a Gwich'in/Koyukon/Dena'ina Athabascan girl.

"This opportunity has led me to explore creative career path options, make connections with people that have supportive initiatives for Indigenous people. And I hope that people can also have similar experiences with Mitacs, and that they're able to accomplish goals and dreams of theirs."

Lia Fabre-Dimsdale, Mitacs intern, Atomic Cartoons

Organizational Excellence

Mitacs on call: agile approach leads to 17,000 internships for Canadian students and post-graduate researchers during COVID-19.





Organizational excellence depends on teamwork, culture, and swift mobilization

The Challenge

In response to the COVID-19 pandemic, the Government of Canada announced a \$40 million investment in Mitacs to create 5,000 additional internships and support new initiatives to help students gain employment while driving innovation and economic growth.

The Solution

Mitacs mobilized quickly to create a suite of new offerings including Business Strategy Internships; extending eligibility for undergraduates; special COVID-19 discounts for small- and medium-sized enterprises; and projects supporting underrepresented groups.

The Outcome

Thanks to the agility, hard work, and dedication of the Mitacs team, the organization successfully piloted new programs and created 17,000 innovation internships during COVID-19.

"Our efforts will mitigate the impact of the pandemic on this generation of students that would otherwise have missed important career development opportunities. I'm especially proud of our Mitacs people who have been able to accomplish this feat in the course of just over six months, during a pandemic when businesses are facing severe economic challenges."

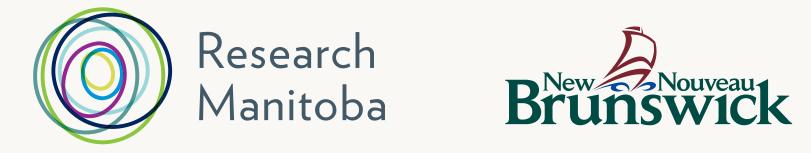
Dr. John Hepburn, CEO, Mitacs

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