

Research tools and facilities: essential drivers of innovation

Annual report 2022-23

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The Canada Foundation for Innovation respectfully recognizes and acknowledges the traditional relationship that the First Nations, Inuit and Métis across Canada have with the land all Canadians share.

### Table of contents

Listening, reflecting and aiming high	2
Overview	4
A vision to realize the best of Canadian research: our new strategic plan	8
Invest	10
Manage	16
Understand	20
Connect globally	21
Communicate	22
Looking toward the future	25
Financial statements	26

# Listening, reflecting and aiming high

This year, we set our sights on the future. In that spirit, we drafted our new five-year strategic plan, our roadmap for 2023 to 2028. Titled *Aiming high*, the plan renews our commitment to excellence and our support for Canada's research talent, and offers new goals set in the context of the opportunities and challenges faced not only by our country, but the world.

The Canada Foundation for Innovation (CFI) understands the importance of realizing the benefits of research to Canada. And we equally understand the need to collaborate, to listen to all voices inclusively and to forge effective partnerships as we trace the path forward.

Our first step in drafting our new strategic plan was to consult broadly with the people most closely connected to research in Canada, including representatives from academia, governments and the public, private and not-forprofit sectors. We learned the key issues they anticipate will impact research over the next five years, insights that helped us set out a series of actions that will create the foundation on which to build future success across disciplines and involving all sectors. (Read more about our strategic plan on page 8.)

The release of the findings and recommendations of the Government of Canada's Advisory Panel on the Federal Research Support System at the end of this fiscal year gave us another framework for reflection. This has inspired the CFI not only to continue to improve in all we do but to bring together colleagues to begin to define a long-term vision for research in Canada, which in turn will contribute to a better future for our country.

We understand the importance of investing in the tools, instruments and facilities that prepare researchers to find solutions to pressing societal and economic needs when they arise. We witness this each time Canadian research institutions rise to address critical needs, be it the COVID-19 pandemic, climate change, or emerging areas of inquiry like personalized medicine and artificial intelligence. Researchers achieve impressive results because they have the essential tools and talent at the ready.

We also know that our trusted funding process allows us to deliver targeted, tailor-made investments, which enable Canada to respond to strategic needs. The creation of the Biosciences Research Infrastructure Fund is an excellent example of this. (Read more about this funding program on pages 12 and 13.)

We recognize that a range of perspectives and life experiences, especially among early career researchers, makes research in Canada more relevant, more insightful and more effective, so we embrace the values of equity, diversity and inclusion that will continue to shape the Canadian research community.

Cutting-edge research equipment and facilities attract researchers to Canada, encourage students to remain here and facilitate companies to discover the talent pool that will enable their growth. This, in turn, encourages a healthy economy and elevates communities to be strong and vibrant.

CFI equipment catalyzes collaboration among institutions of all sizes while encouraging industry

participation. Working directly with research institutions and not-for-profit organizations provides us with a holistic, cross-disciplinary perspective that ensures our investments build on identified research strengths and encourage the birth of new fields that may prove essential to overcoming the hurdles the world faces. At the same time, this process of listening, encouraging dialogue and collaboration, weighing the challenges and the possibilities ahead makes possible the organic development of a vision for research and its important role in Canada.

Our strategic planning process and the thoughtful consideration and proposals of the Advisory Panel have resulted in renewed energy and a clear path forward. In synergy with the research community, the support of government and the collaboration of research leaders in the federal granting agencies, universities, colleges, hospitals and other foundations, we will together enable the full potential of research in this country to be realized, improving the lives and livelihoods of Canadians.



Ingrid J. Pickering Chair of the Board



Koseann O'Reilly Runte Roseann O'Reilly Runte President and CEO

### Overview

#### What we do

With a bold, future-looking mandate, the CFI equips researchers to be global leaders in their fields and to respond to emerging challenges. Our investments in state-of-the-art tools, instruments and facilities at universities, colleges, research hospitals and non-profit research institutions underpin both curiosity- and mission-driven research that cuts across disciplines and bridges all sectors. The research infrastructure we fund mobilizes knowledge, spurs innovation and commercialization, and empowers the talented minds of a new generation.

#### Our objectives

- Support economic growth and job creation, as well as health and environmental quality through innovation
- Increase Canada's capability to carry out important worldclass scientific research and technology development
- Expand research and job opportunities by providing support through research infrastructure for the development of highly qualified personnel
- Promote productive networks and collaboration among Canadian universities, colleges, research hospitals, non-profit research institutions and the private sector

#### Our role in supporting research in Canada

The CFI has a unique role to play in research in Canada. We are the country's only funding organization with the specific mandate to fund research facilities and equipment. We support research projects across every discipline and contribute to Canada's research goals in many ways:

#### Keeping Canadian research agile and ready to respond

- CFI investments create a backbone of state-of-the-art research infrastructure that ensures
   Canada is ready to seize new opportunities and undertake strategic research missions that benefit
   Canadians, such as supporting the Government of
   Canada's Biomanufacturing and Life Sciences Strategy.
- Having the right research tools and facilities in place means Canada's researchers are at-the-ready to pursue ambitious ideas, to respond to environmental and health issues and to seize emerging opportunities with economic and social impact.

#### \$496 million

CFI investments in support of Canada's Biomanufacturing and Life Sciences Strategy

#### Crossing disciplines, sectors and borders

- We invest in the spaces and facilities that bridge users in all sectors and across all disciplines and where researchers in Canada engage with research leaders from around the world.
- In CFI-funded labs, ideas move from fundamental research to technology development and commercialization.
- Thanks to investments in top-of-the-line research facilities, the CFI helps Canadian universities, colleges and research hospitals attract users and partners from around the globe.

#### 75

percentage of the research infrastructure projects we have funded that involve international partners

#### 98

percentage of the 226 research project leaders newly recruited in 2022 who indicated that access to CFI-funded research infrastructure positively influenced their decision to join their institution



Michel Fodje, Senior Scientist at the Canadian Light Source synchrotron facility at the University of Saskatchewan in Saskatoon, Sask., loads samples into a robotic sample mounter on the structural biology beamline, which is used for drug development and to study diseases.

#### Mobilizing knowledge, spurring innovation

- By funding state-of-the-art labs and facilities, we put in place the research capability and expertise that fuel Canadian innovation by sparking new ideas, training highly qualified personnel and supporting commercialization.
- We make those capabilities accessible to Canadian companies of all sizes through the Research Facilities Navigator — a database of over 800 state-of-the-art labs where innovators and entrepreneurs find the cutting-edge equipment and expertise they need to compete and succeed.

number of new patents that arose from CFI-funded projects in 2022

number of new companies that arose from CFI-funded projects in 2022

#### Forging relationships that strengthen the research enterprise

- Through trusted, effective relationships with the provinces and a proven funding model, the CFI brings together various levels of government toward a common goal.
- · Our funding programs encourage multi-institutional and multidisciplinary research infrastructure projects that provide significant value for the country in terms of the benefits they produce.

amount the provinces have invested in CFI-funded projects since 1997

#### Nurturing and empowering talented minds

- The labs we equip are where a new generation of researchers, innovators and entrepreneurs start their journey to become global leaders. In these spaces, they realize their ideas, meet their mentors and learn skills that are highly valued by every sector.
- Businesses seek out students who have trained on the latest technologies and understand the research environment. This knowhow helps companies develop and commercialize new products and technologies in order to compete and succeed globally.

31,400+ number of postdoctoral fellows and students who trained on CFI-funded research infrastructure in 2022

#### How we do it

#### Optimizing investments

The CFI typically contributes up to 40 percent of a project's research infrastructure costs. Research institutions — the ultimate recipients of our funding — secure the remaining 60 percent through partnerships with provincial governments, industry and other public, private and non-profit organizations. By attracting co-funding from strategic partners, this unique funding model optimizes the Government of Canada's investments in research infrastructure.

This means that Government of Canada investments have enabled CFI awards of nearly \$10 billion (as approved by the CFI Board of Directors), which have been leveraged into a total investment of \$23.93 billion in research infrastructure in Canadian institutions since we were created.\*

#### Rewarding excellence

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 contribution of the research infrastructure project to strengthening innovation capacity
- The benefits of the research to Canada.

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



"We have this incredible ecosystem of collaboration," says Professor Leah Cowen (centre), shown working with students in her molecular genetics laboratory at the University of Toronto.

#### Since 1997,

investments have enabled CFI awards of almost

\$10 billion for 173 research institutions in

municipalities across Canada.\*

#### **Our values**

#### Our commitment to equity, diversity and inclusion

The CFI is committed to the principles of equity, diversity and inclusion. 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 and research infrastructure 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. They include gender, language, culture and career stage; institutional characteristics such as size, type and location; and attributes that encompass the full spectrum of research, from basic to applied and across all disciplines.

#### Inclusion

We encourage a culture of collaboration and partnership which includes contributions from 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.

For our part, we strive to be:

#### RESPONSIBLE

#### COLLABORATIVE

#### INNOVATIVE

#### How we live it externally

We remain transparent and accountable by monitoring and communicating the outcomes of our activities and investments.

We are client-focused, providing effective, efficient services and actively consulting with our stakeholders.

We believe in a bright future for Canada's research community. Our investments allow researchers to think big and have a profound, transformative impact on society.

#### How we live it internally

We are objective, ensuring the integrity and independence of our processes and decisions. We foster teamwork, valuing and considering the opinions, and trusting the skills and knowledge, of our colleagues.

We bring fresh ideas into a work environment that fosters excellence and creative thinking.

# A vision to realize the best of Canadian research: our new strategic plan

Aiming high, the CFI's new five-year strategic plan, highlights our vision from 2023 to 2028 to meet the challenges of today and tomorrow while growing prosperity and building a stronger future for Canada through research. Our vision reflects our commitment to invest in research facilities and equipment that support researchers in addressing current and emerging science and technology opportunities to contribute to the vitality, health and prosperity of communities.

We developed the plan through consultations with our stakeholders, including research institutions and representatives from academia, governments and the public, private and not-for-profit sectors. Those insights helped us set out a series of meaningful actions that will help address the needs of the Canadian research community.

The CFI'S 2023–28 strategic plan is built on five pillars:

### Fostering the science of tomorrow:

Our contribution to building today the research capacity that supports the science of tomorrow

We are building a strong future for Canada through research. We do this by investing in the facilities and equipment that: drive discovery and advance knowledge; contribute to the training, retention and recruitment of a new generation of talent; and bring social and economic benefits to Canada.

### Building prosperous and healthy communities:

Our contribution to enhancing the connection between research and communities

Research institutions provide both tangible and intangible benefits to the communities where they are located. Recognizing that research increasingly spans many social and economic sectors, our programs foster opportunities for all members of a community to contribute to and benefit from research. To do this, we partner with organizations from different sectors to support research.

### Contributing to a sustainable world:

Our contribution to environmental, social and economic sustainability

We seek to contribute to the attainment of the United Nations Sustainable Development Goals (SDGs) by leveraging our role as an enabler of research. We will encourage research institutions to find ways to integrate the SDGs into the projects we fund. And as an organization with an impact of its own to consider, we also strive to make our operations and activities more sustainable.



#### **Inspiring the next generation:** Our contribution to promoting equity, diversity, inclusion and community

With the understanding that research that involves people from a range of experiences has the greatest impact, we encourage institutions to create environments that bring people together, making them feel welcome and enabling the kind of interaction and understanding that can lead to discovery and innovation.

We recognize that investments in research facilities and equipment are also investments in the development of a new generation of research talent and we encourage the training, recruitment and retention of new researchers through our program activities.

#### Delivering for the research community: Our contribution to leveraging institutional partnerships and collaboration

In Canada and internationally, advances in scientific research result from the combined efforts of multiple actors from the academic, public, private and not-for-profit sectors. We find opportunities to collaborate and partner with other organizations to maximize the impact of public funding for research. This results in programs and policies that foster Canada's research enterprise and enable academic and private research institutions to continue to successfully compete with the best in the world.

#### Problem solvers

College research teams partner with industry and public organizations to tackle real-life challenges

#### An ounce of disaster prevention for a pound of long-term benefits

The Centre de recherche et d'innovation en sécurité civile (a research centre focusing on public safety) at Campus Notre-Dame-de-Foy, a college near Québec City, is building an experimental simulation site, the first of its kind in Canada. At the facility, firefighters, paramedics and police officers will learn how to handle the risks of natural and human-made disasters like wildfires, road and rail accidents, and toxic spills. The site will include a multi-room house where fires can be simulated in a controlled manner as well as a training maze and obstacle course where researchers can study the physical and mental limits of responders in emergency situations.



#### Sustainable food packaging with potential

Developing efficient and environmentally friendly packaging is a pressing concern for food processors, but a new research centre will help them find solutions. Fanshawe College in London, Ont., will open the Packaging Advancement Centre, which will be equipped with two cutting-edge food packaging conveyor belts — one for pouring liquids into bottles and labelling them, and another for wrapping and boxing solid foods.



### Invest

This year, we successfully delivered the results of the 2023 Major Science Initiatives Fund competition and the first competition of the Biosciences Research Infrastructure Fund while also continuing to administer the 2023 Innovation Fund competition and our two annual funds, the John R. Evans Leaders Fund and the College Fund.

By the end of the fiscal year, our Board of Directors approved 553 projects for a total CFI contribution of nearly \$219 million in capital funding; \$66 million in infrastructure operating and maintenance costs; and \$635 million through the Major Science Initiatives Fund.

### Enhancing innovation through partnerships College Fund

In 2021–22, we revised our College Fund to support colleges in fostering collaborations with the public and not-for-profit sectors, in addition to industry and the private sector. In 2022–23, we delivered the first competition of the revised fund, through which we awarded \$11.9 million in capital funding and \$3.6 million in associated operating costs from the Infrastructure Operating Fund (IOF) to support 17 applied research projects at 14 colleges, Cégeps and polytechnics (see sidebar for two examples). Each project will lead to business, health or social innovation.

### Attracting the world's best researchers to institutions in Canada, and keeping them here John R. Evans Leaders Fund

The John R. Evans Leaders Fund helps universities across the country attract and retain world-leading researchers by offering competitive research support packages. This year, in support of 507 research infrastructure projects, we awarded more than \$109 million in capital funding and \$32.7 million through the IOF for associated operating costs. The projects that received funding this year range from developing ways to provide precision healthcare remotely to understanding the cold reaches of interstellar space and the formation of planets.

### Thinking big for meaningful impact Innovation Fund

Investments made through our Innovation Fund allow institutions to think ambitiously and propose transformative projects that underpin cutting-edge, globally competitive research. Infrastructure projects supported through this fund help Canada remain at the forefront of exploration and knowledge generation while making substantial and meaningful contributions to social, health, environmental and economic benefits, and addressing global challenges. Throughout this fiscal year, we administered the review process for the 2023 Innovation Fund competition, which was launched in November 2021. Through this competition, we will invest up to \$400 million in capital funding and another \$120 million through the IOF for associated operating costs. The CFI Board of Directors will make funding decisions in June 2023.



### **Supporting Canada's Biomanufacturing and Life Sciences Strategy**Biosciences Research Infrastructure Fund

The Biosciences Research Infrastructure Fund (BRIF) supports the bioscience infrastructure needs of postsecondary institutions and research hospitals by providing high-performance tools, innovative research spaces and biocontainment facilities (see "A new funding program to respond to the needs of the country" on page 13 for more on the origins of this funding program).

In October 2022, we awarded \$98.4 million in capital funding and \$29.5 million in associated operating costs through the IOF to eight biocontainment facilities capable of working with infectious materials (see page 13 to learn more about those eight facilities).

In March 2023, the Government of Canada announced five hubs — led by the University of British Columbia in Vancouver, B.C., the University of Alberta in Edmonton, Alta., the University of Toronto in Toronto, Ont., the University of Ottawa in Ottawa, Ont. (co-led by McMaster University in Hamilton, Ont.), and the Université de Montréal

in Montréal, Que. — that will speed up the research and development of vaccines and other medicines and diagnostics, and support the training and development of highly skilled bioscience professionals. The announcement of the hubs was the result of a competition of the Canada Biomedical Research Fund (CBRF), which is administered by the Social Sciences and Humanities Research Council (SSHRC) and is offered jointly with the Natural Sciences and Engineering Research Council of Canada (NSERC) and the Canadian Institutes of Health Research (CIHR).

A joint funding opportunity between BRIF and CBRF will support projects at institutions across Canada that align with the priorities of one of the five hubs. Through that funding opportunity, the CFI will invest up to \$279 million in capital funding and \$84 million in associated operating costs through the IOF. The CFI Board of Directors will make funding decisions in March 2024.



# A new funding program to respond to the needs of the country

Canada's leading postsecondary institutions and their affiliated research hospitals anchor much of the country's bioinnovation ecosystem, including the ability to respond to future pandemics. Important foundational components are centred in these institutions, including laboratories and talent.

Canada's scientists need high-performance tools and innovative research spaces and laboratories to bring their ideas from discovery through development and commercialization. In many cases, their work requires specialized equipment in appropriate biocontainment facilities to ensure that infectious-disease research is conducted safely. Supporting surveillance, diagnostics, and pre-clinical and clinical trials with flexible research infrastructure capacity is critical to Canada's biomanufacturing and life sciences ecosystem.

The Biosciences Research Infrastructure Fund was created in 2021 to respond to these critical needs.

CFI investments will ensure that funded facilities are collaborative, durable, flexible, multi-institutional and capable of serving researchers in all relevant disciplines in support of Canada's Biomanufacturing and Life Sciences Strategy.

#### Funding awarded through the first competition of the Biosciences Research Infrastructure Fund will:

- Modernize one of the containment level 3 labs at the British Columbia Centre for Disease Control, in Vancouver, B.C., to focus on SARS-CoV-2, tuberculosis and multidrug-resistant pathogens
- Enlarge the containment level 3 facility at the
  University of Calgary in Calgary, Alta., and equipping
  it with state-of-the-art imaging capabilities to
  be able to visualize what a pathogen is doing
  inside a cell and to see whether new drugs are
  working, making it one of few containment level 3
  facilities in North America with this capability
- Create a centre for discovery and translational research at the Alberta High Containment Research Infrastructure facility at the University of Alberta in Edmonton, Alta., that will develop and test new vaccines and therapeutics to support the immediate and long-term growth needs of Canada's biopharmaceutical sector
- Upgrade the capability of the University of Saskatchewan's Vaccine and Infectious Disease Organization in Saskatoon, Sask., to study pathogens that emerge in animal and human populations
- Expand the Imaging Pathogens for Knowledge Translation containment level 3 facility at Western University in London, Ont., and establish a new Pathogen Research Centre to test the effectiveness of new antimicrobial materials and strategies that will reduce or prevent the spread of pathogens through the air or by touch
- Expand a laboratory at Canada's Global Nexus for Pandemics and Biological Threats at McMaster University in Hamilton, Ont., where an internationally renowned team of experts in infectious disease and immunological research seek new antimicrobials, antivirals, vaccines and diagnostics to combat the world's worst pathogens
- Expand the capacity of the Toronto High Containment Facility, which is part of the Emerging and Pandemic Infections Consortium at the University of Toronto in Toronto, Ont., to make it a world leader in its ability to support innovative interdisciplinary research
- Support ongoing research at McGill University in Montréal, Que., on emerging pathogens to develop new lines of investigation and train the next generation of infectious disease researchers.

### Supporting research facilities of national importance Major Science Initiatives Fund

In Canada, there is a category of research facilities that are national in scope, complex, highly specialized and of exceptional value to Canadian research. They provide entire communities of researchers access to research equipment that is highly advanced and unparalleled in its capabilities, and to the singularly skilled scientific and technical personnel who operate it.

Across the board, these facilities produce leading-edge, game-changing research, and each is committed to mobilizing the knowledge and technology they develop for the good of society.

Their scope means they require resource commitments well beyond the capacity of any one institution and robust governance and management structures that serve researchers across Canada.

Funding through the Major Science Initiatives Fund (MSIF) keeps these world-class facilities performing at their highest level by helping to cover the significant ongoing costs of operations and maintenance. This support allows these national research assets to be optimally exploited and promotes the adoption of best practices in their governance and management.

In August 2022, the Honourable François-Philippe Champagne, Minister of Innovation, Science and Industry, announced the results of the 2023 MSIF competition, which will provide a total of \$660 million between April 1, 2023 and March 31, 2029 for the operation and maintenance needs of the country's nationally significant research facilities. In 2022–23, \$628.3 million was awarded to 19 of those facilities (see page 15 to learn about six of them) and \$24.6 million more will be allocated to those same facilities between 2023 and 2029 in accordance with the fund's oversight framework. The CFI provided \$7.1 million in transitional funding for two other facilities in 2022–23.

### The 19 facilities awarded funding in 2022–23 are:

- Advanced Laser Light Source, Institut national de la recherche scientifique, located in Varennes just outside of Montréal, Que.
- Canadian Cancer Trials Group Operations and Statistics Centre, Queen's University in Kingston, Ont.
- Canadian Light Source Inc., University of Saskatchewan in Saskatoon, Sask.
- Canadian Research Data Centre Network, McMaster University in Hamilton, Ont.
- Centre for Biodiversity Genomics, University of Guelph in Guelph, Ont.
- CGEn Canada's national facility for genome sequencing and analysis, Toronto's Hospital for Sick Children in Toronto, Ont.
- Coalition Publica, Université de Montréal in Montréal, Que.
- GlycoNet Integrated Services, University of Alberta in Edmonton, Alta.
- Ocean Networks Canada, University of Victoria in Victoria, B.C.
- Ocean Tracking Network, Dalhousie University in Halifax, N.S.
- **SNOLAB**, in Sudbury, Ont.
- SuperDARN Canada: The Canadian Component of the Super Dual Auroral Radar Network, A Global Space Weather Collaboration, University of Saskatchewan in Saskatoon, Sask.
- The André E. Lalonde Accelerator Mass Spectrometry Facility for Environmental Radionuclides, University of Ottawa in Ottawa, Ont.
- The Canadian Research Icebreaker Amundsen, Université Laval in Québec City, Que.
- The Global Water Futures Observatories, University of Saskatchewan in Saskatoon, Sask.
- The Metabolomics Innovation Centre, University of Alberta in Edmonton, Alta.
- The World's Freshwater Laboratory, outside of Kenora in northwestern Ontario, operated by the International Institute for Sustainable Development Experimental Lakes Area Inc.
- Vaccine and Infectious Disease Organization (VIDO), University of Saskatchewan in Saskatoon, Sask.
- Wind Engineering, Energy and Environment Research Facility (WindEEE), Western University in London, Ont.

#### Research facilities in a class of their own

The latest competition of the Major Science Initiatives Fund keeps Canada's most complex and specialized research facilities performing at their highest level

#### Summoning the storm

The Wind Engineering, Energy and Environment Research Facility, known as "WindEEE," at Western University in London, Ont., is the only facility in Canada with a wind dome that can simulate tornadoes and downbursts, as well as large weather systems such as hurricanes, in a controlled environment. It also includes facilities to test the impacts of wind and waves and how varying wind loads affect full-scale houses. This lets researchers test and understand how weather and climate change have an impact on the infrastructure we rely on in our daily lives.



### Mounting an early warning system for Canada's looming water crisis

The University of Saskatchewan's Global Water Futures Observatories (in Saskatoon, Sask.) is a network of observation systems that provides urgently needed data to help ward off the devastating impacts of floods, droughts and other water crises plaguing Canada. It includes 76 instrumented basins, lakes, rivers and wetlands. 27 deployable observation systems. and 31 state-of-the-art water laboratories. The observatories monitor our aquatic systems in unprecedented detail and at the national scale, across seven provinces and territories including six major river basins and the Great Lakes Basin.



#### Tweaking biology for health and biotech solutions

GlycoNet Integrated Services is a pan-Canadian network of over 170 researchers that brings together expertise in the field of glycomics to create solutions in medicine and other bio-based industries. Glycans, also known as carbohydrates or sugars, are vital to the biological processes of all living things and hold promise for new human health therapeutics, as well as solutions in bio-based industries like agriculture and biofuels.



#### Keeping pollution in check

A network of lakes in northwestern Ontario provides a globally unique perspective on how human activity affects lakes and watersheds, so we can find ways to preserve them. The world's freshwater laboratory research facility is a series of 58 natural lakes and their watersheds and is operated by the International Institute for Sustainable Development Experimental Lakes Area. It is the only place in the world where scientists can study the effects of pollution on real lakes to build a more accurate and complete picture of what human activity is doing to our freshwater resources over the long term.



#### Cataloguing all the world's living things

The University of Guelph's Centre for Biodiversity Genomics in Guelph, Ont., is building a powerful inventory of every species on Earth in an effort to monitor and conserve biodiversity in the face of crisis. It is the global leader in DNA barcoding, which is a technique that allows researchers to identify species from the tiniest pollen grains carried by bees to vulnerable birds and mammals using a short section of DNA. Knowing where each species lives is critical to monitoring and maintaining the Earth's biodiversity.



#### Making movies of matter as it changes

Researchers at the Advanced Laser Light Source at the Institut national de la recherche scientifique located in Varennes, just outside of Montréal, use Canada's most powerful laser. The facility lets researchers peer deep inside the matter of living and non-living things even as it moves and changes, providing high-resolution images of how individual atoms and electrons behave. This allows them to better understand a host of processes, such as how plant roots grow underground and how alloys react under stress.



### Manage

Financial highlights (for the year ending March 31, 2023)

Since 1997:

\$11.63<sub>billion</sub>\*

Total amount committed in grants to the CFI by the Government of Canada, of which \$7.22 billion has been received. The balance will be received in future years, based on annual cash requirements.

\$10<sub>billion</sub>

Total awards approved by the CFI Board of Directors, of which \$8.4 billion has been disbursed to eligible institutions. The remaining \$1.6 billion will be disbursed in future years.

\$23.93 billion

Total investment in research infrastructure including CFI contributions (typically 40 percent of project cost) plus those <u>from institutions</u> and their partners (typically 60 percent)

This fiscal year:

\$386.88 million

Total disbursements to eligible institutions

\$443.20 million

Allocations received from the Government of Canada

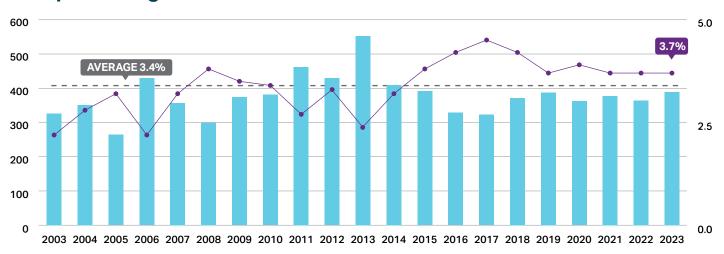
\$920.49 million

Awards approved

\$14.48<sub>million</sub>

CFI operating expenses

### Annual disbursements to institutions and operating expenses as a percentage of disbursements

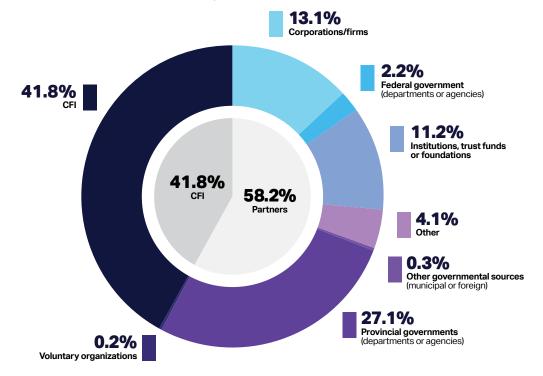


DISBURSEMENTS TO INSTITUTIONS (millions \$)

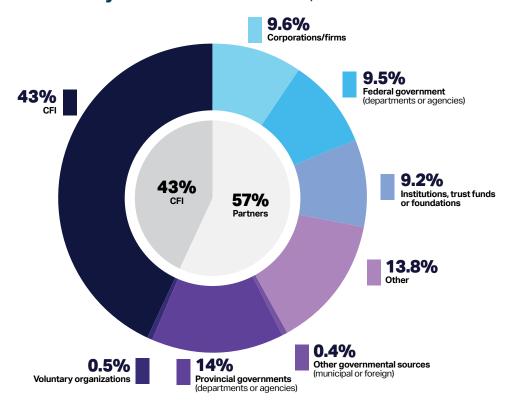
OPERATING EXPENSES
(as a % of disbursements to institutions)

<sup>\*</sup> The CFI has generated an additional \$1.7 billion in interest income since its inception, most of which has now been awarded to eligible institutions or used for CFI operating expenses.

### Contributions to eligible costs from the CFI and other funding sources since 1997: Total \$23.93 billion



### Contributions to eligible costs from the CFI and other funding sources for fiscal year 2022–23: Total \$2.14 billion



### Managing 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 2022. 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

The CFI performs ongoing oversight activities to ensure that institutions spend CFI funds as intended and have appropriate processes and controls in place to manage awards. These include:

- Contribution audits of projects where the CFI investment is \$10 million or more, as well as other projects, depending on risk
- Review of financial reports to allow us to monitor institutional spending for each project
- Monitoring visits to ensure institutions that receive funding have proper practices and processes in place to manage awards and to identify good practices used by institutions
- An annual financial trend analysis of all institutions with active CFI projects (started in 2022–23) to better align payments to institutions with the spending trends we observe and our experience with each institution.

#### Governance

#### **Board of Directors**

The CFI Board of Directors 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, industry, not-for-profit, institutional, academic and research sectors.

The Government of Canada appoints six Directors (these are 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, Board of Directors Audit and Finance Committee Governance and Nominating Committee Investment Committee

#### **Cecilia Moloney**

Vice Chair, Board of Directors Chair, Governance and Nominating Committee

#### William Waterman

Chair, Audit and Finance Committee Chair, Investment Committee

#### Catherine Aczel Boivie\*

Audit and Finance Committee Investment Committee

#### Lynda Brown-Ganzert\*

Governance and Nominating Committee

#### **Peter Dinsdale**

Governance and Nominating Committee

#### John Kelly\*

Audit and Finance Committee Investment Committee

#### Ronald Layden\*

Audit and Finance Committee Investment Committee

#### **Christopher Mushquash**

Governance and Nominating Committee

#### **Marc Ouellette**

Governance and Nominating Committee

#### Morag Park

Governance and Nominating Committee

#### **Gail Powley**

Governance and Nominating 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. Following a careful review of recommendations for possible candidates, Members nominate and appoint new 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.

#### Marilyn Luscombe

Co-Chair

#### **Louise Proulx**

Co-Chair

#### Lorne Babiuk

Members Governance and Nominating Committee

#### **Sophie Bouffard**

Jean-Paul Deveau

#### **Elizabeth Douville**

#### Joanne Gassman

Members Governance and Nominating Committee

#### Jack Gauldie

Chair, Members Governance and Nominating Committee

#### **Erasmus Okine**

#### Pierre Richard

Members Governance and Nominating Committee

#### **Luc Vinet**

David M. C. Walker

#### 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 fee of \$750 for attending Board or committee meetings.

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 2022–23, the remuneration of Board Directors ranged from \$2,300 to \$17,550.

### Ranges of remuneration for CFI staff

#### Executive team

Position level	2022–23 range
President	\$237,200 to \$332,200
Vice President	\$157,200 to \$217,700

#### Other staff

Position levels with pay ranges that exceed \$100,000/year	2022–23 range
7	\$130,300 to \$173,800
6	\$113,400 to \$151,400
5	\$103,200 to \$137,300
4S	\$92,600 to \$123,300
4	\$82,200 to \$109,600

### Understand

We use data to improve our processes and program delivery as well as to explore, assess and demonstrate our results and their benefits to Canadians.

#### Launching a new project progress report for the College Fund

We launched a new project progress report questionnaire to track the outputs and outcomes of projects funded under the College Fund. The new questionnaire aligns our data collection to college attributes and the objectives and prerequisites of the College Fund.

### Measuring the results of new funding programs

We worked with Innovation, Science and Economic Development (ISED) and the Social Sciences and Humanities Research Council (SSHRC) to develop the Performance Measurement Strategy Framework (PMSF) that aligns with the strategic objectives and expected results of the Biosciences Research Infrastructure Fund and the Canada Biomedical Research Fund. This PMSF was approved by the Tri-agency Institutional Program Secretariat (TIPS) Management Committee and submitted by ISED to the federal government's Treasury Board Secretariat. The PMSF shows how the funding for these initiatives helps contribute to Canada's Biomanufacturing and Life Sciences Strategy by identifying performance indicators and devising a data collection plan for reporting on the joint funding opportunity.

# Analyzing CFI investments in climate change and environmental sustainability research projects

We conducted two studies to assess CFI investments in research projects that address climate change and environmental sustainability (CCES). One looked at the scope of CFI investments in those areas; the other looked at the scientific and environmental impacts and benefits of those investments and included four case studies, to be released in fall 2023. Another series of case studies will be released in the next fiscal year.

Doug Thompson tends to a miniature forest of evergreens at the University of Northern British Columbia's Irving K. Barber Enhanced Forestry Lab, in Prince George, B.C.. The CFI-funded facility is a vital resource for forest ecology researchers.



### Connect globally

This year, we continued to engage with the global research infrastructure community. The CFI played a significant role in the International Conference on Research Infrastructures (ICRI) in Brno, Czechia, in October 2022. CFI staff participated in ICRI panels focusing on the issues of public communications and performance measurement associated with research infrastructure.

In addition, a CFI staff member co-chairs the Organisation for Economic Co-operation and Development's (OECD) Global Science Forum Expert Group on Very Large Research Infrastructures and another contributed to its study on the precarity of research careers, which addresses ways to improve work conditions for research jobs in the public sector.

We further demonstrated our international leadership in research infrastructure by continuing to participate in the Comité de pilotage scientifique (a scientific steering committee) of France's Agence nationale de la recherche, of which the CFI's President and CEO is a member.









Clockwise from top: The CFI's Vice President of Programs and Planning, Claire Samson, at the International Conference on Research Infrastructures in Brno, Czechia in October 2022; Heidi Bandulet, Senior Programs Officer at the CFI, speaks in her role as co-chair for the Organisation for Economic Co-operation and Development's (OECD) Global Science Forum Expert Group on Very Large Research Infrastructures; A panel of experts (left to right) including Bryony Butland, Programme Director for UK Research and Innovation, Claire Samson, Daniel Stach, journalist and science communicator, Karl Tischler (on screen), Head of Communications for EUROfusion and Michael O'Neill, Director of Policy and Strategic Engagement at the CFI, during a session entitled "Communicating Successes and Raising Awareness Among Decision Makers, their Influencers, and the Public"; Claire Samson helps open the conference.

### Communicate



# Convening a national conversation to highlight the importance of science literacy, communications and skills for young Canadians

We hosted a national conversation in June 2022 that included panelists from across the country who gathered to reflect on how to support young people with the skills and knowledge they need to make decisions on science-based issues. This was part of our 25th anniversary celebrations and was a collaboration with Acfas, an organization that contributes to the advancement of science in Quebec and other Francophone regions.

The event was a follow-up to a survey the CFI and Acfas commissioned in 2021 to shed light on the attitudes 18- to 24-year-old Canadians have toward science.

To help frame the conversation, Roseann O'Reilly Runte, President and CEO of the CFI, Mona Nemer, Canada's Chief Science Advisor, and Rémi Quirion, Chief Scientist of Québec (above, from left), discussed what we learned from the survey.

The conversation focused on three themes:

- · The role of educators in promoting science literacy
- The current state of science communication to build public trust
- The skills in science and technology that will contribute to the Canadian economy.

Among the conclusions were that science should be viewed as a journey that can lead to unpredictable outcomes — and that we need to be better at reflecting this reality in schools; that we should be communicating science in a way that acknowledges the limits of our understanding; and that we should ensure those interested in careers in science can see themselves in these careers and are provided with the opportunities and pathways to pursue them.

### Hosting a panel on social justice for a more empathetic world

To help mark our 25th anniversary, we held a panel discussion as part of the Congress of the Federation for Humanities and Social Sciences (FHSS) in May 2022.

Four experts addressed the question "What does social justice mean for you today, and how can research help advance it to forge the future you want?" by sharing their research in fields ranging from climate activism, social justice learning, queer and gender difference, and health and well-being.



### Discussing how students are critical contributors to research in Canada

The keynote panel discussion at our annual public meeting in December 2022 highlighted the importance of mentorship for students to develop skills, make discoveries and innovate.

The discussion, titled "Mentorship as a winning element in research and economic development," was moderated by Roseann O'Reilly Runte, CFI President and CEO (below, top right), and included two research mentors and their students:

- Marie-Josée Hebért (below, top left), Vice-Rector of Research, Discovery, Creation and Innovation at Université de Montréal in Montréal, Que., along with her former student, Alexandre Brodeur (below, top centre), who is now a research assistant at the Centre de recherche du Centre hospitalier de l'Université de Montréal
- Jeff Dahn (below, bottom left), Principal Investigator, NSERC/Tesla Canada Alliance Grant at Dalhousie University in Halifax, N.S., along with his student, Tina Taskovic (below, bottom right).





## Introducing a new online dashboard for an in-depth look at Canada's \$10-billion investment in research infrastructure

In March 2023, we launched a new feature on Innovation.ca to help visitors delve further into the extent of our investments in Canada's research enterprise.

Our funded projects dashboard showcases the more than 12,500 research infrastructure projects we have funded over the past 25 years.

Among other things, the dashboard allows visitors to:

- See a summary of CFI investments, including project name, total CFI contribution, institution, funding competition and year of award
- Scroll over a map view that breaks down funding by province and territory
- Do an in-depth search through the projects we have supported and filter the results by field of research, institution or funding competition.

This new dashboard is part of our commitment to be transparent and accountable for the investments we make.



### Launching a new podcast series about leading-edge science and the joy of discovery

We launched 10,000 ways, a new podcast series, in October 2022 that showcases the outstanding work of researchers in Canada and follows the inspirational — and sometimes revealing — journeys they took to find success.

In each episode of 10,000 ways, both up-andcoming and established researchers working in facilities funded by the CFI reveal their motivations, discoveries and hopes for future generations.



### **Promoting the Research Facilities Navigator**

In September 2022, we launched a campaign marking the onboarding of the 800th facility to the Research Facilities Navigator, the CFI's online directory of publicly funded labs that helps connect academia, industry and government with the research expertise, equipment and services they need to succeed.

We worked to raise the Navigator's profile with potential users, including through a collaboration with Mitacs, a national organization that encourages innovation by building partnerships between industry, academia and others.



Representatives of Montréal Polytechnique's Centre de recherche, développement et validation des technologies et procédés de traitement des eaux (CREDEAU) joined CFI staff at the Federation of Canadian Municipalities' Sustainable Communities Conference to demonstrate how publicly funded facilities are working with municipalities to meet their sustainability goals. Above, from left, CREDEAU's Shokoufeh Nour and Natasha McQuaid.

"The Navigator is a great tool for connecting industrial and commercial needs with academic resources and solutions."

– Gordon Nish, Geomatics manager at IRED Thermal Group, Edmonton

# Looking toward the future

What we are working on for 2023–24:

- Ensuring that Northern researchers have access to state-of-the-art research infrastructure through the first competition of the Northern Fund
- Supporting the administration of the joint funding opportunity between the Biosciences Research Infrastructure Fund and the Canada Biomedical Research Fund
- Completing the final stages of review and Board decisions for the 2023 Innovation Fund competition, which will result in a \$520-million investment in research infrastructure and operations and maintenance support
- · Celebrating 10 years of the Research Facilities Navigator
- Working with like-minded organizations to communicate the importance of STEM education and skills development for young Canadians to help keep the issue of trust in science on the public agenda
- Highlighting the value of our investments in the areas of climate change and environmental sustainability through events, stories and reports
- Updating our *Performance*, *evaluation*, *risk* and audit *framework* to better reflect a changing environment and evolving priorities
- Working collaboratively with the provinces, the three federal research funding agencies, National Research Council Canada, Laboratories Canada, Mitacs, UK Research and Innovation and others to better serve the research community by sharing knowledge, best practices and, where possible, resources

Financial statements March 31, 2023

#### 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, 2023, 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, 2023 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 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.

Ottawa, Canada June 12, 2023 Chartered Professional Accountants Licensed Public Accountants

Ernst + young LLP



#### Statement of financial position

As at March 31

	2023	2022
	\$	\$
Assets		
Cash and cash equivalents [note 4]	203,308,131	153,174,317
Interest and other receivables	1,426,645	855,306
Prepaid expenses	401,239	322,586
Capital assets, net [note 5]	1,473,005	1,773,306
	206,609,020	156,125,515
Link With a residence of a second		
Liabilities and net assets		
Liabilities		
Accounts payable and accrued liabilities	1,968,696	1,492,252
Deferred lease inducement [note 6]	415,238	485,419
International Conference on Research Infrastructure		
project deposits		295,101
	2,383,934	2,272,772
Deferred contributions [note 7]		
Expenses of future years	202,752,081	152,079,437
Capital assets	1,473,005	1,773,306
Total liabilities	206,609,020	156,125,515
Commitments [note 8]		
Net assets [note 9]		
	206,609,020	156,125,515

See accompanying notes

On behalf of the Board:

Thekeny Director June 12, 202

#### **Statement of operations**

Year ended March 31

	2023	2022
	\$	\$
Revenue [note 7]		
Recognition of deferred contributions related to amounts		
granted to eligible recipients	386,876,627	362,387,403
Recognition of deferred contributions related to current-year		
operations	14,050,085	13,001,422
Amortization of deferred contributions related to capital assets	425,741	439,134
	401,352,453	375,827,959
Expenses		
Grants to eligible recipients	386,876,627	362,387,403
General and administration	14,050,085	13,001,422
Amortization of capital assets	425,741	439,134
	401,352,453	375,827,959
Excess of revenue over expenses for the year	_	_

See accompanying notes

#### Statement of cash flows

Year ended March 31

	2023	2022
	\$	\$
Operating activities		
Excess of revenue over expenses for the year	_	_
Add (deduct) items not affecting cash		
Amortization of capital assets	425,741	439,134
Amortization of deferred contributions related to capital assets	(425,741)	(439,134)
Decrease in deferred contributions related to expenses of future		,
years net of investment income [note 7]	(392,527,650)	(374,462,280)
Net change in non-cash working capital balances	, , ,	,
related to operations [note 11]	(538,830)	(92,200)
Cash used in operating activities	(393,066,480)	(374,554,480)
Capital activities		
Purchase of capital assets	(125,440)	(58,480)
Increase in deferred contributions related to capital assets	125,440	58,480
Cash used in capital activities		
	-	
Financing activities		
Grants received [note 7]	443,200,294	338,550,000
Cash provided by financing activities	443,200,294	338,550,000
Net increase (decrease) in cash and cash equivalents		
during the year	50,133,814	(36,004,480)
Cash and cash equivalents, beginning of year	153,174,317	189,178,797
Cash and cash equivalents, end of year	203,308,131	153,174,317

See accompanying notes

#### Notes to financial statements

March 31, 2023

#### 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:

#### Cash and cash equivalents

Cash and cash equivalents consist of cash deposits and short-term investments with terms to maturity less than 90 days from the date of acquisition or that are able to be cashed on demand.

#### 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 to be 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 cash and cash equivalents, interest and other receivables and accounts payable and accrued liabilities at amortized cost using the effective interest method of amortization, which approximates fair value given the short term to maturity. Transactions are recorded on a settlement date.

#### Notes to financial statements

March 31, 2023

#### 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 improvementsTerm of the leaseFurniture and other equipment5 yearsComputer and software3–5 yearsAwards management systemFully amortized

#### 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 the 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, 2023, the CFI has met its objective of having sufficient liquid resources to meet its current obligations.

#### 4. Cash and cash equivalents

Cash and cash equivalents comprise the following financial instruments:

	20	2023		)22
	Fair value \$	Carrying value \$	Fair value \$	Carrying value \$
Cash	181,388,641	181,388,641	122,192,030	122,192,030
Cash equivalents	21,921,907	21,919,490	30,981,963	30,982,287
	203,310,548	203,308,131	153,173,993	153,174,317

#### **Notes to financial statements**

March 31, 2023

#### Market risk

Interest rate risk

Interest rate risk arises when the value of a financial instrument fluctuates due to changes in market interest rates.

The CFI invests in money market securities and deposit 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, 2023, the entire portfolio is composed of cash and short-term money market securities. As such, fluctuations in market price would have a minimal impact, if any, on the fair value of the financial instrument.

The CFI's grant commitments do not exceed the total of its financial instruments, related investment income and grants committed from the government that will be received in future years. The timing of financial instruments 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 deposit accounts are tiered-rate interest accounts that combine competitive interest, liquidity and security of a simple deposit account. The interest rates for these accounts range from 0.75% to 4.85% [2022 - 0.20% to 0.85%].

#### 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 cost-effective manner.

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

All money market securities mature between April 2023 and May 2023.

#### 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.

#### Notes to financial statements

March 31, 2023

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% [2022 – 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:

		2023		2022
	Cost \$	Accumulated amortization \$	Net book value \$	Net book value \$
Leasehold improvements	2,309,461	1,017,933	1,291,528	1,509,815
Furniture and other equipment	823,862	769,091	54,771	182,859
Computers and software	1,049,118	922,412	126,706	80,632
Awards management system	6,629,688	6,629,688	_	_
9	10,812,129	9,339,124	1,473,005	1,773,306

Total cost and accumulated amortization related to capital assets held as at March 31, 2022, were \$11,125,449 and \$9,352,143, respectively.

The awards management system became fully amortized on March 31, 2021. On-going maintenance of this system is charged to expenses.

#### 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 11 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, 2023, the unamortized balance is \$415,238.

#### 7. Deferred contributions

The CFI operates under two active Funding Agreements and four Contribution Agreements with the Government of Canada. As at March 31, 2023, the Government of Canada had committed \$11.63 billion in grants to the CFI under these agreements, of which \$7.22 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 the Parliament, based on the estimated cash requirements for the year. During the fiscal year, the CFI received \$443.2 million [2022 – \$338.6 million] related to these agreements.

#### **Notes to financial statements**

March 31, 2023

#### **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.

	2023	2022
	\$	\$
Balance, beginning of year	152,079,437	187,991,717
Add grants received	443,200,294	338,550,000
Add restricted interest revenue earned	8,524,502	985,025
Less amount recognized as revenue	(400,926,712)	(375,388,825)
Less amount applied toward capital assets	(125,440)	(58,480)
Balance, end of year	202,752,081	152,079,437

#### 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.

	<b>2023</b> \$	<b>2022</b> \$
Balance, beginning of year	1,773,306	2,153,960
Add restricted grants applied towards the purchase of capital assets	125,440	58,480
Less amount amortized to revenue	(425,741)	(439,134)
Balance, end of year	1,473,005	1,773,306

#### 8. Commitments

During the year, the CFI approved grants for a maximum amount of \$920.5 million [2022 – \$130.7 million]. Total disbursements to eligible recipients during the fiscal year were \$386.9 million [2022 – \$362.4 million]. As at March 31, 2023, the CFI has approved grants for a maximum amount of \$9,992.0 million, of which \$8,446.6 million had been disbursed. To date, the CFI has award agreements in place related to these approved grants in the amount of \$8,987.1 million and, therefore, has outstanding contractual obligations of \$540.5 million as at March 31, 2023.

#### Notes to financial statements

March 31, 2023

The CFI estimates these obligations to be disbursed as follows:

	\$ millions
2024	145.5
2025	121.6
2026	96.9
2027	78.8
2028 onwards	97.7
Total estimated disbursements	540.5

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 participate in the Universities Canada Pension Plan [the "Plan"], a defined contribution plan managed by Sun Life Financial Inc. The total contributions to the Plan are 18% of the employee salary of which 5% is from the employee and 13% from the CFI. The employer contributions made to the Plan during the year ended March 31, 2023 amounted to \$965,505 [2022 – \$906,550] and are recorded in General and administration expenses.

#### 11. Statement of cash flows

The net change in non-cash working capital balances related to operations consist of the following:

	<b>2023</b> \$	<b>2022</b> \$
Interest and other receivables	(571,339)	(34,675)
Prepaid expenses	(78,653)	(9,826)
Accounts payable and accrued liabilities	476,444	213,971
Deferred lease inducement	(70,181)	(70,181)
International Conference on Research Infrastructure project deposits	(295,101)	(191,489)
	(538,830)	(92,200)