

RESEARCH
BUILDS OUR
communities

ANNUAL
REPORT
2016-17



20

YEARS • ANS

INNOVATION.CA

CANADA FOUNDATION
FOR INNOVATION

FONDATION CANADIENNE
POUR L'INNOVATION

INNOVATION.CA

CANADA FOUNDATION
FOR INNOVATION

FONDATION CANADIENNE
POUR L'INNOVATION

**450-230 Queen Street
Ottawa ON K1P 5E4**

Telephone: 613.947.6496

Fax: 613.943.0923

Email: info@innovation.ca

Annual Report 2016-17

ISBN: 978-1-926485-11-9

ISSN: 1489-5978

ON THE COVER:

RESEARCH BUILDS MY ARCTIC COMMUNITY

Trevor Lucas, ashore here in Inuvik, Northwest Territories, has made nine voyages through Canadian Arctic waters as a Marine Wildlife Observer aboard the Canadian research icebreaker *CCGS Amundsen*. His notes and photos of bowheads and belugas, of seals and polar bears and birds, are part of a wide range of activities carried out annually on the *Amundsen*, among the best equipped research vessels in the world.

Photo: Keith Levesque



RESEARCH BUILDS OUR COMMUNITIES

Community is the place we live, the shared experiences that bind us to other people. It's where we come from, it shapes where we are headed. And community is built of many things: the physical spaces around us, the roads and communication lines that connect us, the beliefs and policies that guide us, and above all, that intrinsically human desire to reach out, to be supported by others, to understand our neighbours, to help. Research, ultimately, is one way we do all of these things better. In the social sciences and humanities, we delve into who we are, what makes us human, what drives us, so we can know ourselves better. In the physical sciences, we query the rules of nature

that govern us and ask "How can we put these to use for the good of us all?" We make things better for each other.

Research contributes to building strong, inclusive and diverse communities. This includes communities of people from across the country, and in particular Indigenous communities at a time when truth and reconciliation is paramount. To mark our 20th anniversary, we asked Canadians to tell us how research builds their community. Their stories are featured throughout this report and formed the basis for many of our celebrations throughout the year.

Photos, left to right: Christinne Muschi, Ben Nelms, David Stobbe, Christinne Muschi, Patrice Halley, Dale Wilson, Keith Levesque



RESEARCH BUILDS MY *Canadian* COMMUNITY

Jacqueline Mboko overlooks the Thames River in London, Ont. She came to Canada from the Democratic Republic of the Congo with her family when she was 13 years old and now works as an interpreter for other Swahili- and French-speaking newcomers. Pathways to Prosperity, a research partnership led by nearby Western University, looks at ways of providing services to immigrant families like Mboko's that will help them more easily settle into their new home.

Photo: Christinne Muschi

CELEBRATING TWO DECADES OF THE CANADA FOUNDATION FOR INNOVATION



Gilles G. Patry,
President and CEO



Kevin P. D. Smith,
Chair, Board of Directors

This year marks a milestone for the Canada Foundation for Innovation (CFI). In truth, it is also a milestone for Canadian research.

That is because it has been 20 years since the creation of the CFI, which has profoundly transformed how research is undertaken in Canada.

A bold vision to revitalize an ailing research ecosystem was behind the idea of the CFI. In the 1990s, the challenge was clear. Research infrastructure at our universities, research hospitals and colleges was not keeping pace with the needs of modern science, which undermined the ability of our best minds to query the cutting-edge questions that would allow them to lead in their fields.

Many looked elsewhere. Many left. “Brain drain” became a household phrase. It was a problem that had Canadian academic leaders worried. The talent and reputation of researchers was among their greatest assets. How could they compete when their key scientists were heading for the door?

Through a confluence of political will, fiscal opportunity and dire need, an idea of an organization dedicated to funding research infrastructure was brought to fruition. The CFI would provide state-of-the-art equipment and facilities that our researchers needed to think big, reach higher and help Canada lead in the new knowledge era the 21st century promised.

The creation of the CFI by the Government of Canada in 1997 was in itself an experiment to set Canadian research on a new path, and it worked. When it comes to research facilities and equipment, we’re not playing catch-up anymore; we’re setting the pace by providing Canadian researchers with cutting-edge tools.

The 2016-17 fiscal year, which started April 1, 2016, was no exception. With some 507 projects awarded over \$470 million this past year, it is clear that the CFI continues to play a vital role in building Canada’s capacity for research and innovation.

At the end of the year, we also welcomed the news that Dr. Roseann O’Reilly Runte would be the fifth President and CEO of the CFI, beginning in August 2017. As a well-regarded, highly skilled leader and strategic visionary, Dr. Runte is well positioned to move the CFI forward.

As we embark on our next phase the ultimate measure of our achievements continues to be the difference our research endeavours have made in the quality of life of Canadians. That research builds communities is a simple truth we see reflected in our work every day, and which is brought into focus through the stories and images in this report.

An anniversary is a chance to look back at what we’ve accomplished over the decades, but more importantly, to look forward toward the potential we’ve created. This year, we produced a commemorative collection of stories for our 20th anniversary called *Innovation: A desire to make things better* (which you can read on our website, Innovation.ca). It challenges us all to realize that there is almost no limit to how research can inform us, and that our innately human drive to innovate touches our lives in many ways. It reminds us to imagine the possibilities for Canadian research and innovation over the next 20 years.

OVERVIEW

PROVIDING WORLD-CLASS RESEARCH INFRASTRUCTURE

Researchers cannot do world-class research without world-class research infrastructure. The Canada Foundation for Innovation was created in 1997 to fund the state-of-the-art tools essential for conducting leading-edge research in the 21st century. The CFI supports the evolving needs of Canada's universities, colleges and research hospitals 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-the-art equipment, laboratories and facilities.

MEETING OUR MANDATE

Our 2015 contribution agreement with the Government of Canada states that the CFI's objectives are to:

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

RELYING ON A SMART FUNDING MODEL

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 secure the remaining 60 percent through partnerships with provincial governments and other public, private and non-profit organizations. This means the more than \$7 billion invested by the Government of Canada through the CFI has been leveraged into a total investment of close to \$17.5 billion in research infrastructure in Canadian institutions since the CFI was created.

SUPPORTING EXCELLENCE

The CFI has a well-established, rigorous and independent merit-review process that rewards research excellence. We rely on experts from around the world to ensure that only the best projects are funded. CFI funding is awarded to institutions, and all funding proposals must support the institutions' strategic research plans. Proposals from eligible Canadian institutions are assessed 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.

Since its creation in

1997

the CFI has committed more than

\$7.1 billion

in support of

9,925

projects at

147

research institutions in

71

municipalities across Canada*

**as of March 31, 2017*

HISTORY

20 YEARS OF MILESTONES IN SUPPORTING WORLD-CLASS CANADIAN RESEARCH

February 1997

Build it, and they will innovate

What do you get when you combine a federal surplus and a research community in need of newer, better labs and equipment? The CFI, of course. Which is why the Government of Canada proposes to create the CFI to give researchers the tools they need to think big and innovate.

April 1997

Day one

We're established with a five-year mandate, \$800 million in the bank and grand plans to reshape Canada's research landscape over the next half decade.

December 1997

First meeting of the minds

Our Board of Directors meets for the first time and approves funding mechanisms and eligibility guidelines. The first deadline for submissions for CFI funding is set for May 1998.

June 1999

And the winners are ...

Competition recipients are announced under four different funds — the Institutional Innovation Fund, Research Development Fund, New Opportunities Fund and the College Research Development Fund. Fifty-one Canadian institutions receive \$226 million for 122 projects across the country.

February 2000

More time to make positive change

The 2000 Federal Budget includes an additional \$900 million in funding for the CFI, extending our original five-year mandate to 2005.

December 2000

Making new friends

We forge a funding partnership with the Canada Research Chairs Program, which invests around \$265 million a year to attract and retain some of the world's brightest minds.

June 2003

Tackling big health issues with a big fund

To increase Canada's capacity to conduct world-class research in critical health-related areas, we launch the Research Hospital Fund, a \$500 million fund for large-scale, research-hospital-based infrastructure projects.

January 2009

New funding, more opportunities

The Federal Government allocates \$750 million to the CFI for leading-edge research infrastructure. In addition, the 2009 Federal Budget provides \$600 million for future activities of the CFI, including new competitions.

December 2013

Online dating for businesses and research

The Research Facilities Navigator launches to help industry find labs and expertise. The online directory lists research facilities across the country that are open to working with business.

April 2015

A vote of confidence for Canada's research community

Federal Budget 2015 includes \$1.33 billion for the CFI, the largest single investment in research infrastructure in the country's history.

June 2015

Innovative awards for innovative minds

We become a founding partner of the Governor General's Innovation Awards, responsible for managing the adjudication process.

September 2016

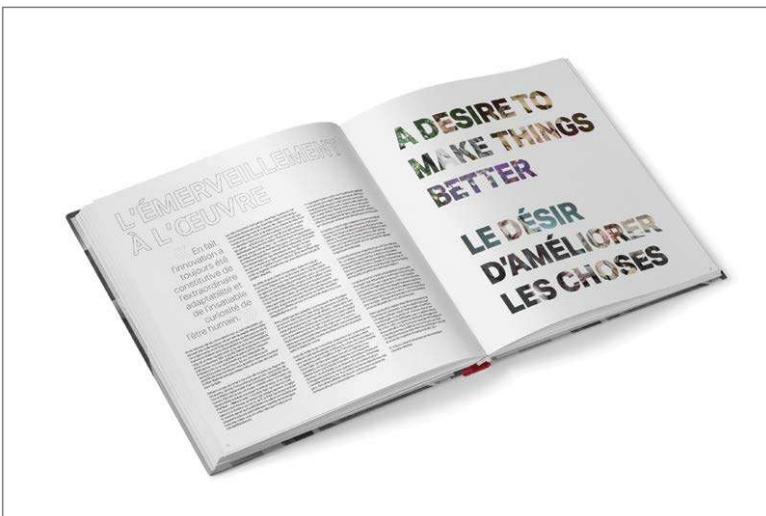
20th anniversary campaign kicks off

We celebrate 20 years of CFI-funded research with a fresh new website full of stories of how research builds communities across Canada.

CELEBRATING 20 YEARS



More than 100 guests, including researchers and community members, Senators, Members of Parliament, political staff and research funding leaders, attended *Research Builds Our Communities*, an event held on February 14 in Ottawa. The event was hosted by Member of Parliament Lloyd Longfield and CFI President and CEO Gilles Patry (pictured at right), and provided guests with the opportunity to meet researchers and Canadians who benefit from research.



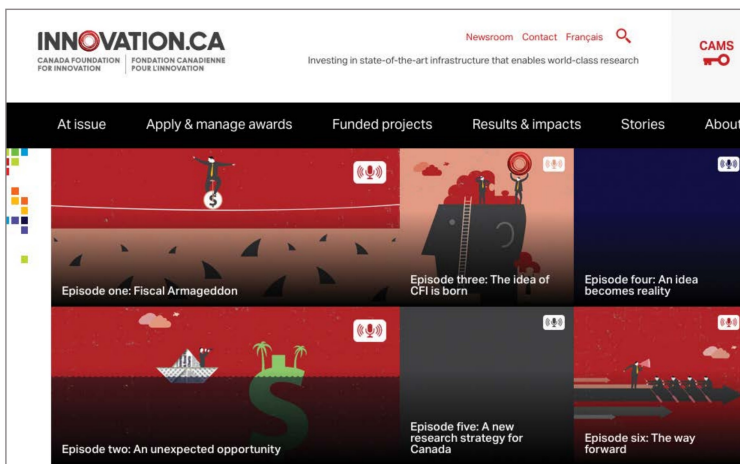
Innovation starts with an idea. It is built on understanding and powerful discoveries and a desire to make things better. That was the message of our 20th anniversary, limited edition commemorative book which gathered dozens of stories that illustrate the breadth of ways in which research and innovation change our world and transform us — from our health, our economy and our planet, to how we understand our past and how we envision our future. A small number of the books came encased in a 3D-printed art piece created by Mohawk College's Additive Manufacturing Resource Centre.



As part of a campaign to demonstrate the impact of research supported by the CFI on communities across the country, ads appeared in publications including *University Affairs*, *Hill Times* and *Québec Science*, as well as in the Ottawa airport.



We partnered with *The Globe and Mail* and *Le Droit* to produce supplements featuring stories from across Canada of how research builds communities. “La recherche au service de ma collectivité” came out as a special supplement in *Le Droit*, *La Presse* and seven French dailies across Quebec on November 19, reaching over 1.7 million people. A 20-page supplement in *The Globe and Mail*, “Excellence in Research and Innovation,” was published November 22, reaching over a million people.



The new Innovation.ca, launched September 14, marks the culmination of many months of planning, designing, programming and content development. The new site prioritizes three of our core values: providing effective services to our clients, being accountable and being innovative. To that end, we emphasized an intuitive user experience, clear navigation, and up-to-date best practices including accessibility and responsive design.



Andrew Pelling explains how prioritizing curiosity allows his lab to take the most audacious ideas and turn them into reality. Pelling, who gave the keynote address at our Annual Public Meeting on December 5, is Canada Research Chair in Experimental Cell Mechanics and a professor at the University of Ottawa.



RESEARCH BUILDS OUR *agriculture* COMMUNITY

Albert Leyenhorst and his son, Logan, are second and third generation dairy and cash crop farmers in Dalmeny, Sask. The University of Saskatchewan's Canadian Feed Research Centre in nearby North Battleford is developing new ways of processing grain by-products to make feedstocks that are better for milk production, for the good of both grain and cattle farmers across Canada.

Photo: David Stobbe

ACCOMPLISHMENTS 2016-17

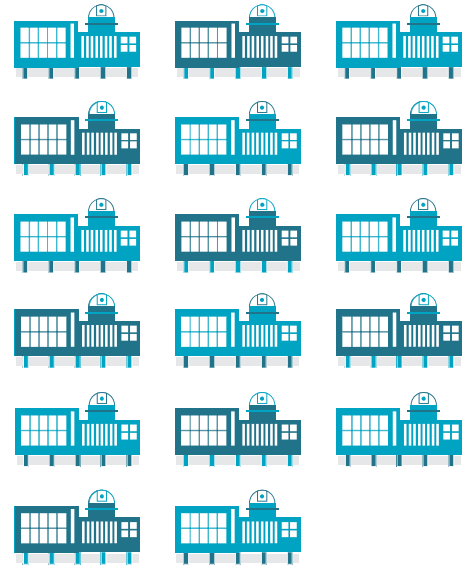
BIG SCIENCE

State-of-the-art national research facilities like SNOLAB in Sudbury, or the International Vaccine Centre at the University of Saskatchewan, are essential for enabling Canadian researchers to undertake world-class research and technology development that leads to social, health, economic or environmental benefits for Canadians. The Major Science Initiatives Fund helps cover the significant ongoing costs of operating and maintaining these kinds of facilities. This support allows the capabilities of these national research assets to be fully exploited and encourages the best possible governance and management practices for these facilities. The 2015 Federal Budget included \$400 million for this fund, most of which was awarded this year. Between now and 2020, the facilities will be reviewed and the remaining \$71.5 million of the funding will be awarded.

Decisions for the 2017-22 competition for this fund were made by the Board of Directors in September.

\$328.5 million

17 national research facilities



LEADING THE WORLD

The Innovation Fund supports promising and innovative research or technology development in areas where Canada currently is, or has the potential to be, competitive on the global stage. The competition was worth up to \$425 million from the CFI in research infrastructure costs. Proposals for this fund were submitted in October. The merit-review process began in November and was completed in May 2017, with final decisions in June.

SUPPORTING THE BEST AND BRIGHTEST

The John R. Evans Leaders Fund helps institutions attract and retain world-leading researchers. It does so by providing support for institutions to acquire foundational infrastructure — this can be either basic workhorse-type research tools or leading-edge equipment, both of which can be important additions to the institution's research capacity. These tools enable the work of leading research faculty, and help the institution create competitive research support packages including both infrastructure and a portion of operating and maintenance costs.

KEEPING PACE WITH BIG DATA

\$20 million
toward Canada's
high-performance
computing platform

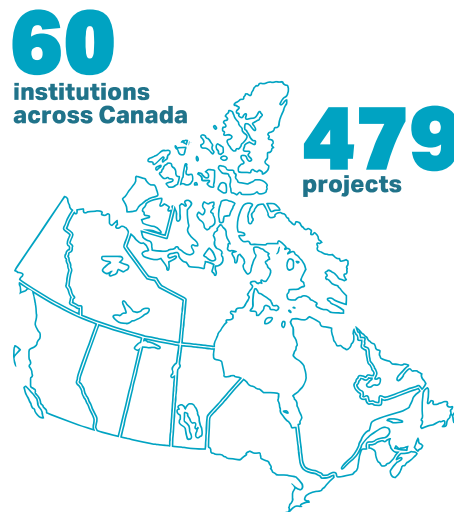


EXPERT REVIEW FOR THE INNOVATION FUND BY THE NUMBERS

Expert review committees are a critical step in our rigorous merit-review process. Here is a snapshot of our committees for this year's Innovation Fund.

- Almost 360 committee members
- 73 Expert Committees
- 24 percent of Expert Committee members were from Canada, 50 percent were from the United States and 26 percent were from other countries
- 41 committees met in person and the other 32 convened by teleconference
- 31 proposals included a face-to-face meeting between the Expert Committee and institutional representatives

\$84.7 million
from the John R. Evans
Leaders Fund



The Cyberinfrastructure Initiative aims to create data resources such as databases and data repositories for leading-edge research on important scientific, social and economic questions. To meet this goal, our Board approved \$20 million for Canada's advanced research computing platform. We also launched a competition in March under this fund in which we challenged institutions and researchers to come together to form consortia and propose research data infrastructure projects that create tailored, shared and integrated data resources that can be used by multiple institutions. We expect to fund five to 10 proposals.

WORKING WITH INDUSTRY

The College-Industry Innovation Fund (CIIF) enhances the capacity of colleges to support business innovation in Canada by providing them with state-of-the-art, industry-relevant research infrastructure to foster partnerships with the private sector in a specific area of strategic priority to the institution.

Stream 1 of this fund supports infrastructure requests aimed at enhancing existing applied research and technology development capacity in colleges. Six projects received funding from this stream this year, ranging from helping small businesses get new food and beverage products to market faster, to helping small-scale farmers find sustainable production systems for new crops, to finding new markets for Quebec's metallurgical sector.

Stream 2 of this fund supports research infrastructure associated with an application for a five-year grant from the tri-agency's College and Community Innovation - Innovation Enhancements program, which is managed by the Natural Sciences and Engineering Research Council of Canada (NSERC). This joint initiative allows colleges to apply for a comprehensive funding package supporting both research activities and research infrastructure costs. This year, four projects were awarded \$3.8 million for research ranging from developing mobile technology to serve healthcare needs, to making aircraft more energy efficient, to fostering a smart economy, to making better use of pulp and paper by-products.

\$9.2 million

from the College-Industry Innovation Fund

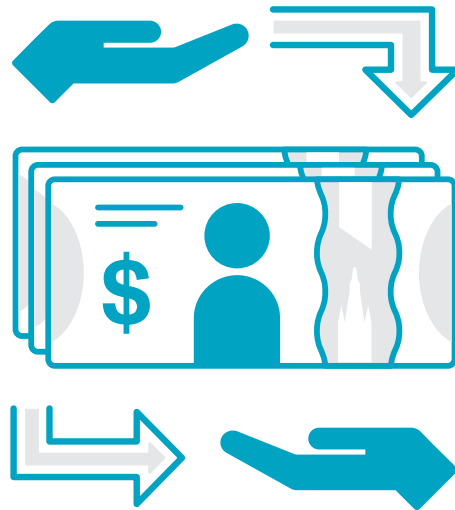


KEEPING THINGS RUNNING

The Infrastructure Operating Fund provides funding equivalent to 30 percent of CFI capital awards to assist institutions in the operation and maintenance of CFI-funded infrastructure.

\$28.2 million

to operate and maintain labs and equipment



FOSTERING CANADIAN INNOVATION

The winners of the inaugural Governor General's Innovation Awards were announced in April 2016. This year, the CFI, a founding partner of the awards, was once again invited to manage the adjudication process, drawing on the best practices of our merit-review process. The 2017 recipients were announced in May.

RESEARCH INFRASTRUCTURE ON A GLOBAL SCALE

International cooperation is key to bridging a global skills gap and growing innovation hubs around the world: that was the final consensus of the International Conference on Research Infrastructure, which was held in Cape Town, South Africa in October. This biennial conference is sponsored by the European Commission and is unique in that it deals with research infrastructure on an international scale. About 600 scientists, policy makers, academics and other stakeholders from 60 countries attended.

CFI representatives participated in sessions about expanding partnerships across disciplines, sectors and world regions and building digital platforms to facilitate those partnerships. The CFI Research Facilities Navigator was presented as an example of an online platform that helps businesses and other research partners find the research equipment and expertise they seek.

“
International cooperation is key to growing innovation hubs around the world.
”

INNOVATIVE WAYS TO MEASURE RESULTS

We use several approaches to assess the impacts of CFI funding. One new approach introduced this year, a “catalyst study,” aims to assess the overall impact CFI investments at one institution have had in a particular research area.

This year, we looked at Acadia University’s Centre for Analytical Research on the Environment, which studies and measures contaminants in the environment at trace levels. We wanted to understand the interplay among five John R. Evans Leaders Fund awards in multiple disciplines led by different project leaders at the university, and how this CFI funding has helped precipitate positive changes.

The study found that by locating the research infrastructure from all five awards under one roof at the K.C. Irving Environmental Science Centre, this smaller university is having a big impact. The centre has been able to attract researchers in the area of environment to form a multidisciplinary group of scientists and solidify its reputation as a hub with expertise in environmental research and training. This has helped the institution secure collaborations nationally and internationally.

GATHERING EVIDENCE

After a CFI-funded project becomes operational, the institution receiving funding must submit a progress report every year for up to five years. We compile this information into an annual report on results to illustrate the outcomes of CFI-funded infrastructure. The data we collect ranges from the importance of cutting-edge infrastructure in attracting and retaining researchers to the number of trainees using it to the role of CFI-funded infrastructure in developing new technologies and creating jobs.

Here are a few ways CFI funding had an impact in Canadian institutions in 2016*:

Providing a state-of-the-art training environment for the next generation:

23,000



postdoctoral fellows, graduate students and undergraduates honed their research skills using CFI-funded infrastructure.

**Attracting a diverse pool
of research talent:**

200



**new project leaders
were recruited
to Canadian
institutions, just
over half from
outside Canada.**

Fostering research collaborations:

1,900



**new research agreements with
other academics and with the
private sector were facilitated
by CFI-funded infrastructure.**

** Numbers are rounded. This year, the annual report on results includes data from 1,601 progress reports submitted by 85 institutions.*

**OUR VOICE IN THE
FUNDAMENTAL SCIENCE REVIEW**

In October, our Board of Directors provided a submission to the Panel for Canada's Fundamental Science Review, an independent review of federal funding for fundamental science launched by Minister of Science, Kirsty Duncan, in June. The Board emphasized that the overall structure of the Canadian research support system is well designed, particularly at the federal level, but that there is opportunity for improvement. It identified a number of issues it considers to be of strategic importance to the way the Government of Canada supports state-of-the-art research infrastructure through the CFI, and to the foundation's ability to meet its mandate to increase the capabilities of Canada's research community to conduct world-class research. These issues included, among others: the benefits of ongoing and stable research infrastructure support; the importance of sustaining the operations and maintenance of a range of research facilities and the need for a Big Science roadmap for Canada — all of which were captured in the panel recommendations released in April 2017.

“

The overall structure of the Canadian research support system is well designed, but there is opportunity for improvement.

”





RESEARCH BUILDS OUR *healing* COMMUNITY

Breast cancer survivors and cherished friends (from left) Mary Chow-Humphries, Kara Horsman, Alana van Dam, Yvonne Eng, Julie Donegan, Ling Takara, Christine Gaio and Sharon Shum, became each other's support network after participating in a study on the effects of exercise on recovery from breast cancer. The research was conducted at the University of British Columbia.

Photo: Ben Nelms

MONITORING INCLUSIVITY AND DIVERSITY

A world-class innovation system depends on participation from everyone, regardless of gender, age, disability or ethnicity. Each year, we engage hundreds of individuals, from our review committees to the leaders of the projects we fund. In March we added a series of questions to our Awards Management System to collect data on age, disability and gender identity of the people we work with, and whether or not they identify as Indigenous or a visible minority. We've taken care to ensure that none of this data is associated with our adjudication process for funding. Rather, it will allow us to better understand the research community we serve, to monitor trends and to examine the design and delivery of our programs and processes for signs of potential bias.

REVIEWING OUR INVESTMENT STRATEGY AND POLICY

Our investment strategy and policy were both reviewed in the fall of 2016 by the CFI Board's Investment Committee, which oversees the management and investment of CFI funds. Our portfolio of investments is decreasing and will continue to do so in the coming years. We no longer receive large instalments of funding upfront from the government. Rather, since 2008, only funds sufficient to cover projected award disbursements to institutions in a given year are provided to the CFI each year. This requires that we concentrate on more liquid investments and that we maintain an appropriate liquidity policy.

REMAINING ACCOUNTABLE FOR TAXPAYER DOLLARS

The CFI visits recipient institutions to discuss their policies, practices, processes and controls for grant management over the lifecycle of CFI awards, and reviews evidence to assess how well they are managing CFI-funded projects. We use a risk-based approach to select institutions for monitoring visits. This year, we conducted nine visits during which we also shared good practices different institutions use for managing CFI funds.

Contribution audits and other cost reviews ensure the funding received by an institution for a given project has been used in accordance with the terms and conditions of the award and our policies and guidelines. We performed 11 contribution audits or other cost reviews in 2016-17. A risk-based approach is used to select which projects will be audited. All projects with a CFI contribution exceeding \$10 million are automatically subject to an audit. The risks associated to a project determine the scope, nature and extent of the audit activities.

Financial reports are submitted by institutions for each CFI-funded project at specific intervals, ranging from quarterly reporting to reporting every two years. The frequency is determined by the complexity and risk of each project. This year we received 985 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.

FINANCIAL HIGHLIGHTS

For the year ending March 31, 2017, disbursements to eligible recipients totalled \$320.7 million, only slightly less than the previous year's total of \$326.9 million. Operating expenses were \$14.4 million, up from \$13.8 million the previous year, which reflects the high volume of funding competitions and their proposal review activities. Our ratio of operating expenses as a percentage of annual disbursements to recipient institutions remained low at 4.5 percent in fiscal 2016-17, and cumulatively now stands at 3.2 percent since the CFI was created in 1997.

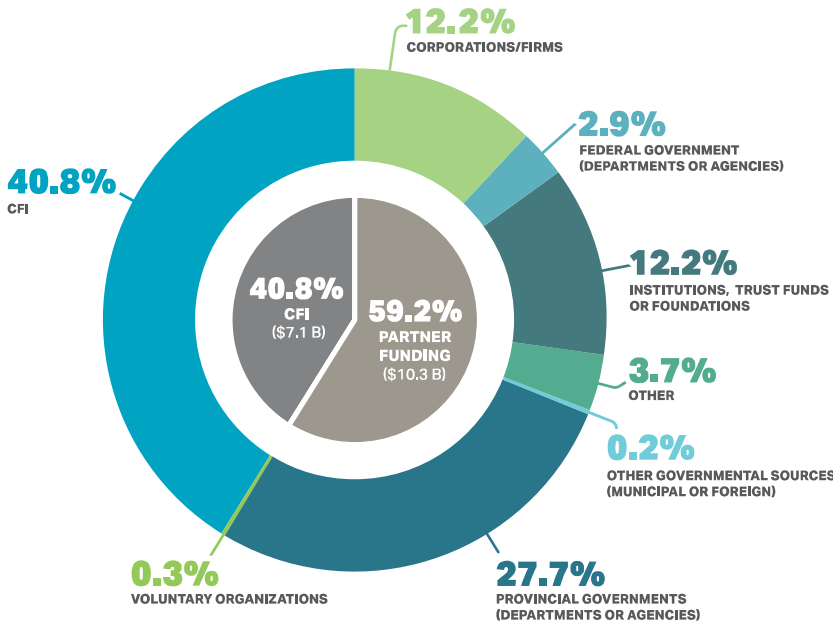
In 2016-17, the CFI approved grants for a maximum amount of \$470.6 million. Disbursements related to these grants will take place over the years as projects are implemented.

Since it began, the CFI has approved grants for a maximum amount of \$7.1 billion, including \$1.69 billion of investment revenues earned so far. CFI contributions, along with those from institutions and their partners, have resulted in an investment of approximately \$17.4 billion in research infrastructure.

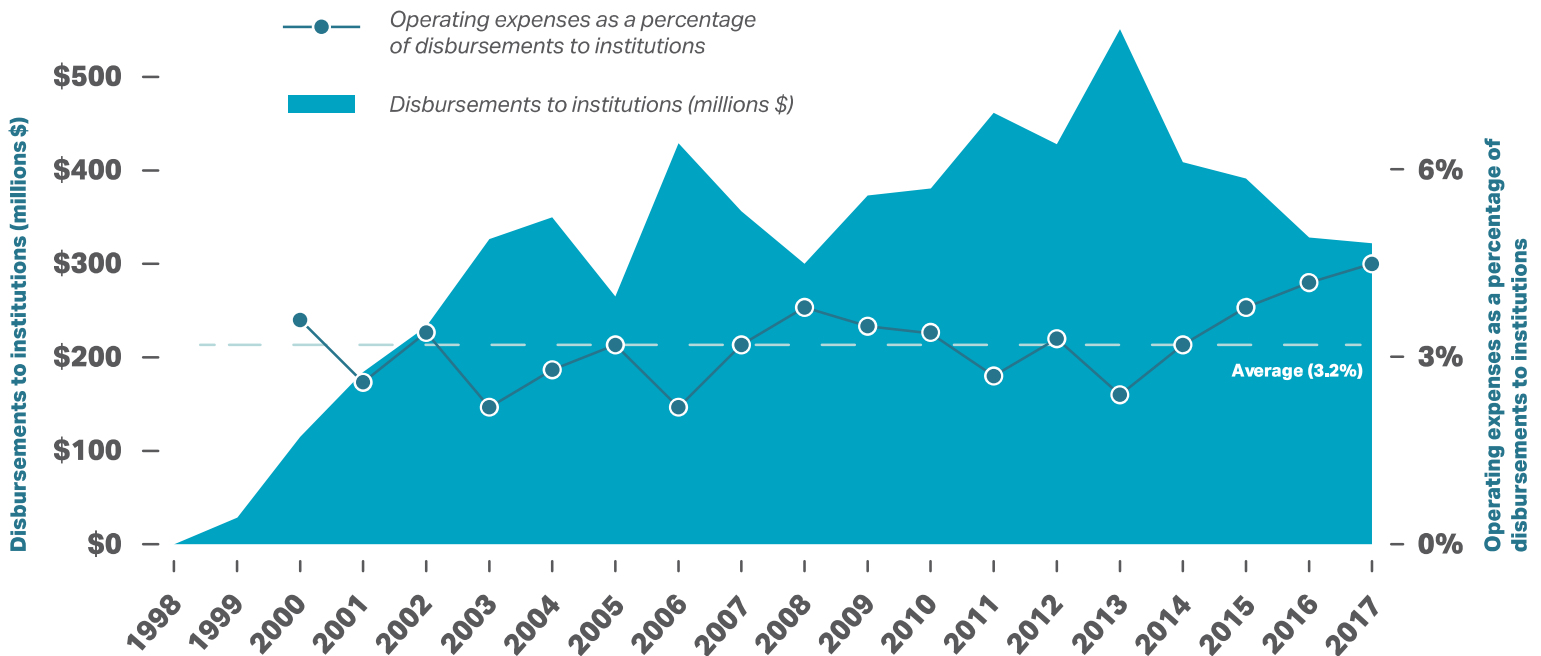
In 2016-17, the CFI received \$198.6 million in grants from the Government of Canada. At March 31, the Government of Canada had committed \$6.82 billion in grants to the CFI, of which \$5.14 billion has been received. The balance will be received in future years, based on annual cash requirements.

At March 31, a total of \$418.2 million remained as deferred contributions related to expenses of future years. This amount is for making disbursements in subsequent years for approved projects and for CFI operations.

CFI contributions and other funding sources: Total \$17.4 billion (as of March 31, 2017)



Annual disbursements to institutions and operating expenses as a percentage of disbursements (as of March 31, 2017)





RESEARCH BUILDS MY business COMMUNITY

Franziska Broell displays a wildlife tagging device she developed as a doctoral student while working with Dalhousie University's Ocean Tracking Network, a global research platform that tracks the movement of marine creatures through the world's oceans. Broell co-founded a company in Halifax to commercialize the device; the enterprise is one of many serving Atlantic Canada's vibrant oceanographic research community.

Photo: Dale Wilson

LOOKING FORWARD TO 2017-18

HERE'S WHAT'S COMING IN THE NEXT FISCAL YEAR:

- Celebrating the recipients of the second annual Governor General's Innovation Awards
- Presentation of our panel, "Scientific Culture and Remote Populations: A Citizen Engagement Issue," at the Journées internationales de la culture scientifique, Science & You conference in Montréal
- More stories about CFI-funded research to help celebrate Canadian science, research and innovation as part of the country's sesquicentennial
- Decisions for 2017 Innovation Fund competition, worth approximately \$552 million, including \$425 million in infrastructure costs and \$127 million in operating and maintenance costs
- Decisions for the most recent competition of the College-Industry Innovation Fund – Stream 1 and Stream 2
- Three rounds of proposals for review expected for the John R. Evans Leaders Fund
- Decisions for the second competition of the Cyberinfrastructure Initiative – Challenge 1
- The release of a study on the impact of investments in agricultural research across Canada
- Drafting a new strategic roadmap for the organization
- Welcoming our new President and CEO, Roseann O'Reilly Runte

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, institutional, academic and research sectors. The Government of Canada appoints six directors, including the chair, while the remaining directors are appointed by CFI members. Directors are nominated and appointed for three-year terms. Consideration is given to the desirability of having a gender-balanced Board drawn from various regions of Canada.

MEMBERS

The Board of Directors reports to a higher governing body made up of our members, who represent the Canadian public (they are similar to a company's shareholders). Members are nominated and appointed for a five-year term. 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 before it is released at the annual public meeting.

BOARD OF DIRECTORS

***Kevin P. D. Smith, Chair (Ont.)**
Audit and Finance Committee,
Governance and Nominating
Committee, Investment Committee

**Margaret Bloodworth,
Vice-chair (Ont.)**
Chair, Governance and Nominating
Committee

***Alain Beaudet (Ont.)**

Micheline Bouchard (Que.)
Chair, Investment Committee

***Lynda Brown-Ganzert (B.C.)**
Audit and Finance Committee

William Driedzic (N.L.)
Audit and Finance Committee

Albert Friesen (Man.)
(term expired June 2016)

***Michel Kelly-Gagnon (Que.)**
Governance and Nominating
Committee

Leslie MacLaren (N.S.)
Audit and Finance Committee

Rod McInnes (Que.)
Governance and Nominating
Committee

Ingrid Pickering (Sask.)
Governance and Nominating
Committee

Ian Seymour (Man.)
(appointed June 2016)
Audit and Finance Committee

***Prem Singhmar (Alta.)**
Governance and Nominating
Committee

***Gordon F. Stovel (Ont.)**
Investment Committee; Chair,
Audit and Finance Committee

**Governor-in-Council appointment*

MEMBERS

Linda Humphreys, Co-chair (Alta.)

Ronald Morrison, Co-chair (Ont.)

Harold Cook (N.S.)

Members Governance and
Nominating Committee

Elizabeth Douville (Que.)

(appointed June 2016)

David Fung (B.C.)

(term expired June 2016)

Joanne Gassman (B.C.)

(appointed June 2016)

Jack Gauldie (Ont.)

Sandra Greer (N.S.)

(term expired June 2016)

Roland Hosein (Ont.)

Marilyn Luscombe (N.B.)

(appointed June 2016)

Rick Miner (Ont.)

(term expired June 2016)

Leigh Murphy (Man.)

Louise Proulx (Que.)

Members Governance and
Nominating Committee

Emőke Szathmáry (Man.)

Chair, Members Governance and
Nominating Committee

Vianne Timmons (Sask.)

Members Governance and
Nominating Committee

Luc Vinet (Que.)

(appointed June 2016)

RANGES OF REMUNERATION

Board of Directors and Members

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 2016-17, the remuneration of Board Directors ranged from \$0 to \$17,500.

For the fiscal year ending March 31, 2017, compensation for CFI staff whose remuneration exceeded \$100,000 was within the following annual salary ranges*:

CFI MANAGEMENT (OFFICERS)

Gilles G. Patry

President and CEO
\$213,700 to \$299,200

Manon Harvey

Vice-President, Finance and
Corporate Services
\$141,600 to \$196,000

Guy Levesque

Vice-President, Programs and
Performance
\$141,600 to \$196,000

Pierre Normand

Vice-President, External Relations
and Communications
\$141,600 to \$196,000

EMPLOYEES

Director, Programs
\$115,600 to \$154,200

Director, Communications
Director, Corporate Services
Director, Evaluation and Outcome
Assessment
Director, Finance
\$100,700 to \$134,300

Manager, Finance
Manager, John R. Evans Leaders
Fund
Senior Programs Officers
Senior Advisor, Policy and Planning
Senior Project Manager
\$91,500 to \$121,800

Manager, Administration
Manager, Human Resources
Manager, Information Management/
Information Technology
Senior Evaluation Officer
Senior Financial Monitoring Officer
\$82,300 to \$109,300

** Note: Salary ranges are in line with those of other agencies contracted by the Government of Canada to deliver on specific mandates.*



A man wearing a plaid jacket, a cap with sunglasses, and brown boots is kneeling in a flooded field of cranberries. He is smiling and holding a handful of cranberries in his hands. The field is filled with red cranberries, and the water is shallow. In the background, there are trees and a red truck under a blue sky with clouds.

RESEARCH BUILDS MY *farming* COMMUNITY

Crop scientist Simon Bonin (left) and cranberry farmer Olivier Pilotte stand knee-deep in a flooded field on the south shore of the St. Lawrence near Quebec City. It's the heartland of a cranberry-growing district that has grown spectacularly in the last 15 years with research carried out at the Université Laval and the establishment of the Fruit d'Or processing company at Notre-Dame-de-Lourdes.

Photo: Patrice Halley

Independent Auditors' Report

To the Members of the
Canada Foundation for Innovation

We have audited the accompanying financial statements of the Canada Foundation for Innovation, which comprise the statement of financial position as at March 31, 2017 and the statements of operations and of cash flows for the year then ended and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these 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.

Auditors' responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Canada Foundation for Innovation as at March 31, 2017 and the results of its operations and its cash flows for the year then ended in accordance with Canadian public sector accounting standards for government not-for-profit organizations.

Ernst & Young LLP

Ottawa, Canada
June 20, 2017

Chartered Professional Accountants
Licensed Public Accountants



STATEMENT OF FINANCIAL POSITION

As at March 31

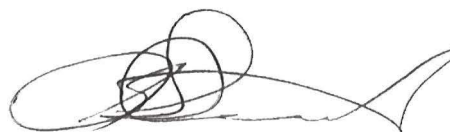
	2017	2016
	\$	\$
ASSETS		
Current		
Cash	21,628,938	15,097,913
Interest and other receivables	2,175,083	2,636,292
Investments [note 4]	394,719,027	529,889,626
Prepaid expenses	577,894	107,218
Total current assets	419,100,942	547,731,049
Capital assets [note 5]	3,069,174	3,879,915
TOTAL ASSETS	422,170,116	551,610,964
LIABILITIES AND NET ASSETS		
Current		
Accounts payable and accrued liabilities	895,207	1,005,261
Total current liabilities	895,207	1,005,261
Deferred contributions [note 6]		
Expenses of future years	418,205,735	546,725,788
Capital assets	3,069,174	3,879,915
Total liabilities	422,170,116	551,610,964
Commitments [note 7]		
Net assets [note 8]	—	—
TOTAL LIABILITIES AND NET ASSETS	422,170,116	551,610,964

See accompanying notes

On behalf of the Board:



Director



Director

STATEMENT OF OPERATIONS

Year ended March 31

	2017	2016
	\$	\$
REVENUE [note 6]		
Recognition of deferred contributions related to amounts granted to eligible recipients	320,738,683	326,928,458
Recognition of deferred contributions related to current year operations	13,381,897	12,842,016
Amortization of deferred contributions related to capital assets	976,341	972,681
	<hr/> 335,096,921	<hr/> 340,743,155
EXPENSES		
Grants to eligible recipients	320,738,683	326,928,458
General and administration	13,381,897	12,842,016
Amortization of capital assets	976,341	972,681
	<hr/> 335,096,921	<hr/> 340,743,155
Excess of revenue over expenses	<hr/> —	<hr/> —

See accompanying notes

STATEMENT OF CASH FLOWS

Year ended March 31

	2017	2016
	\$	\$
OPERATING ACTIVITIES		
Excess of revenue over expenses	—	—
Add (deduct) items not involving cash		
Amortization of capital assets	976,341	972,681
Amortization of deferred contributions related to capital assets	(976,341)	(972,681)
Net increase (decrease) in amortization of discount/premium on investments	(2,497,917)	1,975,164
Net decrease in deferred contributions related to expenses of future years	(327,070,053)	(329,749,761)
	(329,567,970)	(327,774,597)
Net change in non-cash working capital balances related to operations [note 10]	(119,521)	2,446,256
	(329,687,491)	(325,328,341)
Capital		
Purchase of capital assets	(165,600)	(269,457)
Increase in deferred contributions related to capital assets	165,600	269,457
	—	—
INVESTING ACTIVITIES		
Purchase of investments	(592,978,540)	(1,073,962,943)
Proceeds from disposal of investments	730,647,056	1,222,143,065
	137,668,516	148,180,122
FINANCING ACTIVITIES		
Grants received [note 6]	198,550,000	177,100,000
	198,550,000	177,100,000
Net increase (decrease) in cash during the year	6,531,025	(48,219)
Cash, beginning of year	15,097,913	15,146,132
Cash, end of year	21,628,938	15,097,913

See accompanying notes

NOTES TO FINANCIAL STATEMENTS

March 31, 2017

1. Description of business

The Canada Foundation for Innovation (CFI) was incorporated on April 25, 1997, under Part 1 of the Budget Implementation Act, 1997 (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 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 comprised 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 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, 2017, the CFI has met its objective of having sufficient liquid resources to meet its current obligations.

4. Investments

Investments comprise the following financial instruments:

	2017		2016	
	Fair value	Carrying value	Fair value	Carrying value
	\$	\$	\$	\$
Money market funds	27,957,647	27,957,577	96,895,773	96,898,470
Bonds	138,072,806	137,154,318	240,474,312	237,898,775
NHA mortgage-backed securities	80,082,398	80,147,304	134,479,497	134,489,928
High interest savings account	149,459,828	149,459,828	60,602,453	60,602,453
	395,572,679	394,719,027	532,452,035	529,889,626

Market risk

Interest rate risk

Interest rate risk arises when the value of an investment fluctuates due to changes in market interest rates. For the year ended March 31, 2017, if the interest rates on bonds had a 1% increase or decrease with all other variables held constant, the increase or decrease in the interest earned for the year would have been approximately \$1.9 million [2016 – \$2.8 million]. The increase or decrease in the interest rate was not calculated for NHA mortgage-backed securities.

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, 2017, a 1% increase in market price would result in an increase of the fair value for investments of approximately \$4 million [2016 – \$5 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.

Coupon rates for bonds held to maturity range from 1.11% to 5.50% [2016 – 1.80% to 5.50%]. The rates for mortgage-backed securities range from 1.24% to 2.27% [2016 – 1.24% to 4.35%].

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 1.072% to 1.15% [2016 – 1.10% to 1.25%].

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 investment maturities to projected cash outflows and, as such, liquidity does not present a significant financial risk to the CFI.

The maturities of money market funds range between April 2017 and May 2017 [2016 – between April 2016 and June 2016]. Bond maturities range between April 2017 and June 2019 [2016 – between May 2016 and June 2019]. The maturities of mortgage-backed securities range between May 2017 and December 2018 [2016 – between April 2016 and December 2018].

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. As well, 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% [2016 – 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:

			2017	2016
	Cost	Accumulated amortization	Net book value	Net book value
	\$	\$	\$	\$
Leasehold improvements	2,643,834	2,635,023	8,811	27,443
Furniture and other equipment	900,267	889,522	10,745	23,673
Computers and software	925,162	841,782	83,380	98,687
Awards Management System	6,595,699	3,629,461	2,966,238	3,730,112
	11,064,962	7,995,788	3,069,174	3,879,915

Total cost and accumulated amortization related to capital assets held at March 31, 2016 were \$11,597,455 and \$7,717,540 respectively.

6. Deferred contributions

The CFI operates under two active Funding Agreements and two Contribution Agreements with the Government of Canada. As at March 31, 2017, the Government of Canada had committed \$6.82 billion in grants to the CFI under these agreements, of which \$5.14 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 \$198.6 million [March 31, 2016 – \$177.1 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.

	2017	2016
	\$	\$
Balance, beginning of year	546,725,788	699,375,549
Add grants received	198,550,000	177,100,000
Add restricted investment revenue earned	7,216,127	10,290,170
Less amount recognized as revenue	(334,120,580)	(339,770,474)
Less amount applied toward capital assets acquired	(165,600)	(269,457)
Balance, end of year	418,205,735	546,725,788

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.

	2017	2016
	\$	\$
Balance, beginning of year	3,879,915	4,583,139
Restricted grants applied towards the purchase of capital assets	165,600	269,457
Less amount amortized to revenue	(976,341)	(972,681)
Balance, end of year	3,069,174	3,879,915

7. Commitments

During the year, the CFI approved grants for a maximum amount of \$470.6 million [2016 – \$134.3 million]. Total disbursements to eligible recipients during the fiscal year were \$320.7 million [2016 – \$326.9 million]. As at March 31, 2017, the CFI has approved grants for a maximum amount of \$7,133.8 million, of which \$6,207.0 million had been disbursed. To date, the CFI has award agreements in place related to these approved grants in the amount of \$6,644.8 million and, therefore, has outstanding contractual obligations of \$437.8 million at March 31, 2017.

The CFI estimates these obligations to be disbursed as follows:

	in millions of \$
2018	140.1
2019	100.7
2020	78.8
2021	56.9
2022 onwards	61.3
Total estimated disbursements	437.8

In August 2011, the CFI renewed the lease agreement for its premises at 230 Queen Street, Ottawa, Ontario for a ten-year period ending July 31, 2021, with option to terminate after five years. The minimum annual lease payment related to these premises is approximately \$1.3 million.

8. 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 imposes 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.

9. Pension plan

The employees of the CFI may elect to become members of the Universities Canada Pension Plan, a defined contribution plan managed by Sun Life Financial Inc. The employer contributions made to the Plan during the year ended March 31, 2017 amounted to \$716,581 [2016 – \$729,201].

10. Changes in non-cash operating working capital items

	2017 \$	2016 \$
Interest and other receivables	461,209	2,205,821
Prepaid expenses	(470,676)	108,930
Accounts payable and accrued liabilities	(110,054)	131,505
	(119,521)	2,446,256

11. Comparative figures

Certain comparative figures have been reclassified to conform to the current year's presentation.