



Canada Foundation for Innovation

Annual Report 1998 - 1999



Table of Contents

A Message from the Chair	1
A Message from the President and CEO	5
Board of Directors, Members, Committees, Officers	8
The Year in Review	11
Programs that respond to research priorities	11
Coping with an overwhelming response	11
Approving projects for the knowledge-based economy	11
Helping to launch new careers	12
Setting a level playing field	13
Supporting Canada's community colleges	13
Contributions Overview 1998-99	14
Approaching broad initiatives strategically	14
Achieving results through volunteers	15
Institutions putting together investment teams	15
Creating opportunities for collaboration	17
Being accountable: a daily operating principle	17
Meeting public expectations	18
Looking ahead	19
Examples of Projects Supported by the CFI	20
Financial Statements	31



A Message from the Chair



Research and innovation. They have become twin pillars of the knowledge-based economy—dynamic and co-dependent. They are an inescapable part of our future, helping to reshape our world and redefine the way we create wealth. Their values exemplify the importance of creative excellence, dynamic teamwork, patient determination, and a concern for the public good.

The Canada Foundation for Innovation (CFI) supports this vision of the future by investing in infrastructure for leading-edge research projects. In co-operation with other funding partners from across the country, the CFI strives to address an urgent need: enabling Canada's researchers to have the equipment and facilities they require to take on new and exciting challenges.

By the summer of 1999, the CFI will have invested \$436 million in research infrastructure at universities, hospitals, colleges, and other research institutions from coast to coast. When coupled with funds from other partners, this amount will result in a much-needed infusion of over \$1 billion in capital investments that will help build a top-quality research environment to attract and retain excellent researchers in Canadian institutions.

One of our country's most precious resources is its intellectual capital. The retention of our most creative and innovative people in Canada is critical to ensuring the success of Canadian business and communities in the knowledge-based economy. In recent years, governments at all levels, research institutions, as well as the private and voluntary sectors have come together and we can now see significant improvements over even a few years ago.

The CFI is providing up to 40 percent of the cost of the infrastructure projects. The balance of the cost comes from partners represented by provincial and municipal governments, the research institutions themselves, the private sector, federal departments and agencies, voluntary organizations and foundations, as well as individual citizens.



A Message from the Chair

In 1997, the Government of Canada made the revitalization of Canadian research infrastructure a national priority. In February 1999, the Government reaffirmed its commitment by adding an additional \$200 million to the CFI's funding budget. This federal commitment has been matched by extraordinary support from other funding partners notably, the provincial governments, research institutions, and the private sector.

The Board of Directors expresses its appreciation to the President and CEO of the CFI, Dr. David W. Strangway, and the highly dedicated, competent, and enthusiastic staff members responsible for the CFI's operations. We're extremely fortunate to have such outstanding staff. In addition, we are deeply indebted to some 600 volunteer experts who serve on the multidisciplinary assessment committees and review panels.

I wish to thank all the Directors for their commitment and wise counsel, so important to the successful establishment of a new organization.

This annual report describes the CFI's programs and financial status during its first year of funding activity. We hope the report also conveys the sense of purpose and excitement that CFI staff members bring to this important new enterprise in support of Canadian research.

John R. Evans
Chair

“...helping
to reshape
our world
and redefine
the way
we create
wealth.”



A Message from the President and CEO



The Canada Foundation for Innovation is an organization without precedent: an independent corporation, created in 1997 by an Act of Parliament, answerable to 15 Members whose role is similar to that of a corporation's shareholders. The CFI is governed by a Board of 15 Directors, eight of whom were named by the Members, with the other six, plus the Chair, appointed by the federal government.

The CFI's mandate is also without precedent: to judiciously invest the \$1 billion that it has been entrusted with by the federal government to enhance Canada's research capacity in the areas of health, the environment, science, and engineering.

In complementing investments that are made by other partners, the CFI is helping universities, colleges, hospitals, and not-for-profit research institutions acquire the equipment and facilities they need to undertake research projects in these four areas.

As an organization characterized by so many firsts, the CFI's initial challenge was to find the appropriate means of translating its mandate into operational terms. There was a vision, but no model. Founding President and CEO, the late J. Keith Brimacombe, set the tone. Canada's research community and the potential partners had to be part of the process. When Dr. Brimacombe died unexpectedly just months after his appointment in 1997, his successor, Acting President and CEO Denis Gagnon, carried on with the same guiding principles of responsiveness, openness, fairness, and flexibility that had characterized the CFI's beginnings.

Since becoming President and CEO in June 1998, I have wanted to make sure that our organization continues to subscribe to these principles. I am most grateful for the outstanding work that both Dr. Brimacombe and Dr. Gagnon did during their mandate and would like to publicly acknowledge their contributions. Both were a source of inspiration to me. Dr. Gagnon has stayed on as a Senior Adviser and his great personal qualities and professional advice remain a tremendous asset to the CFI.

Our Vice-President of Programs, Ms. Carmen Charette, saw her level of responsibility increase at that time, and to reflect this change, she was named Senior Vice-President responsible for Programs and Operations.



A Message from the President and CEO

Today, the CFI has moved well beyond its initial start-up phase. We've turned an important corner, from planning what we'll do, to actually doing it. We've put in place mechanisms and procedures to review applications and make decisions about investments.

Funds are being put to work for Canada's research community. Between August 1998 and the end of our fiscal year on March 31, 1999, we invested close to \$200 million for a total of 423 contributions in 49 universities and research institutions across Canada.

Our 19 staff members are focused on delivering a high level of quality service and helping to revitalize Canada's research infrastructure. We listen carefully to our review committees, clients, stakeholders, and applicants. If we realize that things can be done in a better way, while respecting the integrity of the adjudication process, we will do so. And whenever it makes sense and is feasible, we will further simplify how we do things, making sure that, at each step along the way, every user is kept informed and plays by the same rules.

We've introduced electronic application forms, and arranged for electronic financial transactions. We have also kept the research community apprised of developments via our Web site, and divided up the growing list of institutional clients to ensure that applicants and recipients get prompt, personalized service.

We take our accountability very seriously. Thanks to the expertise and guidance of our Vice-President of Finance, Ms. Manon Harvey, the funds we have received from the federal government are invested and managed responsibly, in a way that we believe will benefit the people of Canada, both now and in the future.

Accountability is about telling the story as it is. That's why telling the story and what it means to Canadians is one of our corporate priorities. We have strengthened our ability to do so through the appointment of a Vice-President for External Relations, to ensure that Canadians are kept apprised of what's happening with the investments that we are making on their behalf. After a thorough search process, we hired Mr. Michel Lamoureux who brings to this new CFI position his extensive communications experience.

The report that follows summarizes the story as it has unfolded over the past year. I hope you will find it an interesting reading and learning experience.

David W. Strangway
President and CEO

“...guiding principles of responsiveness, openness, fairness, and flexibility...”



Board of Directors

- Dr. John R. Evans
Chair
- Dr. Michel Gervais
Vice-Chair
- Dr. Lorne A. Babiuk
Director, Veterinary Infectious
Disease Organization
(VIDO), University of Saskatchewan
- Dr. Tom A. Brzustowski
President, Natural Sciences and
Engineering Research Council
- Ms. Dian Cohen
President, DC Productions Limited
- Dr. Bernard Coupal
President, Gestion T²C²/BIO Inc.
and Gestion T²C²/INFO Inc.
(Transfert Technologies
Commercialisation Capital)
- Dr. Monique Frize
Professor, NSERC/Nortel Joint Chair
for Women in Science and
Engineering in Ontario, Carleton
University/University of Ottawa
- Dr. Robert A. Phillips
Executive Director, National Cancer
Institute of Canada
- Dr. David Pink
Professor, Physics Department,
St. Francis Xavier University
- Dr. Gerri Sinclair
President and CEO, NCompass
Labs Inc. and Director, Exemplary
Centre for Interactive Technologies
in Education (ExCITE), Simon Fraser
University
- Dr. Michael Smith
Peter Wall Distinguished Professor of
Biotechnology,
University of British Columbia
- Ms. Stella Thompson
Principal, Governance West Inc.
- Dr. Mary Anne White
Killam Research Professor in
Materials Science, Dalhousie
University

Members

- Dr. Angus A. Bruneau
Chairman of the Board, Fortis Inc. and
Chairman, Air Nova
- Dr. James Friesen
Professor, Banting and Best Chair,
Department of
Medical Research,
University of Toronto
- Mr. Robert J. Giroux
President and CEO, Association of
Universities and Colleges of Canada
- Dr. Arthur Hanson
President and CEO, International
Institute for Sustainable Development
- Ms. Dorothy Lamont
Chief Executive Officer, Canadian
Cancer Society
- Dr. Monique Lefebvre
Vice-President,
(Quebec and Atlantic Canada)
Ericsson Communications Canada
- Dr. Julia Levy
President and Chief Executive Officer
and Chief Scientific Officer, QLT
PhotoTherapeutics Inc.
- Mrs. Judith Maxwell
President, Canadian Policy Research
Networks
- Mrs. Edythe A. Parkinson-Marcoux
President and CEO, Ensyn Energy
- Dr. Peter J. Nicholson
Chief Strategy Officer,
BCE Inc.
- Dr. Martha Piper
President and Vice-Chancellor,
University of British Columbia
- Mr. Guy Saint-Pierre
Chairman, SNC-Lavalin Inc.
- Dr. Matthew Spence
President and CEO, Alberta Heritage
Foundation for Medical Research
- Dr. Ronald Steer
Professor, Department of Chemistry,
University of Saskatchewan

Note: Two Directors, Mr. Jean-Yves Leblanc and Mr. Gedas Sakus, resigned during the year creating vacancies for appointments by the Members.



Governance and Nominating Committee

Ms. Stella Thompson
Chair

Ms. Dian Cohen

Dr. John R. Evans

Dr. Michel Gervais

Dr. David Pink

Audit and Finance Committee

Dr. Lorne A. Babiuk
Chair

Dr. Bernard Coupal

Dr. John R. Evans

Dr. Robert A. Phillips

Officers

Dr. David W. Strangway
President and CEO

Dr. Denis Gagnon
Senior Executive Adviser to the President

Ms. Carmen Charette
Senior Vice-President, Programs and Operations

Ms. Manon Harvey
Vice-President, Finance

Mr. Michel Lamoureux
Vice-President, External Relations

“...helping
them tackle
work that
they could only
dream about
before.”



The Year in Review

Programs that respond to research priorities

Following consultations with various stakeholders and interested parties, the CFI Board initially created four mechanisms to direct its investments to those areas where they would be the most beneficial. They are:

The Institutional Innovation Fund, which is intended to strengthen the research infrastructure at Canadian institutions, promotes an interdisciplinary approach to research and allows researchers to tackle groundbreaking projects.

The Regional/National Facilities Fund, which encourages institutions to form research consortia to make the most effective use of highly specialized infrastructure.

The New Opportunities Fund, which provides the infrastructure needed to support the work of new researchers, and enables universities to retain and attract new faculty in priority areas.

The Research Development Fund, which helps universities that receive less than one percent of Canadian-sponsored research to strengthen their research capacity.

A fifth mechanism was added in May 1998, after talks with Canada's community colleges. The College Research Development Fund was designed to build the research capacity of colleges that have research as part of their mandate.

How did we make out with these funding mechanisms during our first year of operation? Here's what we saw.

Coping with an overwhelming response

The deadline for submissions in the first major competition for the Institutional Innovation Fund and the Regional/National Facilities Fund was in June 1998. The Board of Directors had earmarked about \$400 million for the competition. But since this was a first, the CFI could only make educated assumptions about the level of demand to be expected.

The response was overwhelming and substantially exceeded our projections. Close to 800 applications were submitted by institutions for a total close to \$3 billion, \$1.2 billion of which would be the CFI's share.

Dr. Mary Anne White, one of the CFI's Directors, is a Killam Research Professor in Materials Science and a professor of chemistry at Dalhousie University. She understands the high level of demand for research infrastructure support in Canadian institutions. "During my 18 years as a professor, I have witnessed first-hand the pressing need for new research infrastructure in Canada. The CFI is directing its efforts at an outstanding group of people—from students to established researchers—and is helping them tackle work that they could only dream about before."

Approving projects for the knowledge-based economy

Under the Institutional Innovation Fund, applications were considered in two categories: those of more than \$350,000, and those of less than \$350,000.



The Year in Review

Due to the very high number of applications, the competition was handled in two phases. Based on the recommendations of the Multidisciplinary Assessment Committee (MAC), the Board of Directors confirmed investment decisions for the clear front-runners in the competition in mid-October of 1998. In the "more than \$350,000 category," 14 institutions received approval for 16 acquisitions, for an investment of \$8.1 million. In the "less than \$350,000 category," the Board approved 67 infrastructure acquisitions at 19 institutions, for an investment of \$7.8 million.

A total of 144 applications, representing a potential investment of about \$687 million in CFI funds, moved to the second phase of the assessment process. To ensure fair comparisons and that the most effective investment in infrastructure were made, projects of a similar nature were grouped together and assessed by the same team. Task groups went back to the institutions for more information. For some of the more complex proposals, face-to-face meetings were conducted.

In March 1999, the Board approved investments totalling \$124.4 million for 59 projects at 23 institutions. This included a \$56.4 million investment in Canada's first synchrotron facility, being built at the University of Saskatchewan at a total cost of \$140.9 million. Construction of the new facility will create 500 jobs a year. Once it is fully operational in 2003, the Canadian Light Source's synchrotron is expected to employ more than 200 scientific, technical, and administrative staff and attract as much as \$35 million a year in commercial activity.

The President of the Association of Universities and Colleges of Canada, Mr. Robert Giroux, stresses the importance of university research for Canadians: "The research that is carried out in our universities has a tremendous impact on all aspects of our lives. The greater our research capacity, the better off we will be for it. This is essential not only to ensure Canada's leadership in the knowledge-based economy, but most importantly to provide the right environment to train young Canadians for the jobs of tomorrow."

Helping to launch new careers

In the case of the New Opportunities Fund, which provides infrastructure aimed at attracting new researchers to Canadian universities, the CFI held its first competition in May 1998. This first round allowed faculty who had been hired since 1995 an opportunity to benefit from this new program. The more than 300 applications sent to us emphasized the serious extent of the need. In mid-August 1998, the Board approved an investment of \$36 million under this program, helping to launch the research careers of more than 500 new faculty at 26 Canadian universities.

The Board had planned to allocate an extra \$40 million for this initiative over the five-year life of the CFI. But following the additional \$200 million allocated to the CFI in the federal budget, and due to the program's overwhelming success in helping to retain and attract new researchers, including very positive feedback received from both researchers and institutions, the Board subsequently decided to increase this allotment to a total of \$116 million.



The Year in Review

Setting a level playing field

Universities that account for less than one percent of Canada's sponsored research are given the option to seek CFI support outside of the New Opportunities Fund, the Institutional Innovation Fund and Regional/National Facilities competitions. Universities that opt to apply under the Research Development Fund can tap into a predetermined investment limit, provided their applications meet the same rigorous standards used in the other competitions. Once a university has utilized its allotment under the fund, it can then compete for additional investments under the CFI's other funding mechanisms.

Over the course of the last year, the Board approved \$19.9 million worth of investments under the Research Development Fund, involving 59 projects at 18 institutions. Together, these funds are supporting the work of 241 university researchers and contributing to the positive impact that universities have on smaller communities across Canada.

The Board initially earmarked \$40 million for this funding mechanism.

Supporting Canada's community colleges

The College Research Development Fund, established by the Board in May 1998, was designed to help colleges, institutes, and affiliated research centres develop and strengthen their research infrastructure. Under this funding mechanism, colleges can submit proposals for projects totalling less than \$2 million in eligible costs, with a maximum contribution of \$800,000 from the CFI. The budget for the College Research Development Fund was initially set at \$10 million. Although applications under the fund were received at the end of the fiscal year, Board decisions were still pending the recommendations of a specially appointed review committee at the time this report was being prepared. The deadline for the first College Research Development Fund competition was March 10, 1999. The first contributions under this funding mechanism will be announced in 1999-2000.



The Year in Review

Contributions Overview 1998-99

Mechanism	Number of projects	Number of institutions	CFI \$ awarded	Number of researchers	Other users
Institutional Innovation Fund > \$350K and Regional/National Facilities	75	26	132.5M	610	415
Institutional Innovation Fund < \$350K	67	19	7.8M	368	106
New Opportunities	222	26	37.6M	539	431
Research Development Fund	59	18	19.9M	241	172
Total	423	49*	197.8M	1758	1124

* Institutions can receive funding under more than one mechanism.

Approaching broad initiatives strategically

As part of the review process in the second phase of the competition, the CFI set up three task forces to provide strategic advice for infrastructure projects in the areas of genomics, high performance computing, and campus networks. These task forces were responsible for advising on strategies for effective investment, individual projects, and issues for consideration in future competitions.

Institutions submitting proposals for digital libraries were asked to prepare a single national proposal for the acquisition of site licences. Using a framework provided by the CFI, institutions worked with the Canadian Association of Research Libraries on a proposal to be reviewed by an expert committee in May 1999.

In the area of medical imaging, expert committees were established to assess different subgroups of projects, and to make recommendations regarding potential overlap and opportunities for consolidation.



The Year in Review

Achieving results through volunteers

The CFI could not have achieved this level of program delivery over such a short period without the work of close to 600 volunteers who served on its multidisciplinary assessment committees and expert panels, provided thoughtful advice, or prepared written reviews. These volunteers, including researchers, research administrators, and research users, were selected because of their expertise and reputation. Particular attention was paid to ensuring balance between regional, linguistic, gender, disciplinary, and sectoral factors. Experts were also recruited from Europe and the United States.

Dr. Gail Gabel served on the Multidisciplinary Assessment Committee that reviewed projects under the Institutional Innovation Fund. "The amount of time that we all put into this is phenomenal, hundreds of hours over the course of the year," says Dr. Gabel who is also President of ESI Environmental Sensors Inc. in Victoria, B.C. "We had a very serious group, but I would have to say that this is one of the most enjoyable review committees I have ever participated in."

Dr. Yves Lancelot of the Marseille Oceanographic Centre has attended two MAC meetings and is slated to participate in a third. "The process is very fair, but it is also very time consuming. We had something like 8,000 pages to review. I was amazed that so much money could be distributed so quickly and so well. I would welcome such an initiative in my country, and intend to try to use the CFI's assessment process as a model for some of the evaluations that we do for large programs in France."

The CFI owes tremendous thanks to volunteer experts like Dr. Gabel, Dr. Lancelot, and their colleagues. Their work is exemplary, their contribution critical.

Institutions putting together investment teams

Once an institution has a clear picture of the infrastructure needed to support its priorities, it assembles a team of partners who are prepared to assume at least 60 percent of the new infrastructure acquisition costs. Typically, provincial governments account for about two-thirds of this share of the investment. Other partners can represent private corporations that have already collaborated with the institution on other projects.

Most provincial governments have created programs and mechanisms specifically designed to match CFI funding. They also support projects through their granting agencies and relevant ministries in areas such as science, environment, agriculture, forestry, transport, and economic development.

The Government of Canada is another partner of institutions, through regional development agreements and regional economic development agencies, such as the Atlantic Canada Opportunities Agency and Western Economic Diversification Canada. The federal government also invests in projects through science-based agencies such as the National Research Council of Canada, the Canadian Space Agency, the Canadian International Development Agency, and departments such as Agriculture and Agri-Food Canada, Environment Canada, Fisheries and Oceans, National Defence and Natural Resources Canada. In addition, many companies and industry associations as well as voluntary agencies have become partners in infrastructure projects.



The Year in Review

One of the CFI's Directors, Bernard Coupal, who is also President of Gestion T²C², a technology transfer and commercialization firm in Montreal, sums it up in these terms, "The CFI investments leverage funding from other sources, and promote partnership building between research institutions and the public and private sectors. These investments will promote an innovation culture among researchers and students in our universities and research centres, adding value to the development of the new economy."

When an institution makes its case to the CFI under the appropriate funding mechanism, it needs to demonstrate how the new equipment or facilities will help to build capacity in at least one of the strategic areas of health, science, engineering, or the environment. The Multidisciplinary Assessment Committee will judge the submission using three criteria:

1. The quality of research and suitability of the infrastructure

Will the proposed infrastructure lead to measurable advances that can be recognized internationally? Are the principal users recognized as leaders in their field? Are the acquisitions cost-effective and do they represent the most efficient and effective way of responding to the research needs?

2. The contribution to strengthening the capacity for innovation

Does the proposed infrastructure contribute to strengthening the capacity for innovation through the training of highly qualified personnel? Will it be able to attract and retain this highly qualified personnel, and will it foster collaboration and research partnerships?

3. Potential benefits of the research to Canada

Will the proposed infrastructure result in tangible benefits to Canada and Canadians, in terms of economic growth, job creation, quality of life, health, and environment, as well as knowledge interchange?

Once the MAC has had an opportunity to review a submission in light of these criteria, and in relation to the other submissions it has received under the same funding mechanism, it makes its recommendations to the Board of Directors for a final decision.

"We used the ProGrid methodology to separate the wheat from the chaff," said Dr. Michael Gibbons, Secretary General of the Association of Commonwealth Universities. "It's really quite a good process for making sure that very diverse applications are all considered in exactly the same way. I found it quite impressive, and would recommend its implementation in Britain."

Many researchers have told CFI staff members that the requirement to reflect upon the criteria and articulate the benefits of their work gave them added focus and a sense of belonging to a much larger enterprise.



The Year in Review

Creating opportunities for collaboration

Investments made by the CFI are helping to leverage new opportunities for collaboration. When coupled with investments from other partners, the \$1 billion available from the CFI, which will grow to \$1.3 billion with accrued interest, will translate into an actual overall investment in new research infrastructure of about \$3.25 billion over five years.

"The CFI investments complement very well what is done by the Alberta Heritage Foundation for Medical Research," says Dr. Matthew Spence, who is President and CEO of that organization, and a CFI Member. "These investments have stimulated a lot of creative thinking, not only in Alberta but all across Canada. It is important to remember that when we put money into research infrastructure, we are really investing in people."

Due to the broader range of possibilities resulting from this financial boost, many researchers appear to be increasingly looking beyond their own disciplines and exploring ways to collaborate with other colleagues and institutions across Canada, while identifying common interests and common needs.

This wide-angle approach is also bringing people together at the regional level as researchers are inventing partnerships, expanding existing ones, defining ways to reduce duplication, and making the most out of the new investments.

The CFI's criteria are helping to foster discussions within and among institutions about research priorities and strategic objectives. They are also encouraging researchers and administrators to focus on their role in the broader context of Canada's research efforts. And since CFI investments, as well as those of other investment partners, are directed exclusively at supporting the acquisition of equipment and facilities, there appears to be a lot more talk about the benefits of cross-disciplinary co-operation to make the most effective use of the investments made.

Dr. Larry Milligan is Vice-President of Research at Guelph University. He believes that the CFI is stimulating, in a very powerful way, the interest of researchers to cross disciplines and look at how they complement each other. Dr. Milligan says "The CFI's impact goes well beyond identifying and acquiring infrastructure—it brings together researchers in larger collaborative projects that will have a notable outcome for universities and for Canada."

Being accountable: a daily operating principle

The CFI addresses issues of accountability in a number of ways. It is accountable for providing quality services, while at the same time making sure that administrative costs are kept to a minimum so that the funds are directed for their intended purpose. Applicants, recipients, and review committee members are surveyed to seek their input about possible improvements to be made in the way we do business.



The Year in Review

The CFI is accountable for making sure that the funds are invested as defined by the Funding Agreement with the federal government. On average, the funds yield about five percent per year in accrued interest. Under the same agreement, the CFI is obliged to ensure that it has at least \$250 million to invest in infrastructure development during the last two years of its mandate, 2001 and 2002.

The CFI is also accountable for ensuring that recipients and partners respect their commitments, and that the processes that led to their selection are fair, equitable, and transparent.

And, finally, the CFI is accountable for outcomes. In other words, will the CFI investments breathe new life into Canada's research institutions and strengthen this country's research capabilities in a meaningful, lasting, and productive way? To achieve this, investigators and institutions will be required to provide regular progress reports on the impact of the infrastructure investments.

Meeting public expectations

The many comments received from those involved in the CFI's activities provide valuable feedback, which is regularly examined and discussed by CFI Directors. We hear inspiring stories from many young researchers across the country who are delighted that they can finally have the tools they need to get on with their work right here at home. We hear about new and broadly based partnerships, like the unprecedented level of collaboration behind the University of Saskatchewan's Canadian Light Source project, one of Canada's largest-ever scientific endeavours. We hear from smaller institutions that feel they can finally play a significant role as part of our national research effort.

But as we hear these important messages, many more questions arise. For instance, will our Canadian research institutions, especially our universities, be able to secure the operating funds they need to effectively use and maintain their new purchases? Does Canada's research community have the financial means to cope with the ever-increasing costs of new technology, which can now become obsolete in a few years as opposed to decades? Will researchers in the social sciences be able to take advantage of these investments? Do the investments adequately address regional opportunities? How can other research infrastructure needs, such as non-capital costs, best be addressed?

All of these questions and many more will continue to form part of a great and fascinating debate which, fortunately, is yielding more and more answers and solutions to deal with the numerous and rapidly changing challenges of innovating in the 21st century.



The Year in Review

Looking ahead

The CFI's Board of Directors is slated to complete the first competition for the Institutional Innovation Fund and the Regional/National Facilities Fund in June 1999. By then, it is expected that the CFI will have invested over \$400 million in capital research infrastructure projects across Canada. Two other competitions are planned for these two funding mechanisms over the life of the CFI. The call for proposals for the next round of applications is due to go out in the fall 1999, with a deadline in early 2000. Board approval will likely come six to eight months later. The CFI's other funding mechanisms are ongoing, with institutions submitting proposals for assessment in a wide range of fields and disciplines.

Meanwhile, a CFI-sponsored conference on innovation is being planned for December 1999. The conference will bring together key participants in Canada's research community to assess both where we are and what lies ahead as we prepare to enter a new millennium. This forum will be an opportunity to further strengthen partnerships, showcase some of Canada's brightest innovators, and make sure that we keep our eye on the bigger picture as we focus on specific infrastructure needs.

As the CFI strives to equip researchers with the tools they need to achieve their full potential, whether in health, science, engineering, or the environment, the proof, ultimately, will be in a better quality of life for Canadians.

Investing in the health of Canadians

“Our research project is supported by the Canadian Kidney Foundation, but that support did not include equipment purchases. Broadly speaking, this equipment allows us to improve our clinical care in the treatment of kidney disease in children, developing measures that aren’t currently available.”

Dr. Philip Acott,
Dalhousie University

The CFI is addressing a key area of concern for Canadians by investing a significant portion of its funds in health-related projects. The infrastructure needed for these projects to be carried out enables scientists to undertake research in areas where breakthroughs and advances can make a significant difference in improving people’s health, or where there is a high need for innovative treatment and services.



Examples of Projects Supported by the CFI

Dr. Philip Acott is a researcher at Dalhousie University's Pediatrics Department. He has received support from the CFI to purchase equipment central to research on juvenile polycystic kidney disease. This inherited disease affects approximately 27,000 people in Canada and impacts more particularly on the growth of children. The research will focus on helping children on dialysis and transplant patients to grow into healthy adults.

The CFI is helping Dr. Gloria Gutman, a professor at Simon Fraser University's Gerontology Research Centre, to complete the Tong Louie Living Laboratory. This state-of-the-art research facility has been created to promote independent living and quality of life for elderly and disabled people. To do so, the facility provides a realistic and safe homelike setting, as well as simulated hospital or nursing-home environments where assistive devices and health care products can be assessed. Canada's population is ageing. After adequate income, the two major concerns of seniors are appropriate, accessible health care and housing. Providing them with a safe and functional home environment is critical to ensuring the successful implementation of public policies that are increasingly aimed at keeping older Canadians out of hospitals or nursing homes, and in their own homes for longer.

A professor at the University of Manitoba's Northern Health Research Unit, Dr. John O'Neil, is establishing the Manitoba First Nations Centre for Health Research, an international centre of excellence in the field of Aboriginal health. The Centre offers a unique research environment to address significant health problems in the Aboriginal community, and facilitates the transfer of research results into effective programs and services. Dr. O'Neil and his team will be able to investigate why currently observed disease patterns and changes have occurred over time. They will also be able to study the relationship between health determinants, health status, and health care use. The team's research will be used to design and test culture-based approaches for health services and products that are adapted to the needs of First Nations and Aboriginal communities.

École Polytechnique mechanical engineering professor, Dr. Carl-Éric Aubin, is setting up a unique bio-mechanical modelling and computer-assisted surgery lab. New equipment purchased with the CFI's support will be used to carry out computer simulations of operating strategies that would be less invasive for patients. The computer will also enable a medical team to obtain information during surgery, and to make the necessary adjustments to ensure optimal correction. Dr. Aubin's research will not only make the surgeon's job easier, but it will also enable medical teams to choose surgical techniques that are less invasive and less painful for the patient.

Small communities: global leaders

“We have the most important international research centre on icing here in Chicoutimi. About 50 researchers are now working at the centre, from universities across Canada and overseas as well. As a result of this equipment purchase, we expect that figure to grow.”

Dr. Masoud Farzaneh
Université du Québec à Chicoutimi

In 1998-99, the CFI invested \$19.9 million through its Research Development Fund to support 59 infrastructure projects at 18 institutions. With this financial contribution, the CFI is enabling 241 university researchers to undertake advanced research in areas that are critical to the development of many smaller communities across Canada. The contribution also promotes the emergence of niches of expertise that are widely recognized internationally, and helps bring the benefits of the knowledge-based economy to more Canadians.



Examples of Projects Supported by the CFI

A few days before the first anniversary of the January 1998 ice storm in Quebec, the Université du Québec à Chicoutimi (UQAC) received an infrastructure boost to enhance its global expertise in the area of atmospheric icing. The CFI, the Quebec government, Hydro-Québec, and the UQAC contributed to the development of new facilities which, when combined with the expertise developed over the last 25 years, will allow the university to remain an international R&D leader in the area of atmospheric icing of structures, and of power network equipment. The disruptive effects of atmospheric icing resulting from freezing rain, drizzle, and other weather-related events can cause slowdowns and temporary paralysis of transmission networks and communication systems. The expertise developed in Chicoutimi, under the leadership of Professor Masoud Farzaneh, has potential applications for all northern countries and reinforces Canada's position as a world leader in power generation and transmission.

At Memorial University's Ocean Sciences Centre, the CFI is supporting the development of a facility that will be used to supply a reliable source of seawater for the Aquaculture Research and Development Facility. This new facility will be the largest and most modern in Canada and the northeast coast of North America. Led by Dr. Laurence W. Crim, the research team will be able to undertake projects aimed at increasing the competitiveness of Newfoundland's and Atlantic Canada's aquaculture industry by addressing specific problems using multidisciplinary approaches. The new infrastructure will not only help position the Ocean Sciences Centre as a leading North American institute for cold-water marine aquaculture and science, it will also enhance Canada's ability to develop and sustain a competitive marine aquaculture industry.

A unique project at Brock University will help enhance the competitiveness of the Canadian grape and wine industry. Dedicated to improving techniques for growing grapevines and making wines in Canada, the Cool Climate Oenology and Viticulture Institute will be housed in a new building on the Brock University campus. Working in collaboration with the wineries of the Niagara Peninsula, the Institute will feature facilities for analyzing all the ingredients and products of this horticultural practice. Moreover, the latest technology will be brought to bear on the intricate details of the chemistry and biology that underlie the winemaker's art, with the goal of producing an outstanding product in the unpredictability of the Canadian climate.

Dr. Peter Leavitt, a researcher in the University of Regina's Department of Biology, has received a contribution from the CFI to purchase equipment for the Environmental Quality Analysis Laboratory (EQAL). The mandate of this facility is to promote, sustain, and restore the environmental quality of the Canadian Prairies. Recognizing the multidisciplinary nature of environmental studies, the EQAL facilities are designed to span a broad range of research projects while providing an unprecedented analytical capability at the university. The laboratory will support fundamental and applied research on the terrestrial, aquatic, and atmospheric processes that regulate the environmental quality of the Canadian Prairies. It will also be used for targeted research to help sustain agriculture and petroleum industries in Western Canada.

Nurturing Canada's intellectual capital

“The new equipment allows us to do our work in several hours as opposed to several days. It’s made a tremendous difference in the rate that we can generate data. It also allows us to see changes that we weren’t able to detect before. And it has spurred my students on to do better work, not just faster work.”

Dr. Patricia Schulte
University of Waterloo

Preserving our intellectual capital is one of the key conditions to ensuring Canada's success in the knowledge-based economy. The CFI's New Opportunities Fund provides infrastructure support to new academic personnel and helps Canadian universities attract new faculty in priority areas of development. Since its creation in August 1998, the New Opportunities Fund has enabled Canadian universities to launch the research career of 539 new faculty members in a wide range of areas and disciplines. These researchers are recognized as top leaders in their fields and are already making an important contribution in helping to strengthen the research capacity of Canadian universities.



Examples of Projects Supported by the CFI

The CFI is helping Dr. Patricia Schulte, a new member of the University of Waterloo's Biology Department, to purchase instrumentation for her work on environmental and molecular biology and the genetics of fish. The detailed study of environmental problems can pose significant challenges for biologists. The most fundamental biochemical processes involved in those problems can now be explored, but the necessary techniques call for individual molecules to be detected within complex mixtures collected in the field. Traditional versions of these methods can take up to three weeks. The latest instrumentation, however, makes it possible to carry out even more sensitive analyses in far less time. The ensuing research will examine how factors such as pollution, temperature, or oxygen levels affect fish populations.

Dr. Pearl Sullivan, a researcher in the University of New Brunswick's Department of Mechanical Engineering, is developing distributed fibre-optic smart structures for aerospace application. A smart structure can detect change and take action, especially in engineering applications. Dr. Sullivan will work with users at the Institute of Aerospace Research at the National Research Council of Canada in Ottawa. She'll also work with three other researchers at the university: Dr. Rickey Dubay and Dr. Robert Rogers, also of the Mechanical Engineering Department, and Dr. Xiaoyi Bao of the Physics Department. The CFI is helping the team to support the pioneering application of a distributed-continuous fibre-optic sensing system recently developed by Dr. Bao. It is the only known fibre-optic sensing capability in the world today for both temperature and strain, along a single fibre. Aerospace is one of Canada's leading advanced-technology sectors. It presently employs more than 60,000 people across the country and benefits from a consistent record of trade surpluses. The technology transfer to local industries resulting from the research of the team led by Dr. Sullivan is expected to contribute not only to the expansion of the aerospace sector but also to economic growth in Atlantic Canada.

An Engineering Faculty professor at Université Laval, Dr. Sophie LaRoche, is setting up a world-class laboratory to study fibre optics and the materials needed to develop high-output optical communication systems. Dr. LaRoche's research could have a major impact on the telecommunications industry, an economic sector that has been developing rapidly in Quebec and the rest of Canada. The CFI-supported infrastructure will allow Dr. LaRoche to develop state-of-the-art technologies, and to train skilled workers who will contribute to ensuring Canada's competitiveness in the global economy.

Some very straightforward and fundamental biological questions underlie many of the most challenging issues in medicine and health care research. One such question is how proteins pass through cell membranes in a highly controlled way. The answer represents much more than a matter of scientific curiosity, since membrane transport can be a matter of life or death. Ischemic heart disease, for instance, can lead to a fatal acidification of heart cells that is caused by the migration of proteins that otherwise regulate acid levels. A researcher at the University of Alberta, Dr. Joseph Casey, is now combining techniques of molecular biology and protein chemistry to investigate the role of these regulatory proteins. The CFI will support his activities by helping him to acquire several pieces of equipment that will shed light on one aspect of the health problem, and provide the necessary understanding to address many more.

Strengthening Canada's research leadership

“The new equipment will enable us to move into the next generation of Internet software. This will greatly increase the capability of researchers in the humanities to conduct complex and time-consuming analysis, and to work collaboratively on common information from different locations in Canada and abroad.”

Dr. Susan Hockey
University of Alberta

The CFI's mission is to provide researchers in Canadian institutions with the equipment and facilities they need to conduct leading-edge research and to undertake research programs that would not be possible otherwise. As part of the CFI's first competition for funding, institutions and researchers have put forward many exciting proposals in a wide range of disciplines and areas. By providing researchers with the equipment and facilities they need, the CFI is not only strengthening the capacity to train future researchers, it is also reinforcing Canada's science and technology leadership.



Examples of Projects Supported by the CFI

The advent of electronic word processing and the publication of texts on networks such as the World Wide Web have created many new possibilities for scholars to analyse any kind of written work. However, recent changes in the technical format of this material is making it necessary to update the software tools that are used to conduct this research. The CFI is supporting the University of Alberta's Canadian Institute for Research Computing in Arts (CIRCA), which has been among the leading agencies in this field, and which intends to establish a new infrastructure to help researchers in the social sciences and humanities deal with these changing technical standards. According to Dr. Susan Hockey, a professor at the Faculty of Arts, the resulting software should prove to be a major contribution to some of the ongoing projects with which CIRCA is involved, including compilations of Shakespeare for the Internet, analyses of French literature, studies of the structure and organization of biblical texts, and the documentation of museum artifacts.

The area of genomics, the detailed study of genetic patterns, represents a spectacular revolution in medical, scientific, and economic development. A group established at the Montreal General Hospital Research Institute in 1996 will usher in these changes by expanding the size and scope of its activities as the Montreal Genome Centre. The centre will foster the growth of Canadian start-up companies by providing them with access to the latest technological tools in this field, and will promote Canadian investment to commercialize the ensuing discoveries. The centre will work closely with academic, government, and industry partners to create jobs and will serve as a training ground for highly qualified people in biotechnology. Under the leadership of Dr. Thomas Hudson, the CFI is contributing to the launch of this ambitious enterprise by outfitting the centre's laboratories with some of the latest technology for analysing DNA samples, determining the genetic makeup of an organism, and storing the resulting mass of data for further research.

Dr. Alison Murray, a researcher at Queen's University's Department of Art, is taking a scientific approach to the kinds of materials that are now being used by artists, and to how those materials are being used. The University's Department of Art, which offers Canada's only graduate program in Art Conservation, is seeking to preserve Canada's cultural heritage by improving the technical quality of contemporary artworks, and establishing standards for the best way to conserve such works. The CFI is supporting this initiative through the purchase of various pieces of equipment for activities such as generating accurate images, testing paint, and analysing metal. In addition to exploring new techniques for evaluating the materials used in paintings, sculptures, digital imaging, and printmaking, this research promises to form entirely new collaborations between artists, conservators, and scientists with an interest in the visual arts.

A soil-dwelling worm-like animal that goes by the Latin name "*Caenorhabditis elegans*" has become the first creature whose entire genetic code has been mapped. A team of researchers led by Dr. Ann Rose, a professor at the University of British Columbia's Department of Medical Genetics, is building on this success by employing *C. elegans* as a model for studying the genetic makeup of other organisms, including mammals. A facility dedicated to this work will collaborate with the university's Genome Sequencing Centre to help researchers isolate and study genes that have been identified as being of interest. The facility will provide *C. elegans* specimens with a particular gene in question "knocked out" for investigative purposes. The CFI is contributing to the purchase of DNA-sequencing equipment and other technology that will form a fundamental part of this facility's infrastructure.

Strengthening Canada's research leadership

“The new equipment will enable us to move into the next generation of Internet software. This will greatly increase the capability of researchers in the humanities to conduct complex and time-consuming analysis, and to work collaboratively on common information from different locations in Canada and abroad.”

Dr. Susan Hockey
University of Alberta

The CFI's mission is to provide researchers in Canadian institutions with the equipment and facilities they need to conduct leading-edge research and to undertake research programs that would not be possible otherwise. As part of the CFI's first competition for funding, institutions and researchers have put forward many exciting proposals in a wide range of disciplines and areas. By providing researchers with the equipment and facilities they need, the CFI is not only strengthening the capacity to train future researchers, it is also reinforcing Canada's science and technology leadership.



Examples of Projects Supported by the CFI

The advent of electronic word processing and the publication of texts on networks such as the World Wide Web have created many new possibilities for scholars to analyse any kind of written work. However, recent changes in the technical format of this material is making it necessary to update the software tools that are used to conduct this research. The CFI is supporting the University of Alberta's Canadian Institute for Research Computing in Arts (CIRCA), which has been among the leading agencies in this field, and which intends to establish a new infrastructure to help researchers in the social sciences and humanities deal with these changing technical standards. According to Dr. Susan Hockey, a professor at the Faculty of Arts, the resulting software should prove to be a major contribution to some of the ongoing projects with which CIRCA is involved, including compilations of Shakespeare for the Internet, analyses of French literature, studies of the structure and organization of biblical texts, and the documentation of museum artifacts.

The area of genomics, the detailed study of genetic patterns, represents a spectacular revolution in medical, scientific, and economic development. A group established at the Montreal General Hospital Research Institute in 1996 will usher in these changes by expanding the size and scope of its activities as the Montreal Genome Centre. The centre will foster the growth of Canadian start-up companies by providing them with access to the latest technological tools in this field, and will promote Canadian investment to commercialize the ensuing discoveries. The centre will work closely with academic, government, and industry partners to create jobs and will serve as a training ground for highly qualified people in biotechnology. Under the leadership of Dr. Thomas Hudson, the CFI is contributing to the launch of this ambitious enterprise by outfitting the centre's laboratories with some of the latest technology for analysing DNA samples, determining the genetic makeup of an organism, and storing the resulting mass of data for further research.

Dr. Alison Murray, a researcher at Queen's University's Department of Art, is taking a scientific approach to the kinds of materials that are now being used by artists, and to how those materials are being used. The University's Department of Art, which offers Canada's only graduate program in Art Conservation, is seeking to preserve Canada's cultural heritage by improving the technical quality of contemporary artworks, and establishing standards for the best way to conserve such works. The CFI is supporting this initiative through the purchase of various pieces of equipment for activities such as generating accurate images, testing paint, and analysing metal. In addition to exploring new techniques for evaluating the materials used in paintings, sculptures, digital imaging, and printmaking, this research promises to form entirely new collaborations between artists, conservators, and scientists with an interest in the visual arts.

A soil-dwelling worm-like animal that goes by the Latin name "*Caenorhabditis elegans*" has become the first creature whose entire genetic code has been mapped. A team of researchers led by Dr. Ann Rose, a professor at the University of British Columbia's Department of Medical Genetics, is building on this success by employing *C. elegans* as a model for studying the genetic makeup of other organisms, including mammals. A facility dedicated to this work will collaborate with the university's Genome Sequencing Centre to help researchers isolate and study genes that have been identified as being of interest. The facility will provide *C. elegans* specimens with a particular gene in question "knocked out" for investigative purposes. The CFI is contributing to the purchase of DNA-sequencing equipment and other technology that will form a fundamental part of this facility's infrastructure.

Science for the 21st Century

“This is the first time in the history of Canada that a university joins forces with all levels of government to build a truly national research facility. This extraordinary partnership not only involves the City of Saskatoon, the Province, as well as several federal departments and agencies, it also has the support of 18 other universities across the country.”

Dr. Dennis Johnson
Former President, Saskatoon Chamber of Commerce

Members of Canada’s research community are beaming as the country prepares to build its first synchrotron. This unique research facility is one of the largest scientific projects ever undertaken in Canada. A massive particle accelerator will produce intense radiation that can be controlled with a precision measured in widths of atoms; so precise, in fact, that it can quickly pick apart minute details of matter.



Examples of Projects Supported by the CFI

The synchrotron's exceptional diagnostic capability has made it an increasingly influential tool on the cutting edge of pure and applied research in a wide range of fields. By dramatically increasing the rate at which a sample of material can be analysed, work that previously took months or years can be completed in mere days or even hours. This unprecedented pace opens the way for innovative studies of the structure of matter and the nature of chemical reactions, the development of pharmaceutical agents, the design of entirely new computer chip technology, and the manufacture of microscopic machinery that could be small enough to insert into the human bloodstream.

The Canadian synchrotron is being built at the University of Saskatchewan at a cost of \$140.9 million. This project is the result of several years' worth of active lobbying by scientists, engineers, corporations, and public officials who demonstrated that the technology would play a strategic role in maintaining Canada's place in international scientific and industrial circles.

Canada is the only industrialized country that has not, until now, constructed such a facility. And while about 18 industrialized nations have synchrotrons, there are still fewer than 100 of them in the world. About half of them are concentrated in the United States, Japan, and Germany.

The enterprise mounted by Canadian researchers to ensure that the project became a reality has been just as remarkable as the synchrotron technology itself. Since 1996, representatives of the University of Saskatchewan and the Canadian Institute for Synchrotron Radiation have been working together to amass the necessary support for the project called the Canadian Light Source.

The Canadian Light Source is the result of an extraordinary degree of collaboration for any scientific enterprise—\$28.3 million from various federal government departments and agencies, \$25 million from the Saskatchewan government, \$7.3 million from the University of Saskatchewan, \$2.4 million from the City of Saskatoon, and \$2 million from SaskPower Corporation. Another \$19 million will come from a variety of provincial, university, and industrial partners, in order to build additional beamlines.

The CFI is investing \$56.4 million in the synchrotron project. The construction work on the football-field-sized facility is expected to create about 500 jobs per year. By the time the facility is fully operational in 2003, more than 200 scientists, technicians, and operations staff will be working there, attracting as much as \$35 million annually in scientific and commercial activity to Saskatoon.

“...a system designed to provide assurance that transactions are authorized, assets are safeguarded...”



Financial Statements

Responsibility for financial reporting

The financial statements of the Canada Foundation for Innovation (CFI) were prepared by the CFI's management, which is responsible for the integrity and fairness of the data presented. In certain cases, this data may include amounts that are based on best estimates and judgment. The financial statements were prepared in accordance with generally accepted accounting principles, including the accounting recommendations for not-for-profit organizations in Canada. Financial information appearing throughout this annual report is consistent with the financial statements.

In discharging its responsibility for the integrity and fairness of the financial statements, and for the accounting systems from which they are derived, management maintains the necessary system of internal controls. This system is designed to provide assurance that transactions are authorized, assets are safeguarded, and proper records are maintained. The system is further validated by our external auditors who periodically review and evaluate the accounting records and related internal controls, and who report any findings to management. The external auditors' findings and recommendations are reported to the CFI's Audit and Finance Committee and the Board of Directors.

The Board of Directors oversees management's responsibilities for financial reporting through the Audit and Finance Committee. The Committee reviews the financial statements and recommends them to the Board for approval and submission to the Members. The Committee's other key responsibilities include reviewing the budgets, internal control procedures, investments, and advising the Directors on auditing matters and financial reporting issues.

Ernst & Young LLP, independent auditors appointed by CFI Members on the recommendation of the Audit and Finance Committee, have examined the financial statements and their report follows. The independent auditors have full and unrestricted access to both the Audit and Finance Committee and the Board of Directors to discuss their audit and related findings as to the integrity of the financial reporting and the adequacy of the system of internal controls.

Lorne A. Babiuk
Chair,
Audit and Finance Committee

Manon Harvey, CA
Vice-President,
Finance



Financial Statements

AUDITORS' REPORT

To the Members of the
Canada Foundation for Innovation

We have audited the balance sheet of the **Canada Foundation for Innovation** as at March 31, 1999 and the statements of operations and cash flows for the year then ended. These financial statements are the responsibility of the CFI's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the CFI as at March 31, 1999 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles.

Ernst + Young LLP

Ottawa, Canada,
April 23, 1999.

Chartered Accountants



Financial Statements

Balance Sheet

As at March 31

	1999	1998
	\$	\$
ASSETS		
Cash	2,522,548	354,013
Interest and other receivables	15,162,412	14,584,768
Investments [note 2]	821,828,698	812,546,328
Prepaid expenses	28,691	30,705
Capital assets [note 3]	167,097	189,749
	839,709,446	827,705,563
LIABILITIES AND NET ASSETS		
Accounts payable and accrued charges	200,191	106,526
Deferred contributions [note 4]		
Expenses of future periods	839,342,158	827,409,288
Capital assets	167,097	189,749
	839,509,255	827,599,037
Commitments [note 6]		
Net assets	—	—
	839,709,446	827,705,563

See accompanying notes



Financial Statements

Statement of Operations

Year ended March 31

	1999	1998
	\$	\$
REVENUES		
Recognition of deferred contributions relating to amounts granted to eligible recipients	27,304,113	—
Recognition of deferred contributions relating to current year operations	3,382,849	1,584,023
Amortization of deferred contributions relating to capital assets	57,005	47,437
	30,743,967	1,631,460
EXPENSES		
Grants to eligible recipients	27,304,113	—
General and administration	3,382,849	1,584,023
Amortization of capital assets	57,005	47,437
	30,743,967	1,631,460
Excess of revenues over expenses	—	—

See accompanying notes



Financial Statements

Statement of Cash Flows

Year ended March 31

	1999	1998
	\$	\$
OPERATING ACTIVITIES		
Excess of revenues over expenses	—	—
Items not involving cash:		
Amortization of capital assets	57,005	47,437
Amortization of deferred contributions related to capital assets	(57,005)	(47,437)
Net increase in deferred contributions related to expenses of future periods	11,932,870	827,409,288
Change in non-cash operating working capital	(481,965)	(14,508,947)
Cash provided by operating activities	11,450,905	812,900,341
FINANCING AND INVESTING ACTIVITIES		
Purchase of capital assets	(34,353)	(237,186)
Increase in deferred contributions related to capital assets	34,353	237,186
Net purchase of investments	(9,282,370)	(812,546,328)
Cash used in financing and investing activities	(9,282,370)	(812,546,328)
Net increase in cash	2,168,535	354,013
Cash, beginning of year	354,013	—
Cash, end of year	2,522,548	354,013

See accompanying notes



Financial Statements

Notes to Financial Statements

Year ended March 31

GENERAL

The Canada Foundation for Innovation ("the CFI") was incorporated under Part 1 of the Budget Implementation Act, 1997 on April 25, 1997 for the purpose of providing financial support for the modernization of research infrastructure at Canadian post-secondary educational institutions and research hospitals in the areas of science, engineering, health and the environment.

1. SIGNIFICANT ACCOUNTING POLICIES

The financial statements have been prepared by management in accordance with generally accepted accounting principles.

(a) Revenue recognition

The CFI follows the deferral method of accounting for contributions which include government grants and, potentially, donations from other sources.

Under the Budget Implementation Act, 1997 ("the Act"), the CFI received a grant from the Government of Canada in the amount of \$800 million plus accrued interest of \$964,384 to be held, invested, administered and disbursed in accordance with the Act and the related funding agreement between the CFI and the Government of Canada. An additional grant of \$200 million, yet to be received, was committed to the CFI in the 1999 federal budget. Grants received, together with future investment revenue, are directed to the granting of amounts to eligible recipients and the payment of the CFI's operating expenses and acquisition of capital assets in accordance with the requirements of the Act and the terms of the funding agreement. Grants received and future restricted interest earned on the invested amounts will be deferred and recognized as income as expenditures are incurred by the CFI.

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.

(b) Grants to eligible recipients

Grants to eligible recipients are recognized as expenses as the awarded funds are disbursed.



Financial Statements

Notes to Financial Statements

Year ended March 31

(c) Investments

Investments are recorded at cost. Premiums or discounts are amortized over the remaining term of the investments. If the market value of investments becomes lower than cost and this decline in value is considered to be other than temporary, the investments are written down to market value.

(d) Capital assets

Purchased capital assets are recorded at cost. Contributed capital assets, if any, are recorded at fair value at the date of contribution. Repairs and maintenance costs are charged to expense. 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:

Leasehold improvements	Over the 5 year lease period
Furniture and other equipment	20%

2. INVESTMENTS

Investments comprise the following financial instruments:

	March 31, 1999		March 31, 1998	
	Cost	Market Value	Cost	Market Value
	\$	\$	\$	\$
Money-market funds	96,900,138	96,936,715	102,133,634	102,076,498
Bonds	724,928,560	730,614,071	710,412,694	713,095,105
	821,828,698	827,550,786	812,546,328	815,171,603



Financial Statements

Notes to Financial Statements

Year ended March 31

3. CAPITAL ASSETS

Capital assets consist of the following:

	March 31, 1999		March 31, 1998	
	Cost	Accumulated Amortization	Cost	Accumulated Amortization
	\$	\$	\$	\$
Leasehold improvements	31,809	10,792	22,542	4,508
Furniture and other equipment	239,730	93,650	214,644	42,929
	271,539	104,442	237,186	47,437
Accumulated amortization	(104,442)		(47,437)	
Net book value	167,097		189,749	

4. DEFERRED CONTRIBUTIONS

(a) Expenses of future periods

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

	1999	1998
	\$	\$
Balance, beginning of year	827,409,288	—
Add grants received	—	800,964,384
Add restricted investment revenue earned	42,654,185	28,266,113
Less amount recognized as revenue	(30,686,962)	(1,584,023)
Less amount applied toward capital assets acquired	(34,353)	(237,186)
Balance, end of year	839,342,158	827,409,288



Financial Statements

Notes to Financial Statements

Year ended March 31

(b) 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.

	1999	1998
	\$	\$
Balance, beginning of year	189,749	—
Restricted grants applied toward the purchase of capital assets	34,353	237,186
Less amount amortized to revenue	(57,005)	(47,437)
Balance, end of year	167,097	189,749

5. RESTRICTED CONTRIBUTIONS AND NET ASSETS

All of the net assets of the CFI are subject to externally imposed restrictions as per the requirements of the Budget Implementation Act, 1997 which governs the CFI and the terms of the related funding agreement between the CFI and the Government of Canada. 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 therefore not been prepared since it would not provide additional useful information.

6. COMMITMENTS

During the year, the CFI awarded grants for a maximum amount of \$197.8 million, of which \$27.3 million was disbursed to eligible recipients before the end of the CFI's fiscal year. The balance of \$170.5 million will be recorded as expenses in subsequent years as funds are disbursed.

The CFI entered into a lease agreement during its 1998 fiscal year for its premises on 350 Albert Street, Ottawa for a five year term. The CFI also has operating leases relating to computer equipment. The minimum annual lease payments are approximately \$342,000.



Financial Statements

Notes to Financial Statements

Year ended March 31

7. PENSION PLAN

The employees of the CFI may elect to become members of the Association of Universities and Colleges of Canada (AUCC) Pension Plan, a defined contribution plan administered by Integra Capital Management. The employer contributions made to the Plan during the year ended March 31, 1999 amounted to \$24,149 (1998 - \$1,309).

8. FAIR VALUE OF FINANCIAL INSTRUMENTS

The carrying value of amounts receivable and payable approximate their fair value given the relatively short period to maturity of the instruments. The fair values of the investments, which are based on the year end quoted market prices, are disclosed in note 2.

9. TAX STATUS

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

10. UNCERTAINTY DUE TO THE YEAR 2000 ISSUE

The Year 2000 Issue arises because many computerized systems use two digits rather than four to identify a year. Date-sensitive systems may recognize the year 2000 as 1900 or some other date, resulting in errors when information using year 2000 dates is processed. In addition, similar problems may arise in some systems which use certain dates in 1999 to represent something other than a date. The effects of the Year 2000 Issue may be experienced before, on, or after January 1, 2000, and, if not addressed, the impact on operations and financial reporting may range from minor errors to significant systems failure which could affect an entity's ability to conduct normal business operations. It is not possible to be certain that all aspects of the Year 2000 Issue affecting the CFI, including those related to the efforts of its eligible recipients, suppliers, or other third parties, will be fully resolved.