





Research is my business partner Annual report 2019–20





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Research is my business partner

Businesses across Canada innovate, grow and prosper when they build research partnerships in leading-edge labs

For small- and medium-sized enterprises, the crux of staying competitive is strategic change.

These trailblazers are rethinking previously accepted ideas to unlock new opportunities, reimagining how we do things to find more sustainable, and more profitable, solutions or reinventing the technologies we take for granted to make them more powerful and open up new markets.

And since the world is changing faster than ever, businesses that can evolve will rise to the top, and economies that support the research that fuels those transformations will be the ones to flourish.

Throughout this report, discover stories of Canadian companies that have found the path to business success by collaborating with world-class research labs.

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Overview

What we do

Researchers need world-class research infrastructure to collaborate on the global stage. The Government of Canada created the Canada Foundation for Innovation (CFI) in 1997 to fund the tools essential for conducting outstanding research in the 21st century. We support the evolving needs of Canada's universities, colleges, research hospitals and non-profit research institutions across all areas of research — from health and medicine, to the natural sciences and engineering, to the social sciences and humanities — by funding state-of-theart equipment, laboratories and facilities.

Our objectives

- Increase Canada's capacity to carry out important world-class scientific research and technology development
- Support economic growth and job creation, as well as health and environmental quality through innovation
- Expand research and job opportunities for the next generation of Canadian researchers, technicians and entrepreneurs
- Promote productive networks and collaboration among Canadian universities, colleges, research hospitals, non-profit research institutions and the private sector

How we do it

The CFI maximizes the funding it receives from the Government of Canada by contributing up to 40 percent of a project's research infrastructure costs. Institutions — the ultimate recipients of our funding — secure the remaining 60 percent through partnerships with provincial governments and other public, private and non-profit organizations.

This means the nearly \$8.3 billion invested by the Government of Canada through the CFI has been leveraged into a total investment of \$19.9 billion in research infrastructure in Canadian institutions since we were created.

We have a well-established, rigorous and independent merit-review process that rewards research excellence. We rely on experts from around the world to assess proposals from eligible Canadian institutions on three main criteria: the quality of the research and need for infrastructure; the project's contribution to strengthening the capacity for innovation; and the potential benefits of the research to Canada.

Our process ensures that the infrastructure projects that best meet these criteria receive funding.

Since its creation in 1997 the CFI has committed, with the generous support of the Government of Canada, almost

\$8.3 billion for **11,314 projects** at **160 research institutions** in **78 municipalities** across Canada.*

* As of March 31, 2020

Our commitment to equity, diversity and inclusion

Our values

The CFI is committed to the principles of equity, diversity and inclusion (EDI). In all our activities, we recognize that a breadth of perspectives, skills and experiences contributes to excellence in research.

Equity

We aim to ensure all CFI-eligible institutions have the opportunity to access and benefit from our programs through our well-established, fair and impartial practices.

Diversity

We value attributes that allow institutions and their researchers — from any background and from anywhere — to succeed. This includes individual attributes such as gender, language, culture and career stage; institutional attributes such as size, type and location; and attributes that encompass the full spectrum of research, from basic to applied and across all disciplines.

Inclusion

Our corporate culture encourages collaboration, partnership, contributions and engagement among diverse groups of people, institutions and areas of research to maximize the potential of Canada's research ecosystem.

We believe that nurturing an equitable, diverse and inclusive culture is the responsibility of every member of the research ecosystem, including funders, institutions, researchers, experts and reviewers.



A year to be grateful for state-of-the-art research

This year began on a celebratory note as we launched a new competition of our flagship fund, the Innovation Fund, the goal of which is to keep Canadian research at the forefront, ready to address the most pressing global challenges.

It ended with a stark example of why it is so critical to do so.

The global coronavirus pandemic of 2020 underlined the importance of keeping laboratories equipped and ever-ready.

That importance reached across disciplines. Vaccine researchers in laboratories all over the country doubled down, as did those with expertise in the social and policy implications of the countermeasures used to contain the spread of the virus.

Researchers in psychology offered innovative ways to maintain mental health during a stressful time; leaders in education technologies extended new options to parents and schoolboards scrambling to continue teaching students from a distance; material scientists and engineers retooled laboratory equipment and helped industry to produce much-needed medical supplies.

Trying times remind us to be grateful. That these laboratories had been established and were ready to perform under the most urgent circumstances is a reflection of the importance of science globally in the 21st century. It made us glad to live in Canada, a country that knows the importance of research.

That we live in a time where we reap the rewards of rapid technology development to stay connected, working and healthy was another silver lining. In February and March, as the world's laboratories mobilized to find solutions, the critical role of the CFI was clearer than ever.

This work will undoubtedly continue for many years to come, as researchers grapple with the fallout of the pandemic and how it has changed us all.

It is not just a matter of recovering. This experience has also opened our eyes to many challenging and interesting new areas of inquiry. That is the beauty and the essence of research — as we discover more, we open the door to new concepts, new ways to serve humankind today and in the future. At the CFI, we understand that a research community that reflects equity, diversity and inclusion brings us much closer to those goals.

We look forward to the important findings and inspiring possibilities that new research and knowledge will provide.



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Ingrid Pickering Chair of the Board



Roseann O'Reilly Ruste

Roseann O'Reilly Runte President and CEO

Responding to COVID-19

As the COVID-19 pandemic took hold, the CFI took action to ensure Canadian research labs would remain at the forefront

January 22

The University of Saskatchewan's CFI-funded Vaccine and Infectious Disease Organization-International Vaccine Centre (VIDO-InterVac) receives approval from the Public Health Agency of Canada to work on COVID-19 allowing Canada to join the global research and development efforts coordinated by the World Health Organization.

March 16

The CFI's downtown Ottawa office closes and CFI staff begin working remotely.

March 23

Prime Minister Justin Trudeau announces more than \$11 million from the Major Science Initiatives Fund to support the operation of VIDO–InterVac in their effort to find a vaccine for the novel coronavirus.

April 3

The CFI provides up to \$5 million to optimize the research services offered by VIDO-InterVac to the national research community working against COVID-19.

July 15

A second Exceptional Opportunities Fund competition launches to invest \$2 million in research related to COVID-19 at colleges, polytechnics and Cégeps.

Late February

CFI's programs staff begin to reconfigure 91 expert committee meetings involving 349 experts from 23 countries for the 2020 Innovation Fund competition, keeping the 400-million-dollar competition on track for November 2020 Board decisions, while maintaining the integrity of the review process.

March 20

The CFI makes provisions to allow salary support for research personnel who are temporarily redeployed from CFI-funded infrastructure to support COVID-19 research.

March 24

The CFI's Board of Directors meeting shifts from in-person to videoconference for the first time ever.

June 8

The CFI launches a competition to invest up to \$25 million from the Exceptional Opportunities Fund to support COVID-19-related research from all disciplines at Canadian universities and research hospitals.

Refining sparkling wines



Ontario winemakers are using innovations from Brock University to be more competitive

Brock University's Cool Climate Oenology and Viticulture Institute conducts research to help winemakers in the Niagara peninsula overcome the challenges posed by the region's geography and climate, including helping Fielding Estate Winery, where Heidi Fielding is Director of Sales and Marketing, grow its sparkling wine sales by 30 percent.

Invest

Bringing the world's best researchers to Canada, and keeping them here John R. Evans Leaders Fund

The John R. Evans Leaders Fund helps institutions attract and retain world-leading researchers with competitive research support packages that include key infrastructure and a portion of operating and maintenance costs. This year, we awarded more than \$97.9 million to support 528 projects.

Supporting business innovation College-Industry Innovation Fund

The <u>College-Industry Innovation Fund (CIIF)</u> helps colleges foster strategic partnerships with the private sector. Stream 1 of this fund supports infrastructure requests aimed at enhancing existing applied research and technology development capacity in colleges. Stream 2 supports research infrastructure associated with an application for a five-year grant from the College and Community Innovation – Innovation Enhancements program, which is managed by the Natural Sciences and Engineering Research Council of Canada. This year, we awarded more than \$10.2 million to support 14 projects through both CIIF streams.

Big ideas, big impact Innovation Fund

We launched our latest <u>Innovation Fund</u> competition in April 2019. For this competition, the CFI will invest up to \$400 million in capital funding and \$120 million in associated operating costs through the Infrastructure Operating Fund. In January 2020, we received 307 proposals requesting \$1.1 billion for this competition. By the end of the fiscal year in March, we had to reconfigure our merit-review process to ensure we could maintain the integrity and high standard of excellence that form the foundation of this process while CFI staff and experts worked remotely because of the pandemic.







Keeping things running Infrastructure Operating Fund

We awarded over \$32.4 million through the <u>Infrastructure Operating Fund</u>, which provides funding equivalent to 30 percent of CFI capital awards to assist institutions in the operation and maintenance of CFI-funded infrastructure.



Supporting major research facilities Major Science Initiatives Fund

Through our <u>Major Science Initiatives Fund</u>, we help make sure that 17 national research facilities have the support they need to operate optimally.

Whether physical spaces or virtual networks, these facilities serve a critical mass of researchers tackling important issues facing society, from climate change to cancer. They also act as hubs to bring together some of our country's best researchers and to foster international scientific collaborations.

As the challenges facing scientists become more complex, this major science infrastructure becomes critical for exploring the frontiers of research.

This year, following a formal review, we extended funding for 15 of these facilities to March 31, 2023.

The CFI will also fully support the operations of the Advanced Research Computing (ARC)

platform, through Compute Canada, until the end of March 2022. ARC is one of the key elements of the Government of Canada's Digital Research Infrastructure (DRI) strategy. Starting April 1, 2022, funding for the operations and maintenance of the ARC platform will transition to that strategy. The DRI strategy represents a significant evolution in strengthening Canada's capacity for advanced research computing and research data management. In addition to providing uninterrupted access to ARC's computing resources for researchers and their students, the CFI funding until 2022 will also ensure that Compute Canada continues to participate in strategic planning during the transition period so the national DRI system is well-positioned to succeed.

CANADA FOUNDATION FOR INNOVATION

Reinventing kiteboard equipment A British Columbia kiteboard manufacturing

now licensed internationally

company has set a new bar for kiteboard technology with an innovative product,

force of wind and the torque of performing tricks.

Victoria-based kiteboarding company Ocean Rodeo, where Richard Myerscough is CEO and Founder, increased its sales by working with experts at Camosun College to create stronger plastic control bars that could better withstand the



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Evaluate

Analyzing corporate performance

We are committed to remaining publicly accountable and one way we did that in 2019–20 was by reviewing and updating our 2015 Performance evaluation, risk and audit framework. We revised it to better align with our 2019 Contribution Agreement with the Government of Canada. It now includes new indicators of success, such as tracking the participation of underrepresented groups including women, indigenous people, visible minorities and people with disabilities in our funding programs.

Using this framework, we draft annual reports on the CFI's performance, which are reviewed by CFI management and its Board of Directors.

Early in 2019–20, Innovation, Science and Economic Development Canada (ISED) began an evaluation of the CFI to assess the efficiency and effectiveness of our operations over the past five years. This evaluation will draw on, among other things, data collected through the framework.

Talking to our stakeholders

In the spring of 2019, we surveyed a number of CFI stakeholders: administrators and researchers at institutions that are eligible for CFI funding, representatives from federal and provincial governments, and other funders and partners in the research community. This third biennial stakeholder survey included questions about the effectiveness and efficiency of our activities and elicited views on the progress we have made in meeting our mandate. Among other things, we found that, in keeping with previous years:

- 93 percent of respondents believe the CFI is valuable to science, technology and innovation
- 87 percent of respondents are satisfied or very satisfied with how the CFI delivers its programs

Focusing on results

Over the past four years, we have been producing a series of reports to demonstrate how the CFI is meeting its objectives. Each "Focusing on results" report looks at one or more outcomes of CFI investments and relies on data from various sources, including the project progress reports we receive from the institutions we fund, interviews, focus groups, surveys and data from external sources, such as bibliometrics.

In a study done this year, we examined how CFI investments have helped advance knowledge. We found that CFI-funded research infrastructure enables researchers to advance knowledge in all areas of research, and that studies acknowledging the CFI are cited more frequently than the global average.

Developing a common classification system for Canadian research

The Canadian Research and Development Classification provides Canadian researchers, research institutions and funding organizations a new way to categorize their work. The CFI has collaborated with the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council of Canada (NSERC), the Social Sciences and Humanities Research Council of Canada (SSHRC) and Statistics Canada on the initiative.

It provides a common approach to classifying research across institutions and governments. Having one standard to classify research will make it easier to assess Canada's overall contribution to any one field or type of research, or to any particular socioeconomic challenge. The new classification system was completed at the end of fiscal year 2019–20. The CFI will be the first to implement it in its awards management system in summer 2020.

Manage

Financial highlights

(For the year ending March 31, 2020)

Since the CFI began:

\$8.8

Total amount committed in grants to the CFI by the Government of Canada, of which \$6.1 billion has been received. The balance will be received in future years, based on annual cash requirements.

\$8.3

\$19.9[§]

Investments of CFI contributions (typically 40 percent of project cost) plus those from institutions and their partners (typically 60 percent)

as a percentage of disbursements

(millions \$)

Annual disbursements to institutions and operating expenses

This fiscal year:



Total disbursements to eligible institutions



Allocations received from the Government of Canada



Awards approved

\$13.9[§] Operating expenses



(as a % of disbursements to institutions)



CFI contribution and other funding sources since our inception: Total \$19.9 billion

CFI contribution and other funding sources for fiscal year 2019–20: Total \$774.5 million



Reviewing our investment strategy and policy

Our Board of Directors' Investment Committee, which oversees the management of the CFI's investment portfolio, reviewed our investment strategy and policy in the fall of 2019. Our portfolio of investments is decreasing and will continue to do so in the coming months as funds transferred to the CFI from the Government of Canada in the early years are now almost entirely depleted. Since 2008, the CFI has been receiving funds from the federal government sufficient to cover projected award disbursements to institutions in a given year. As a result, the CFI concentrates on more liquid investments and maintains an appropriate liquidity policy.

Remaining accountable

We regularly visit recipient institutions to discuss their policies, practices, processes and controls for grant management over the lifecycle of CFI awards, and assess how well they are managing their CFI-funded projects. We use a risk-based approach to select institutions for these monitoring visits. This year, we conducted three visits and shared good practices institutions use for managing CFI funds. We also conduct contribution audits and other cost reviews of institutions to ensure they are using the funding they receive for a given project in accordance with the terms and conditions of the award agreement, and with applicable policies and guidelines. We performed contribution audits or other cost reviews on six projects in 2019-20. All projects with a CFI contribution exceeding \$10 million are automatically subject to an audit, and the risks associated to a project determine the scope, nature and extent of the audit activities. Institutions submit financial reports for each of their CFI-funded projects at specific intervals, ranging from quarterly reporting to biennial reporting. We determine the frequency by the complexity and risk of each project. This year we received more than 950 financial reports from recipient institutions. These reports provide information on individual project costs, funding and timelines for the acquisition of the infrastructure. We reviewed each of these financial reports to identify and address any issues.

Ranges of remuneration

CFI management (officers)

Roseann O'Reilly Runte President and CEO \$221,400 to \$310,100

Isabelle Henrie

Vice-President, Finance and Corporate Services \$146,800 to \$203,100

Pierre Normand

Vice-President, External Relations and Communications \$146,800 to \$203,100

Claire Samson (effective March 2020)

Vice-President, Programs and Planning \$146,800 to \$203,100

Employees

Director, Programs \$121,600 to \$162,200

Director, Communications Director, Corporate Services Director, Finance Director, Performance, Analytics and Evaluation

\$105,900 to \$141,300

Manager, Information Management/ Information Technology Manager, John R. Evans Leaders Fund Senior Advisor, Policy and Planning Senior Programs Officers Senior Project Manager \$96,300 to \$128,100 Manager, Administration

Manager, Creative Services Manager, Human Resources Senior Financial Monitoring Officer \$86,500 to \$115,000

Analyst, Finance Financial Reporting Analyst Senior Business Intelligence Developer Senior Evaluation Analysts, Performance, Analytics and Evaluation

\$76,700 to \$102,300

Governance

Board of Directors

The CFI <u>Board of Directors</u> is composed of a maximum of 13 individuals from a variety of backgrounds, each Director offering a unique perspective and understanding of the research community and bringing expertise from one or more of the private, institutional, academic and research sectors.

The Government of Canada appoints six Directors (known as Governor-in-Council appointments), including the Chair, while CFI Members appoint the remaining Directors. Directors are nominated and appointed for three-year terms.

Ingrid Pickering*, Chair

Audit and Finance Committee, Governance and Nominating Committee, Investment Committee

Margaret Bloodworth, Vice-Chair Chair, Governance and Nominating Committee

Catherine Boivie*, Audit and Finance Committee, Investment Committee

Micheline Bouchard, Chair, Investment Committee, Audit and Finance Committee

Lynda Brown-Ganzert* Governance and Nominating Committee John Kelly* Audit and Finance Committee, Investment Committee

Ronald Layden* Governance and Nominating Committee

Leslie MacLaren Audit and Finance Committee, Investment Committee

Cecilia Moloney Governance and Nominating Committee

Christopher Mushquash (appointed July 2019)

Marc Ouellette Governance and Nominating Committee

lan Seymour Chair, Audit and Finance Committee, Investment Committee

Mamdouh Shoukri* Governance and Nominating Committee

* Governor-in-Council appointment

Members

The Board of Directors reports to a higher governing body made up of our Members, who represent the Canadian public. Members nominate and appoint their fellow Members for five-year terms. They meet in June each year and are responsible for appointing seven of the Board Directors, appointing external auditors, reviewing audited financial statements and approving the annual report.

Louise Proulx

Co-Chair

Emőke Szathmáry Co-Chair

Lorne Babiuk

Harold Cook Members Governance and Nominating Committee

Elizabeth Douville

Joanne Gassman

Jack Gauldie Chair, Members Governance and Nominating Committee

Linda Humphreys

Marilyn Luscombe Members Governance and Nominating Committee

Ronald Morrison

Pierre Richard

Vianne Timmons Members Governance and Nominating Committee

Luc Vinet

Remuneration

Directors opting to receive remuneration from the CFI are entitled to an annual retainer of \$5,000. Committee Chairs receive \$7,500, and the Board Chair receives \$10,000. Directors are also entitled to receive a per diem fee of \$750 for attending Board or committee meetings and a \$500 fee for attending a committee meeting associated with a Board meeting. Members are not entitled to any remuneration. Members and Directors may, however, be reimbursed for any reasonable out-of-pocket expenses incurred while performing their duties or attending CFI meetings. In 2019–20, the remuneration of Board Directors ranged from \$0 to \$17,500.

Repairing the roads



There's booming demand for a Manitoba company's product that transforms unpaved roads into smooth, durable surfaces

Winnipeg's Cypher Environmental , where Teaghan Wellman is Vice President of Research and Development, has a global market for its catalyst that, when mixed with clay, creates a road surface that is resistant to ruts and potholes. To sell the product in Canada, the company partnered with Brandon University to prove it can withstand Manitoba winters.

Repurposing the MRI



A New Brunswick company is making its mark around the world by commercializing a new technology that uses Magnetic Resonance Imaging (MRI), typically a healthcare technology, to extract oil and gas more efficiently

Green Imaging Technologies Inc. in Fredericton, which was co-founded by Jill Green, uses MRI software to analyse the behaviour of oil and gas inside rocks. The technique, developed in partnership with the University of New Brunswick and sold around the world, makes it possible to retrieve more oil and gas from every well, an efficiency that translates to as much as \$100,000 per day for one well for decades.

Communicate



Research is my business partner

At the beginning of 2020, we launched a promotional campaign — <u>Research is my business</u> <u>partner</u> — to highlight how small- and mediumsize companies across Canada benefit from partnerships in CFI-funded research labs. You can find these stories throughout this report. We promoted these profiles of successful collaborations between the private sector and publicly funded research online, in select publications and around Ottawa (above).



New year, new blog

In January, our President and CEO, Roseann O'Reilly Runte launched a new blog, "innovision: <u>Reflections on research</u>," where she provides thoughtful comments on research, innovation and research policy and funding in Canada. Early posts touched on developing regional strengths through research, unconventional careers in science and working during a pandemic.



Funding announcements

On February 10, 2020, at the Cégep de Trois-Rivières, the Government of Canada announced \$7 million for seven projects at six colleges through the College-Industry Innovation Fund. Jean-Philippe Jacques (with back to photo), director of the Cégep's Innofibre, Centre d'innovation des produits cellulosiques, displays samples of products made out of recycled pulp and paper. Looking on are (from left to right) Parliamentary Secretary to Minister of Innovation, Science and Industry (Science), William Amos; Pierre Normand, Vice-President, External Relations and Communications at the CFI; and Louis Gendron (face hidden), President of Cégep de Trois-Rivières.

Other funding announcements held this year:

- \$2 million through the John R. Evans Leaders Fund to support three Canada Excellence Research Chairs, announced April 17
- \$160 million for the Major Science Initiatives Fund, including \$40 million for seven nationally significant facilities, held April 29 at the University of Saskatchewan's Canadian Light Source
- \$12 million awarded to 17 research projects at colleges and polytechnics through the College-Industry Innovation Fund, held June 13 at Georgian College in Barrie, Ont.
- More than \$4 million through the John R. Evans Leaders Fund to support 30 Canada Research Chairs, announced June 14 at the University of Victoria
- \$61 million to support 261 projects at 40 universities through the John R. Evans Leaders Fund, held August 12, at the University of Alberta
- Projects announced this fiscal year may have been approved in a previous fiscal year so amounts may not match those listed elsewhere in this report.



Science Machines

Photo: Natalie Selinger

Science Machines is a CFI-led outreach program that aims to provide young women opportunities to see first hand the amazing tools scientists use every day. Tasheena (holding clipboard), Elan, Alexis and Aurora, members of the University of Regina's Educating Youth in Engineering and Science (EYES) All Girls After School Club, and Chris Somers, biology professor at the University of Regina, look on as undergraduate researcher Linnea McClellan asks a suckerfish to smile for the camera. At this Science Machines event on March 7 the girls used fish-tracking equipment to catch and tag fish through the ice of Saskatchewan's Buffalo Pound Lake.



Annual public meeting

Roseann O'Reilly Runte, CFI President and CEO (far left) moderates a discussion between Ed McCauley, President and Vice-Chancellor at the University of Calgary, and Marie-Josée Hébert, Vice-Rector of Research, Discovery, Creation and Innovation at the Université de Montréal, about the innovative ways their respective institutions are working to embrace collaboration across disciplines and engaging with the community. The keynote panel capped off our annual public meeting on December 3.



Photo: Cara Marshall

Canada booth at the annual meeting of the American Association for the Advancement of Science

In February, we participated in the Canada booth at the annual meeting of the American Association for the Advancement of Science (AAAS) in Seattle, Washington. Led by the Office of the Chief Science Advisor, Mona Nemer (centre, in green), and supported by a number of organizations, the Canadian presence at this international conference aimed to highlight the benefits of studying and conducting research in Canada for prospective students and researchers from abroad.

#IAmInnovation Twitter contest

To highlight the work of a new generation of researchers, we launched our third #IAmInnovation Twitter contest in December and announced the winners in February. We asked contestants to submit videos or photos that demonstrate their work in CFI-funded labs and facilities. The three winners were:

- PhD candidate Nicole Lerminiaux of the Department of Biology at the University of Regina, who is discovering how our natural environment influences antibiotic resistance in bacteria.
- PhD student Alex Szojka of the Department of Surgery at the University of Alberta in Edmonton, who is developing lab-grown knee meniscus replacements for people with non-healing injuries to prevent development of osteoarthritis.
- PhD student Anna Cooper Reed of the Institute of Health Policy, Management and Evaluation at the University of Toronto, who is exploring healthcare services for Canada's aging population.

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Photo: VIDO-InterVac, University of Saskatchewan

Making connections that matter

This year, the <u>Research Facilities Navigator</u> the CFI's online directory of leading-edge, publicly funded research facilities — helped create over 239 connections between labs and potential partners from industry, academia and government.

Navigator facilities supporting Canada's contribution to COVID-19 included:

 VIDO–InterVac (research team above) is one of the largest and most advanced research facilities in the world working on animal and human infectious diseases. It is also part of the worldwide research effort to create a vaccine for COVID-19.

- The Walker Advanced Manufacturing Innovation Centre produced 2,000 face shields using laser-cutting technology and computer design tools in their lab at Niagara College.
- Researchers at SNOLAB in Sudbury, Ont., used their expertise in managing gas flow and gas handling to build a ventilator prototype.

Navigator highlights this year

695

105

institutions

28

facilities across Canada

sectors of application

1,980 average monthly web visits

Revolutionizing construction

11

A Quebec company has created a construction product that lets builders reach new heights and gives the forestry industry a new way to make money and increase employment

Two-hundred and fifty of Chantiers Chibougamau's employees — a quarter of its workforce — have jobs directly linked to a new line of engineered wood products for construction which are now sold internationally. The forestry company, where Frédéric Verreault is Executive Director, Corporate Development, partnered with FPInnovations to develop the products, which also opened up new building design and construction possibilities.

Looking toward the future

What we are working on for 2020–21:

- Making funding decisions for the 2020 Innovation Fund competition, with a budget of \$400 million and an additional \$120 million in support from the Infrastructure Operating Fund
- Finalizing the consultation and launching the new Northern Research Infrastructure Fund, which will support research projects conducted by Northern institutions on issues relevant to Northerners
- Using the lessons learned during the COVID-19 pandemic to explore an online review process for future competitions
- Building on our commitment to support equity, diversity and inclusion in Canada's research community with deliberate and meaningful actions
- Evaluating how the College-Industry Innovation Fund meets the needs of colleges and their partners and identifying possible refinements to the design or delivery of the fund

- Planning the International Conference on Research Infrastructures, which the CFI will host in Ottawa in June 2021, to bring together stakeholders including policy experts, facility managers and leading researchers to discuss challenges and emerging trends for research infrastructures around the world
- Continuing to work with the Fonds de recherche du Québec and the Ministère de l'Économie et de l'Innovation to understand the social, cultural and economic impact of research and research infrastructure funding on regions in Quebec
- Growing the number of users of the Navigator and promoting it as a key resource in driving Canadian research partnerships and innovation
- Continuing to show the return on CFI investments by sharing compelling stories — from increasing the capacity for bright minds to conduct research to providing spaces where the next generation of researchers can grow their careers

Financial statements

Independent auditor's report

To the Members of the **Canada Foundation for Innovation**

Opinion

We have audited the financial statements of the **Canada Foundation for Innovation** [the "Foundation"], which comprise the statement of financial position as at March 31, 2020, and the statement of operations and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Foundation as at March 31, 2020 and its results of operations and its cash flows for the year then ended in accordance with Canadian public sector accounting standards for government not-for-profit organizations.

Basis for opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Foundation in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of management and those charged with governance for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian public sector accounting standards for government not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Foundation's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Foundation or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Foundation's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Foundation's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Foundation's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Foundation to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Crost + young LLP

Chartered Professional Accountants Licensed Public Accountant

Ottawa, Canada June 23, 2020

Statement of financial position

As at March 31

	2020 \$	2019 \$
ASSETS	· · · ·	
Cash	48,523,090	41,330,110
Interest and other receivables	1,546,530	1,364,230
Investments (note 4)	202,018,544	183,330,635
Prepaid expenses	368,664	188,040
Capital assets, net (note 5)	3,068,020	3,996,368
	255,524,848	230,209,383
LIABILITIES AND NET ASSETS		
Liabilities		
Accounts payable and accrued liabilities	1,028,393	505,569
Deferred lease inducement (note 6)	625,781	695,962
International Conference on Research Infrastructures project deposits	553,279	94,826
	2,207,453	1,296,357
Deferred contributions (note 7)		
Expenses of future years	250,249,375	224,916,658
Capital assets	3,068,020	3,996,368
Total liabilities	255,524,848	230,209,383
Commitments (note 8)		
Net assets (note 9)	_	_
	255,524,848	230,209,383

See accompanying notes

ON BEHALF OF THE BOARD

1 JACKen

Ingrid Pickering Director

Ian Seymour

Director

Statement of operations

Year ended March 31

	2020	2019
	\$	\$
REVENUE (note 7)		
Recognition of deferred contributions related to amounts granted to eligible recipients	359,593,581	386,098,462
Recognition of deferred contributions related to current-year operations	12,842,624	13,191,013
Amortization of deferred contributions related to capital assets	1,078,201	1,245,665
	373,514,406	400,535,140
EXPENSES (note 12)		
Grants to eligible recipients	359,593,581	386,098,462
General and administration	12,842,624	13,191,013
Amortization of capital assets	1,078,201	1,245,665
	373,514,406	400,535,140
Excess of revenue over expenses for the year		

See accompanying notes

Statement of cash flows

Year ended March 31

	2020 \$	2019 \$
OPERATING ACTIVITIES		
Excess of revenue over expenses for the year	_	_
Items not involving cash		
Amortization of capital assets	1,078,201	1,245,665
Amortization of deferred contributions related to capital assets	(1,078,201)	(1,245,665)
Loss on equipment disposals and write-offs	_	6,244
Decrease of deferred contributions related to equipment disposal	_	(6,244)
Net decrease in amortization of discount/ premium on investments	(251,429)	(5,283,882)
Net decrease in deferred contributions related to expenses of future years	(365,967,283)	(396,260,456)
	(366,218,712)	(401,544,338)
Net change in non-cash working capital balances related to operations (note 11)	548,172	1,221,912
Cash used in operating activities	(365,670,540)	(400,322,426)
Capital		
Purchase of capital assets	(149,853)	(3,050,525)
Increase in deferred contributions related to capital assets	149,853	3,050,525
Cash used in capital activities		
Cash used in operating and capital activities	(365,670,540)	(400,322,426)
INVESTING ACTIVITIES		
Purchase of investments	(782,633,485)	(452,104,887)
Proceeds from disposal of investments	764,197,005	543,209,490
Cash provided by investing activities	(18,436,480)	91,104,603
FINANCING ACTIVITIES		
Grants received (note 7)	391,300,000	330,700,000
Cash provided by financing activities	391,300,000	330,700,000
Net increase in cash during the year	7 102 000	21 /02 177
Cash, beginning of year	7,192,980 41,330,110	21,482,177 19,847,933
Cash, end of year	48,523,090	41,330,110
oush, end or year	+0,323,030	-1,350,110
See accompanying notes		

Notes to financial statements

1. Description of business

The Canada Foundation for Innovation [the "CFI"] was incorporated on April 25, 1997, under Part I of the *Budget Implementation Act, 1997* [the "Act"] for the purpose of making research infrastructure grants to Canadian universities, colleges, hospitals and non-profit research institutions to increase the capability for conducting high-quality research.

Grants received from the Government of Canada and related investment income are administered and invested in accordance with the requirements of the Act and the terms and conditions of the Funding and the Contribution Agreements between the CFI and the Government of Canada.

The CFI is a non-taxable entity under paragraph 149(1) I) of the Income Tax Act (Canada).

2. Summary of significant accounting policies

The financial statements have been prepared by management in accordance with Canadian public sector accounting standards for government not-for-profit organizations and include the following significant accounting policies:

REVENUE RECOGNITION

The CFI follows the deferral method of accounting for contributions that include grants from the Government of Canada and potential donations from other sources.

Externally restricted contributions and related investment income are deferred and recognized as revenue in the year in which the underlying expenditures are incurred. A receivable is recognized if the amount to be received can be reasonably estimated and collection is reasonably assured.

Externally restricted contributions applied toward the purchase of capital assets are deferred and amortized to revenue on a straight-line basis, at a rate corresponding with the amortization rate for the related capital assets.

GRANTS TO ELIGIBLE RECIPIENTS

Grants to eligible recipients are recognized as expenses as the disbursements of funds are authorized by management and all eligibility criteria are met.

FINANCIAL INSTRUMENTS

The CFI records interest and other receivables, investments and accounts payable and accrued liabilities at amortized cost using the effective interest method of amortization. Cash is measured at fair value.

Purchases of investments are recorded on the settlement date.

Financial instruments recorded at fair value are grouped into Levels 1 to 3 based on the degree to which fair value is observable:

- Level 1—fair value measurements are those derived from quoted prices [unadjusted] in active markets for identical assets or liabilities;
- Level 2—fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly [i.e., as prices] or indirectly [i.e., derived from prices]; and
- Level 3—fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data [unobservable inputs].

The fair value hierarchy requires the use of observable market inputs whenever such inputs exist. A financial instrument is classified to the lowest level of hierarchy for which a significant input has been considered in measuring fair value.

The financial instrument recorded on the statement of financial position at fair value is composed of cash and is listed as Level 1.

CAPITAL ASSETS

Purchased capital assets are recorded at cost while contributed capital assets, if any, are recorded at fair value at the date of contribution. Repairs and maintenance costs are charged to expenses. When a capital asset no longer contributes to the CFI's ability to provide services, its carrying amount is written down to its residual value.

Capital assets are amortized on a straight-line basis using the following annual rates and terms:

Leasehold improvements	Term of the lease
Furniture and other equipment	5 years
Computer and software	3-5 years
Awards management system	Remaining months to March 2021

Development costs for the CFI awards management system are capitalized and amortized when the new functionalities become operational. Development costs are composed mainly of professional services.

USE OF ESTIMATES

The preparation of these financial statements requires the CFI's management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from these estimates. These estimates are reviewed periodically and, as adjustments become necessary, they are reported in the periods in which they become known. The most significant estimates used in preparing these financial statements include assumptions used in determining the collectability of accounts receivable, the estimated useful lives of capital assets and the amount of accrued liabilities.

3. Capital management

In managing capital, the CFI focuses on liquid resources available for operations and to be disbursed to eligible recipients. The CFI's objective is to have sufficient liquid resources to continue operating in accordance with the Funding and the Contribution Agreements between the CFI and the Government of Canada, despite adverse events with financial consequences, and to provide it with the flexibility to take advantage of opportunities that will advance its purposes. The need for sufficient liquid resources is considered in the preparation of an annual corporate plan, including long-term cash flow projections and budget. Disbursements to eligible recipients and actual operating results are monitored and compared to the cash flow projections to ensure availability of sufficient liquid resources. As at March 31, 2020, the CFI has met its objective of having sufficient liquid resources to meet its current obligations.

4. Investments

Investments comprise the following financial instruments:

		2020		2019
	Fair value \$	Carrying value \$	Fair value \$	Carrying value \$
Money market funds	52,352,006	52,334,165		
Bonds	—	—	33,606,490	33,612,331
High-interest savings accounts	149,684,379	149,684,379	149,718,304	149,718,304
	202,036,385	202,018,544	183,324,794	183,330,635

MARKET RISK

Interest rate risk

Interest rate risk arises when the value of an investment fluctuates due to changes in market interest rates.

The CFI invests in money market funds and high-interest savings accounts and, as such, the interest rate does not present a significant financial risk for the CFI.

Price risk

Price risk is the risk that the fair value of a financial instrument will fluctuate because of changes in market prices [other than those arising from interest rate risk], whether those changes are caused by factors specific to an individual financial instrument or its issuer, or factors affecting all similar securities traded in the market.

As at March 31, 2020, a 1% increase in market price would result in an increase of the fair value for investments of approximately \$2.0 million [2019 – \$1.8 million].

The CFI's grant commitments do not exceed the total of its investments, related investment income and grants committed from the government that will be received in future years. The timing of investment maturities is matched to projected cash outflows. The degree of volatility is mitigated by the CFI's policy that it will not invest in shares, warrants or other equities, convertible debt securities, derivatives, swaps, options or futures. As such, management believes that interest rate and price risks are appropriately managed.

The high-interest savings accounts are tiered-rate interest accounts that combine high interest, liquidity and security of a simple deposit account, established for the purpose of investment. The interest rates for these accounts range from 1.45% to 2.35% [2019 – 1.82% to 2.51%].

Currency risk

Currency risk is the risk that the fair value of a financial instrument will fluctuate because of changes in foreign exchange rates. The CFI is not exposed to currency fluctuations.

LIQUIDITY RISK

Liquidity risk is the risk of not being able to meet cash requirements in a timely and costeffective manner.

The CFI matches the timing of investment maturities to projected cash outflows. Furthermore, the entire portfolio is made up of cash and money market instruments. As such, liquidity does not present a significant financial risk to the CFI.

The maturities of money market funds range between April 2020 and May 2020.

CREDIT RISK

Credit risk arises from the potential that the issuer of an investment will fail to perform its obligations. Concentrations of credit risk exist when a significant proportion of investments are invested in securities with similar characteristics or subject to similar economic, political or other conditions.

It is the CFI's policy to invest only in securities with at least AA investment ratings or the equivalent. In addition, the CFI's investment policy restricts the single largest issuer, in the case of all but AAA Government, to a maximum of 1% to 20% [2019 – 1% to 20%] of the total investment portfolio depending on the investment category. As such, management believes that credit risk is appropriately managed.

5. Capital assets

Capital assets consist of the following:

			2020	2019
	Cost \$	Accumulated amortization \$	Net book value \$	Net book value \$
Leasehold improvements	2,306,907	363,625	1,943,282	2,161,22
Furniture and other equipment	804,768	390,591	414,177	532,931
Computers and software	1,281,010	1,066,029	214,981	166,646
Awards management system	6,629,688	6,134,108	495,580	1,135,571
	11,022,373	7,954,353	3,068,020	3,996,368

Total cost and accumulated amortization related to capital assets held as at March 31, 2019, were \$10,872,520 and \$6,876,152, respectively.

6. Deferred lease inducement

In August 2017, the CFI signed a lease ending February 28, 2029, for new premises and received an inducement. The lease provides for eleven months of free basic rent totalling \$455,590 and seven months of free additional rent totalling \$287,159. The total amount of \$742,749 has been recognized as an inducement. The amortization of the inducement is over 127 months commencing August 1, 2018. As at March 31, 2020, the unamortized balance is \$625,781.

7. Deferred contributions

The CFI operates under two active Funding Agreements and three Contribution Agreements with the Government of Canada. As at March 31, 2020, the Government of Canada had committed \$8.79 billion in grants to the CFI under these agreements, of which \$6.12 billion had been received. The terms and conditions of these agreements call for remaining grants to be paid to the CFI annually, subject to sufficient appropriation by Parliament, based on the estimated cash requirements for the year. During the fiscal year, the CFI received \$391.3 million [2019 – \$330.7 million] related to these agreements.

EXPENSES OF FUTURE YEARS

Deferred contributions related to expenses of future years represent unspent externally restricted grants received to date, together with investment revenue earned, for the purpose of providing grants to eligible recipients and paying for operating and capital expenditures in future years.

	2020 \$	2019 \$
BALANCE, BEGINNING OF YEAR	224,916,658	290,477,114
Add grants received	391,300,000	330,700,000
Add restricted investment revenue earned	6,618,775	6,073,300
Less amount recognized as revenue	(372,436,205)	(399,289,475)
Less amount applied toward capital assets acquired	(149,853)	(3,050,525)
Loss on equipment disposals		6,244
BALANCE, END OF YEAR	250,249,375	224,916,658

CAPITAL ASSETS

Deferred contributions related to capital assets represent the unamortized amount of restricted grants received and applied toward the purchase of capital assets. The amortization of capital contributions is recorded as revenue in the statement of operations on the same basis as the amortization of the related capital assets.

	2020 \$	2019 \$
BALANCE, BEGINNING OF YEAR	3,996,368	2,197,752
Restricted grants applied towards the purchase of capital assets	149,853	3,050,525
Loss on equipment and write-offs	—	(6,244)
Less amount amortized to revenue	(1,078,201)	(1,245,665)
BALANCE, END OF YEAR	3,068,020	3,996,368

8. Commitments

During the year, the CFI approved grants for a maximum amount of \$380.0 million [2019 – \$135.3 million]. Total disbursements to eligible recipients during the fiscal year were \$359.6 million [2019 – \$386.1 million]. As at March 31, 2020, the CFI has approved grants for a maximum amount of \$8,300.6 million, of which \$7,322.3 million had been disbursed. To date, the CFI has award agreements in place related to these approved grants in the amount of \$8,018.6 million and, therefore, has outstanding contractual obligations of \$696.3 million as at March 31, 2020.

The CFI estimates these obligations to be disbursed as follows:

	in millions of \$
2021	250.7
2022	160.1
2023	132.3
2024	62.7
2025 onwards	90.5
TOTAL ESTIMATED DISBURSEMENTS	696.3

In August 2017, the CFI signed a lease for premises at 55 Metcalfe Street, Ottawa, Ontario for a period ending February 28, 2029. The minimum annual lease payment related to the new premises is approximately \$1.0 million.

9. Restricted contributions and net assets

The requirements of the Act, which governs the CFI and the terms of its Funding and Contribution Agreements with the Government of Canada, externally impose restrictions on all of the CFI's net assets. Investment revenue to be earned on the grants received from the Government of Canada is also restricted. Accordingly, the entire net assets of the CFI are deferred and taken into revenue as expenditures are made with no net asset balance outstanding at any time. A statement of changes in net assets has not been prepared since it would not provide additional useful information.

10. Pension plan

The employees of the CFI may elect to become members of the Universities Canada Pension Plan [the "Plan"], a defined contribution plan managed by Sun Life Financial Inc. The employer contributions made to the Plan during the year ended March 31, 2020, amounted to \$766,907 [2019 – \$770,598].

11. Statement of cash flows

	2020 \$	2019 \$
Interest and other receivables	(182,300)	678,364
Prepaid expenses	(180,624)	112,745
Accounts payable and accrued liabilities	522,824	(359,985)
Deferred lease inducement	(70,181)	695,962
International Conference on Research Infrastructures project deposits	458,453	94,826
	548,172	1,221,912

12. Global coronavirus pandemic

The global coronavirus pandemic has resulted in estimated losses of \$125,295 relating to travel costs incurred for the 2020 Innovation Fund merit-review process. These have been reflected in general and administration expenses. Further impacts are unknown at this time.