

**CANADA
RESEARCH
CHAIRS
PROGRESS
REPORT**

**APRIL 2006 TO
MARCH 2007**





Canada Research
Chairs

Chaires de recherche
du Canada

Canada

Canada Research Chairs Progress Report

April 2006 to March 2007

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1. Message from the chair

In 2000, the Government of Canada created the Canada Research Chairs Program with the goal of attracting and retaining the world's most accomplished and promising minds to Canadian universities. Now, just eight years later, I am happy to report that this ambitious program is revitalizing the Canadian research environment, reversing the flow of talented researchers to universities in other countries, and helping position Canada as an international leader in research and development.

The past year has seen the program mature into a fully subscribed network of close to 2,000 prestigious research professorships at more than 70 universities across Canada. Together, these Canada Research Chairs help their universities become more competitive on the international stage and achieve excellence across all fields of research and academic disciplines. They create internationally renowned research centres, make groundbreaking scientific discoveries and, as a result, attract exceptional students from Canada and around the world to study at Canadian universities.

Out of the current cohort of Canada Research Chairs, approximately one third have been recruited from abroad. Of these, half are Canadian researchers returning home to carry out their world-class scholarship. In addition to this, the growing reputation of the Canada Research Chairs Program attracts the participation of other world-renowned researchers to collaborative research initiatives at Canadian universities, making Canada an international hub for research excellence and innovation.

The Canada Research Chairs Program is at the centre of Canada's national strategy to become a world leader in research, innovation and technology. Our chairholders shed light on important political, economic, social, environmental and health issues. They also strengthen the country's international competitiveness and improve quality of life for Canadians. Furthermore, Canada Research Chairs help train the next generation of Canadian researchers and leaders, ensuring Canada's continued success in the global knowledge economy.

On behalf of Canadian universities and their chairholders, I extend our most sincere appreciation for the government's continued support.

Yours in research,

Chad Gaffield, PhD, FRSC
Chair, Canada Research Chairs Program Steering Committee
President, Social Sciences and Humanities Research Council

2. The Canada Research Chairs Program at a Glance

Program context and objectives (p. 7)

In 2000, the federal government created a permanent program intended to support research excellence and capacity in Canada. It allocated \$300 million a year to establish 2,000 research chairs at Canadian universities. The program's overall objectives are to:

- ◆ attract and retain excellent researchers to Canadian universities;
- ◆ strengthen the training of highly qualified personnel;
- ◆ improve universities' capacity for generating and applying new knowledge; and
- ◆ optimize the use of research resources through strategic planning.

Program description (p. 7)

Types of Chairs and breakdown (p. 7)

- ◆ Tier 1 Chairs: \$200,000 a year for a period of seven years; renewable.
- ◆ Tier 2 Chairs: \$100,000 a year for a period of five years; renewable once.
- ◆ Breakdown by federal granting agency providing funds: 20 per cent for research in social sciences and humanities, 35 per cent for research in health sciences, and 45 per cent for research in natural sciences and engineering.
- ◆ "Flexible" chairs: The program allows some flexibility in the allocation of Chairs by federal granting agency and tier.

Table 1: The two types of Canada Research Chairs p. 7

Table 2: Breakdown of Chairs by federal granting agency p. 8

Table 3: "Flexible" Chairs p. 9

Canada Foundation for Innovation (p. 9)

The program maintains close ties with the Canada Foundation for Innovation (CFI). Universities may submit a request for infrastructure support to CFI at the same time as they submit a nomination for funding of a Canada Research Chair to the program.

Peer-review process (p. 9)

Chairs are allocated on the basis of a rigorous peer review process led by the College of Reviewers, the Interdisciplinary Adjudication Committee and the Program Steering Committee.

Chart 1: Peer-review process p. 10

Governance(p. 11)

The Canada Research Chairs Program is administered by a permanent secretariat within the Social Sciences and Humanities Research Council. The Secretariat reports to the Management Committee, which itself reports to the Program Steering Committee.

Accountability and evaluation(p. 11)

The Canada Research Chairs Program addresses accountability in a number of ways:

Annual reports	p. 11
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SUMMARY OF STATISTICS FOR 2006–07**Approved nominations(p. 12)**

226 new nominations and 85 renewals: total 311

Table 4: Nominations submitted and approved in 2006–07 p. 12

Success rate(p. 13)

The program's nomination success rate ranges from 74 per cent to 100 per cent depending on a number of factors.

Table 5: Nomination success rate, 2006–07 p. 13

Support requests submitted to CFI(p. 13)

A total of \$30,040,950 was allocated in response to 193 CFI support requests accompanying Chair nominations.

Table 6: Support requests submitted to CFI in 2006–07 p. 13

PROGRAM RESULTS MEASURED AGAINST OBJECTIVES**Overall view (p. 14)**

It has been shown that, since it was established, the Canada Research Chairs Program has been meeting its objectives. The terms of the program were renewed following its fifth-year review.

Chart 2: Number of active Chairs, 2001–07..... p. 14

Highlights from 2006–07 (p. 14)

Universities and chairholders state that the program is helping to create a research environment in which researchers can achieve new heights in research excellence.

Recruitment and retention of top researchers (p. 15)

Place of origin of candidates p. 15

Universities tend to use Chairs as a tool for retention, chiefly submitting nominations for scholars and scientists already on their faculty.

Table 7: Place of origin of candidates, 2006–07..... p. 15

Role of the program with regard to recruitment and retention..... (p. 15)

The prestige and advantages connected with the allocation of a Chair—in particular, attractive working conditions—help Canadian universities to recruit and retain some of the world's top researchers. These circumstances promote the development and strengthening of research programs.

Strengthening the training of highly qualified personnel (p. 17)

Canada Research Chairs train the next generation of skilled workers by supervising students and other highly qualified personnel. Program funding makes it possible to provide optimum training conditions, attracting students from Canada and abroad.

Improving the capacity for generating and applying new knowledge (p. 17)

Dissemination of research p. 18

In 2006–07, chairholders demonstrated impressive productivity through research dissemination activities.

Creation of research teams and centres p. 18

Program funding facilitates ties between experts, thereby fostering new research synergies. Within a research team, the prestige associated with a Canada Research Chair often helps to obtain other grants.

Optimizing the use of research resources through strategic planning (p. 18)

University strategic research plan p. 19

To be eligible for the program, each university must submit a strategic research plan defining the fields in which it intends to increase or maintain research excellence.

Strengthening research fields and impact p. 19

Universities have used program funding to strengthen the research fields defined in their plan by allocating chairs to leading researchers in those fields. This has led to many positive outcomes, and has helped many small and medium-sized universities to reinforce their position within Canada and internationally.

INVESTMENT TRENDS

Statement of expenditures (p. 20)

Table 8: Allocation of funds in 2006–07 and since creation of the program p. 20

Expenditure trends (p. 20)

Since the creation of the program, certain trends can be observed with regard to the allocation of funds. Most notably, funds are used primarily for chairholder salaries.

OPERATIONAL ISSUES

Equity in the program (p. 21)

Equity was first identified as an issue in the 2001 review of the Chairs Program, where it was noted that the proportion of women being nominated was significantly lower than the proportion of women on faculty. Since that time, significant progress has been achieved in terms of gender and some changes are being implemented in the administration of the program.

Figure 1: Proportion of female chairholders, 2000–07 p. 21

Small universities(p. 22)

Most smaller universities feel that the Chairs Program has had a significant impact by helping smaller or medium-sized institutions establish the “critical mass” needed to create and expand centres of research excellence. Smaller universities face greater challenges in terms of nomination success rates.

Figure 2: Outcomes for nominations from small, medium-sized and G-13 universities, 2000–07 p. 22

International Research Chairs Initiative(p. 23)

As part of its overall Canadian Partnerships Strategy, in 2007, the International Development Research Centre (IDRC) created the International Research Chairs Initiative, which will establish research chairs in developing countries’ universities, twinned with Canada Research Chairs. This approach to building university research capacity and international research linkages seeks to enhance the impact, training and knowledge mobilization objectives of IDRC and the Chairs Program.

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3. PROGRESS REPORT, 2006–07

Program context and objectives

The Canada Research Chairs Program, a permanent program created in 2000, seeks to make Canada a research leader in the competitive environment of the global knowledge-based economy. It is at the centre of a national strategy intended to strengthen Canada's long and proud tradition of research excellence and to offset "brain drain" pressures. The Government of Canada is allocating \$300 million a year for the establishment of research professorships—known as Canada Research Chairs—in Canadian universities. As of March 31, 2007, more than \$1.7 billion has been invested in the program.

To support Canada's research excellence and expand its research capacity, the program has adopted the following general objectives:

- ◆ attracting and retaining excellent researchers in Canadian universities;
- ◆ strengthen the training of highly qualified personnel;
- ◆ improving universities' capacity for generating and applying new knowledge; and
- ◆ optimizing the use of research resources through strategic planning.

The Canada Research Chairs Program is at the centre of a national strategy intended to strengthen Canada's long and proud tradition of research excellence.

Program description

Types of Chairs and breakdown

Table 1: The two types of Canada Research Chairs

	Tier 1 Chairs	Tier 2 Chairs
Allocations	<ul style="list-style-type: none"> - \$200,000 per year - Period of seven years - Renewable 	<ul style="list-style-type: none"> - \$100,000 per year - Period of five years - Renewable once
Chairholders	<p>These are persons internationally recognized for their outstanding research accomplishments who propose an original research program of the highest quality.</p> <p>They have superior records of attracting and supervising postgraduate students and postdoctoral fellows.</p>	<p>These are excellent emerging researchers with the potential to achieve international recognition who propose an innovative research program of the highest quality.</p> <p>As chairholders, they have the potential to attract excellent trainees, students and future researchers.</p>

Canada Research Chairs are allocated to a university in accordance with the amount of funding provided by the three federal granting agencies (the Canadian Institutes of Health Research, the Social Sciences and Humanities Research Council, and the Natural Sciences and Engineering Research Council) to that university's researchers (including funding provided to researchers working in an affiliated health research institution) over the previous three years. Chairs are allocated in three separate categories (see Table 2 below).

Table 2: Breakdown of Chairs by federal granting agency

Research in social sciences and humanities (20%)	Research in health sciences (35%)	Research in natural sciences and engineering (45%)
376 Chairs	658 Chairs	846 Chairs

As of March 31, 2007, 73 universities were eligible for the program. They are divided into three categories: the 13 large universities (G-13¹), 12 medium-sized universities and 58 smaller universities.

The Canada Research Chairs Program was designed so that six per cent of the Chairs (approximately 120) are reserved for small universities that would otherwise not be competitive for a Chair allocation. These special allocations are based on granting agency funding, with universities with an average of \$100,000 per year receiving one Tier 1 Chair, plus another two Tier 2 Chairs if they exceed \$200,000 per year. Smaller universities have performed much better than was originally expected and the program is currently overcommitted. Options for managing the special allocations are being examined.

In addition, the program allows some flexibility in allocating Chairs. This enables universities to change the tier and field of some of their Chairs. The flexibility was introduced to foster faculty renewal and the development of fields of research excellence in the institutions.

Among other things, the flexibility makes it possible to substitute two Tier 2 Chairs for one Tier 1 Chair or to shift a Chair from one research field to another (e.g. a Chair in natural sciences and engineering to a Chair in health sciences). As shown in Table 3, the flexibility of the Chair allocation process within a university depends on the number of Chairs allocated to that institution.

¹ The G-13 universities include the University of Alberta, The University of British Columbia, the University of Calgary, Dalhousie University, Université Laval, McGill University, McMaster University, the Université de Montréal, the University of Ottawa, Queen's University, the University of Toronto, the University of Waterloo and The University of Western Ontario.

Table 3: “Flexible” Chairs

Number of Chairs per university	Number of “flexible” Chairs per university
1–6	All Chairs
7–19	Total of 4 (plus special allocations)
20–70	Total of 7
70+	Total of 9

Canada Foundation for Innovation

The Canada Foundation for Innovation (CFI) is an independent corporation created by the federal government to increase Canada’s research capacity through investments in research infrastructure at Canadian universities, colleges, hospitals and not-for-profit institutions.

The Canada Research Chairs Program and CFI maintain close ties. Universities may submit a request for infrastructure support to CFI at the same time as they submit a nomination for the funding of a Canada Research Chair. Furthermore, CFI has undertaken to provide to the Program up to \$250 million in direct financial support. The amount allocated is \$125,000 per chair, and each eligible institution receives the maximum amount for its infrastructure needs.

Peer-review process

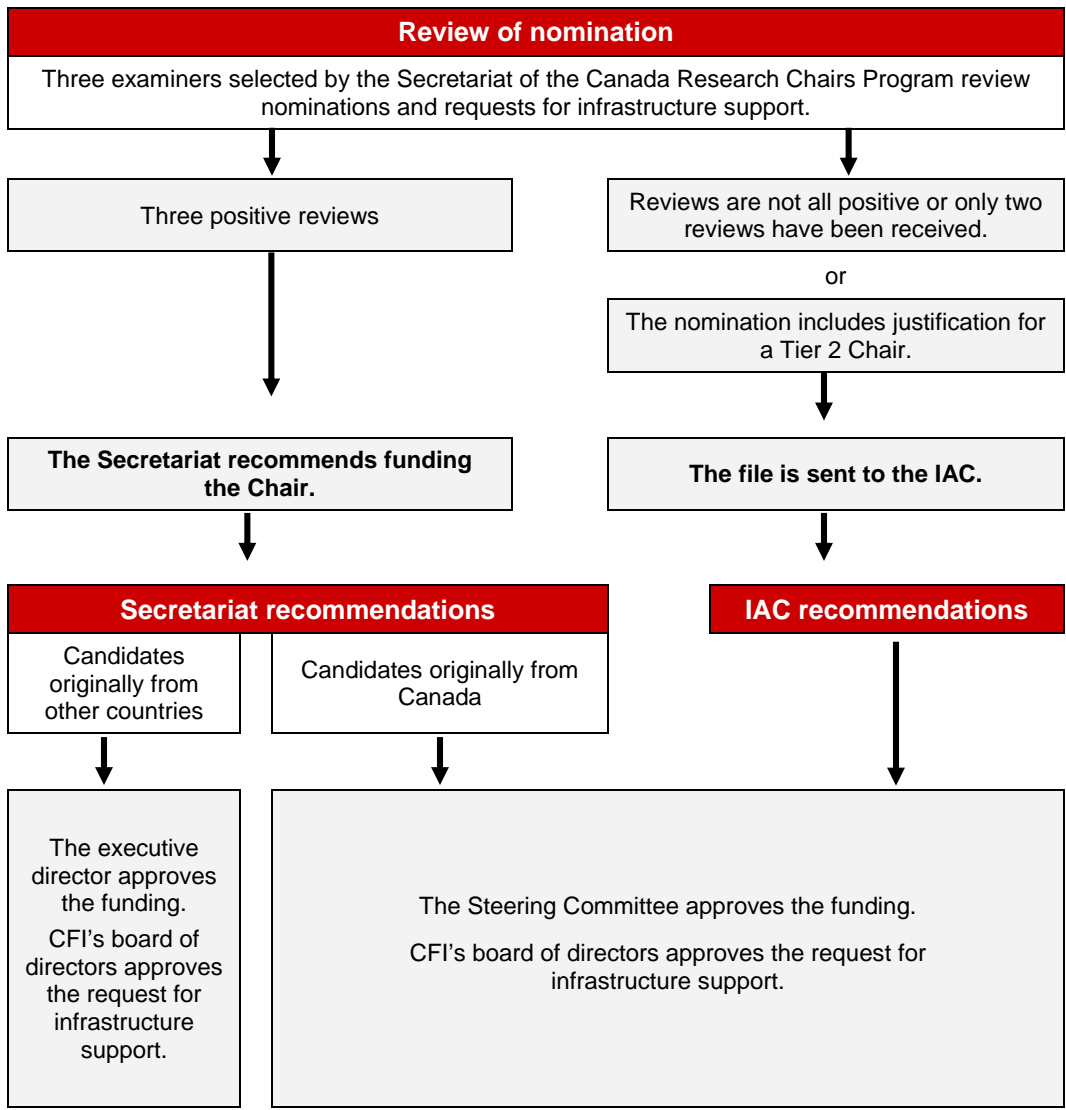
Chairs are allocated on the basis of a rigorous peer-review process led by the College of Reviewers, the Interdisciplinary Adjudication Committee (IAC) and the Program Steering Committee. With regard to the associated funding from CFI, the Secretariat of the Canada Research Chairs Program is responsible for the peer review of requests for infrastructure support accompanying Chair nominations. CFI’s board of directors makes the final decision about requests for infrastructure support for researchers whose nomination has been accepted.

The college of reviewers, which currently has more than 6,000 members, is made up of internationally recognized researchers from Canada and abroad. Its members review the nominations and the accompanying requests for infrastructure support from CFI. On the basis of these reviews, the Secretariat submits recommendations to the Program Steering Committee and CFI.

The IAC is made up of 15 members, with five specialists from the research field of each of the three federal granting agencies. It examines disputed cases and acts as the program’s quality control unit.

The Steering Committee consists of the presidents of the Natural Sciences and Engineering Research Council (NSERC), the Canadian Institutes of Health Research (CIHR), the Social Sciences and Humanities Research Council (SSHRC) and CFI, as well as the deputy minister of Industry Canada. Following the peer review, the Steering Committee makes final decisions about all the nominations submitted (except in the case of a candidate originally from another country, whose nomination is approved by the program's executive director). The chart on the following page outlines the peer-review process.

Chart 1: Peer-review process



Governance

The Secretariat of the Canada Research Chairs Program is responsible for the day-to-day administration of the program. It reports to the Management Committee, which itself reports to the Program Steering Committee.

The **Management Committee** is responsible for providing comments and advice concerning management of the peer review process, communications strategies, the Program's structure, policy development and budget management. It is composed of the executive director of the Chairs Program; NSERC's vice-president, Research Partnerships Programs; CIHR's vice-president, Research Portfolio; SSHRC's vice-president, Programs Branch; the first vice-president of CFI; and the director general, Innovation Policy, at Industry Canada.

In addition to playing an important role in the peer-review process, the **Steering Committee** is mandated to oversee the management of the program and to provide strategic advice on the program's general direction. It is also responsible for examining and overseeing, on an ongoing basis, the program's performance, measured against the defined objectives. Further, it can make changes of an administrative nature to enable the program to better achieve these objectives.

The **Interdisciplinary Adjudication Committee** also provides advice on program policy and ensures that standards are applied consistently throughout the program.

Accountability and evaluation

As with all government programs, accountability is a priority for the Canada Research Chairs Program. As a result, the program has adopted a number of approaches to ensure accountability among chairholders, institutions and the program itself. These include: annual reporting by both institutions and chairholders; financial reviews of institutions' and chairholders' accounts during the course of tri-agency financial monitoring visits; an internal audit scheduled for 2008–09; and a tenth-year evaluation to be carried out in 2009.

Annual reports

Since 2002, the Secretariat of the Canada Research Chairs Program has asked each university to produce an annual report providing a statement of expenditures for the current year as well as information concerning the impact of the program (including associated CFI funding) on the institution's research capacity (recruitment and retention of top researchers; creation and support of research teams; effective use of resources through strategic planning; and the institution's policies with regard to time devoted to research by a chairholder).

In 2005, the Secretariat also introduced an annual report for chairholders. This contains information on the chairholder's research program, knowledge transfer activities, research collaborations and training of highly qualified personnel, the program's contribution to the chairholder's ability to obtain funding from other sources, financial support from the institution, and time devoted to research.

In 2006–07, 70 universities and 1,529 chairholders submitted annual reports.

Financial reviews

The federal granting agencies carry out financial monitoring visits in universities on a regular basis (six to 10 visits a year). The objective of these visits is to review the effectiveness of the controls and systems in place to ensure that the policies and regulations of all federal granting programs, including the Canada Research Chairs Program, are followed and that expenditures are in accordance with program guidelines. A sampling of institutions' and chairholders' accounts is identified and the financial officers who make up the monitoring team review these accounts with university officials. Discrepancies or problems are brought to the attention of the program managers and are dealt with in consultation with the universities.

Internal audit

Plans are under way to carry out an internal audit of the program before its next evaluation.

Tenth-year evaluation

In accordance with the terms and conditions of the program, which expire in June 2010, an evaluation will be carried out in 2009.

SUMMARY OF STATISTICS FOR 2006–07**Approved nominations****Table 4:** Nominations submitted and approved in 2006–07

Type of nomination	Gender	Tier	NSERC	CIHR	SSHRC	Total
New	Women	1	5	11	4	20
		2	21	22	24	67
	Men	1	19	23	5	47
		2	37	38	17	92
			82	94	50	226
Renewal	Women	2	5	4	7	16
	Men	1	0	0	1	1
		2	36	20	12	68
			41	24	20	85
			123	118	70	311

Success rate

Table 5: Nomination success rate, 2006–07

Type of nomination	Gender	Tier	NSERC	CIHR	SSHRC
New	Women	1	83%	100%	100%
		2	84%	88%	92%
	Men	1	86%	95%	100%
		2	74%	95%	85%
Renewal	Women	2	100%	100%	100%
	Men	1	100%	100%	100%
		2	100%	100%	100%

Support requests submitted to CFI

Each year, around 200 candidates for Canada Research Chairs submit a request to CFI for support. In 2006–07, CFI accepted 193 requests for support, amounting to \$30,050,950. In 2006–07, the success rate of chairholder requests for support submitted to CFI was 100%. (See Table 6 below.)

Table 6: Support requests submitted to CFI in 2006–07

Type of nomination	Gender	Tier	NSERC	CIHR	SSHRC	Total
New	Women	Tier 1	2	6	1	9
		Tier 2	19	19	18	56
	Men	Tier 1	15	18	3	36
		Tier 2	32	32	11	75
			68	75	33	176
Renewal	Women	Tier 2	0	1	1	2
	Men	Tier 2	6	7	2	15
			6	8	3	17
			74	83	36	193

PROGRAM RESULTS MEASURED AGAINST OBJECTIVES

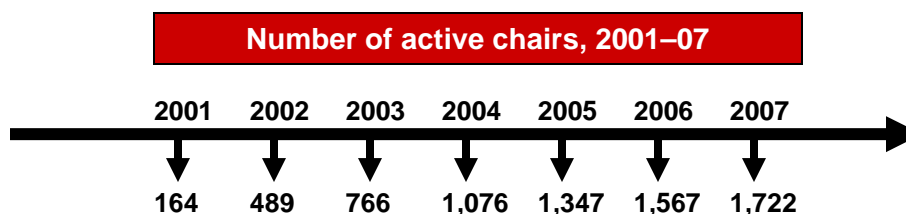
The information collected from universities and chairholders constantly confirms the importance of the program for Canada's research sector, and indeed for Canadian society. In general, and more specifically for the period covered by this report, the program has been described as essential and its achievements have been characterized as in line with its main objectives: attracting and retaining excellent researchers, strengthening the training of highly qualified personnel, improving the capacity for generating and applying new knowledge, and optimizing the use of research resources.

Overall view

It has been shown that, since it was established, the Canada Research Chairs Program has been meeting its objectives. The terms of the program were renewed following its fifth-year review, which reached very positive conclusions.² The general findings of the review demonstrate the relevance of the program's objectives and related achievements. Last, the review shows that the concerns of universities and chairholders focus mainly on the program's ongoing funding and long-term management.

Initially, the Canada Research Chairs Program had the goal of ensuring that the 2,000 chairs would be occupied during 2007–08. The Program Secretariat is proud to report that this objective has been achieved. The allocation of approved Chairs reached this target in 2006–07. As of March 31, 2007, there were 1,722 active chairholders. (See Chart 2 below.)

Chart 2: Number of active Chairs, 2001–07



Highlights from 2006–07

Overall, from the information supplied by universities and chairholders in their 2006–07 annual reports, it can be seen that the Canada Research Chairs Program (together with associated CFI funding) makes a major contribution to creating an environment in which researchers can achieve new heights of research excellence. The information and comments particularly referring to the program's objectives are also very positive, and indicate that the program's achievements are still in line with its objectives. The following sections highlight the program's achievements measured against its four general objectives.

² For a report of the program's fifth-year review, see: http://chairs.gc.ca/web/about/publications/fifth_year_review_e.pdf.

Recruitment and retention of top researchers

Among the program's major achievements are the recruitment and retention of some of the world's most accomplished and most promising researchers—one of the program's main objectives. This use of Chairs by universities as tools for recruitment or retention is examined more closely in the discussion of the breakdown of candidates by place of origin and the role of the program in this regard (according to universities and chairholders).

The Chairs Program helps to create a research environment in which researchers can achieve new heights in research excellence.

Place of origin of candidates

In 2006–07 and since the start of the program, it has been observed that universities tend mainly to submit nominations for researchers already on their faculty, followed by researchers from universities outside Canada.

Table 7: Place of origin of candidates, 2006–07

Place of origin	Nominations submitted	Nominations approved
University submitting the nomination	220	205
Another Canadian university	35	30
Canadian institution other than a university	4	4
Foreign university	77	65
Foreign institution other than a university	7	7
	343	311

Role of the program with regard to recruitment and retention

Undoubtedly, there is stiff competition to recruit and retain the best researchers. Universities are constantly trying to recruit talented researchers within Canada and abroad, particularly by offering them attractive signing packages. In 2006–07, the majority of institutions thought that the program had played a crucial role with regard to their capacity to recruit and retain top researchers:

- ◆ 94 per cent of universities indicated that the program had played a major role with regard to their capacity to retain researchers; and
- ◆ 64 per cent of them indicated that the program had played a major role with regard to their capacity to recruit researchers.

Note that most small universities thought the question about recruitment was not applicable to them because they had not been allocated new Chairs in 2006–07. Note as well that, in characterizing the role played by the program with regard to research collaborations, some universities say that the presence of Chairs helps in recruitment and retention of other top researchers.

Chairholders and universities repeatedly mention that the advantages associated with allocation of a Canada Research Chair are key factors in a researcher's decision to remain in his/her current position, move to another Canadian institution or return to Canada to develop a research program. Moreover, universities and chairholders often say that the recognition provided by a Canada Research Chair—a title described as highly prestigious—certainly strengthens a university's recruitment and retention capacity by raising its ranking within Canada and abroad.

The prestige and advantages associated with the allocation of a Chair are key factors in a researcher's decision about where to develop a research program.

Recruitment and retention thus depend on the ability to offer researchers interesting and attractive working conditions. Funding from the program and CFI support this ability by facilitating the development and strengthening of research programs. Among the advantages mentioned in the annual reports are the following:

- ◆ chairholders' lighter teaching load, which enables them to focus on their research;
- ◆ the creation or development of research teams (within an institution, nationwide, international, within a field or multidisciplinary);
- ◆ the opportunity to participate in research activities that further researchers' professional development and also gain them recognition;
- ◆ modern, well-equipped research facilities; and
- ◆ the availability of human resources to support research programs.

The interesting working conditions offered to chairholders facilitate the development and strengthening of their research programs.

Strengthening the training of highly qualified personnel

Canada Research Chairs train the next generation of skilled workers by supervising students and other highly qualified personnel (e.g. trainees, postdoctoral fellows and research professionals). Statistics from the annual reports show the vital role played by the program in this regard:

- ◆ 94 per cent of universities say the program has had a major impact on their capacity to recruit and retain top students.
- ◆ Chairholders report that they supervised more than 20,000 students (this figure does not take into account joint supervisions).
- ◆ Close to 3,000 students obtained a postgraduate degree under the supervision of a chairholder during 2006–07.
- ◆ Some universities note a significant increase in highly qualified personnel since the program was put in place.

Universities and chairholders consider the presence of Chairs within an institution an advantage for the recruitment and retention of students and other highly qualified personnel because Chairs offer optimum training conditions through learning opportunities such as:

- ◆ participation in different stages of a scientific study;
- ◆ collaboration with other top Canadian and international researchers;
- ◆ drafting research proposals or articles;
- ◆ delivering papers at national and international conferences; and
- ◆ carrying out activities in institutions with advanced research facilities.

The optimum training conditions made possible through funding from the Program are attractive for students from Canada and abroad.

Improving the capacity for generating and applying new knowledge

Research performed by chairholders helps Canadians deepen their knowledge, enhance their quality of life and make Canada more competitive internationally. For this purpose, it is necessary to share research results through dissemination activities. Funding from the Canada Research Chairs Program facilitates ties between experts, thereby fostering new synergies that improve their capacity for generating and applying new knowledge.

Dissemination of research

For the period covered by this report, chairholders showed impressive research productivity. For example, chairholders reported that during 2006–07, they:

- ◆ produced 479 books;
- ◆ published 10,770 articles in scholarly journals;
- ◆ presented 3,266 papers at national conferences and 5,112 papers at international conferences; and
- ◆ submitted 346 patent applications (118 were granted).

Creation of research teams and centres

Universities explain that chairholders train research teams or join them as members, and build solid, productive collaborations that not only strengthen their university's priority fields of research, but help to develop new research approaches. In addition, some chairholders say that their participation in research teams or centres would simply not have been possible without funding from the Chairs Program:

- ◆ 76 per cent of universities think that the program has had an impact on the creation of new research teams, groups or centres within their institution; and
- ◆ 94 per cent believe the program has had an impact on strengthening these groups.

Funding from the Chairs Program facilitates ties between experts, thereby fostering new research synergies.

These collaborations, which are often interdisciplinary, are set up between colleagues at the same institution as well as those at other Canadian universities and abroad, affiliated health research institutions, and the private and public sectors. Institutions note that within these research teams or centres, the prestige associated with a Canada Research Chair often helps to obtain other grants and this strengthens their capacity for recruiting and retaining other researchers, students and highly qualified personnel. Furthermore, the collaborations frequently lead to joint publications or patent filings.

Optimizing the use of research resources through strategic planning

The Canada Research Chairs Program seeks to optimize the use of resources by requiring each university to develop a strategic research plan that helps strengthen its fields of research.

University strategic research plan

To be eligible for the program, each university must submit a strategic research plan that defines the fields in which the university intends to increase or maintain research excellence and describes the way in which it intends to use the allocated Chairs for recruiting and maintaining world-renowned experts in these fields. When submitting a nomination, the university must show the importance of the Chair for the development of strategic research conducted in that institution or in its affiliated institutions, institutes and hospitals. The examiners determine whether the candidate complies with the university's strategic research plan and evaluate the way in which the candidate will help to achieve the university's objectives.

Strengthening research fields and impact

An analysis of the annual reports reveals that universities have invested program funding to strengthen the research fields defined in their plans by allocating the Chairs to outstanding researchers in those fields. In addition, the reports say that the program has been essential for the achievement of objectives such as:

- ◆ excellence in teaching and training students;
- ◆ strengthening multidisciplinary research through internal and external groups, as well as through other institutions within Canada and abroad;
- ◆ developing and strengthening undergraduate and postgraduate study programs to recruit top students;
- ◆ acquiring infrastructure and facilities that enable chairholders, their colleagues, collaborators and students to conduct advanced research.

Some small and medium-sized universities stress that their research activities are expanding rapidly and that the program enables them to strengthen their position in Canada and abroad.

Some large universities also mention that the program has helped them maintain their leadership position in research innovation and maintain or increase grants from external sources. Some small and medium-sized universities stress that their research activities are expanding rapidly and that the program enables them to strengthen their position in Canadian and international scientific research. Furthermore, many smaller universities say that, with the help of the Chairs Program, they were able to shift from a focus solely on teaching to an institution-wide focus on teaching and scientific research.

INVESTMENT TRENDS

Statement of expenditures

Each university must submit an annual statement to the Secretariat showing how each chairholder has spent the funding received. Table 8 (below) shows the amounts for different categories of expenditures, as well as the corresponding proportion of the total funding from the Canada Research Chairs Program spent in 2006–07 and since the program was put in place.

Table 8: Allocation of funds in 2006–07 and since creation of the program

Expenditure categories	Amount, 2006–07	Proportion, 2006–07	Proportion, 2000–07
Student salaries	\$8,085,727	3.7%	3.3%
Non-student salaries	\$20,916,753	9.6%	16.3%
Chairholder salary and benefits	\$156,156,740	71.4%	63.0%
Professional services or contracts and technology	\$5,120,565	2.3%	1.4%
Equipment (including motor vehicles)	\$1,625,693	0.7%	1.2%
Materials, supplies and other expenses	\$6,518,424	3.0%	3.7%
Administration costs related to the Chair	\$14,637,603	6.7%	9.0%
Travel expenses	\$3,537,710	1.6%	2.0%
Allocation for teaching replacement to allow for research	\$428,017	0.2%	0.1%
	\$218,815,455	100%	100%

Expenditure trends

Certain trends can be observed in the allotment of funds since the program was put in place:

- ◆ Most of the funding has gone toward chairholder salaries, and the proportion has increased yearly—from around 50 per cent at the outset to around 70% per cent today.
- ◆ Amounts allotted for non-student salaries have fallen steadily, from around 20 per cent in early years to approximately 10 per cent today.

With regard to the breakdown of expenditures by size of institution, very few variations can be noted, except in certain categories:

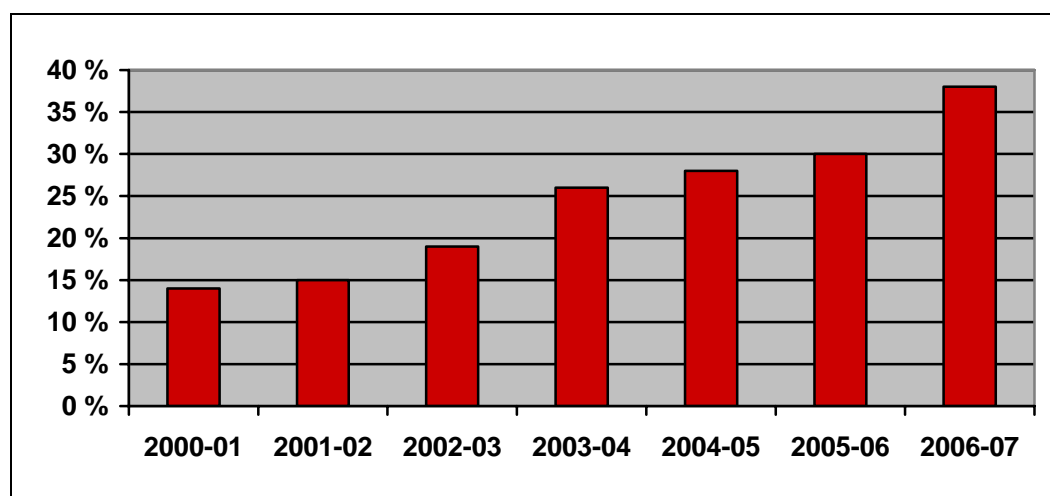
- ◆ Large universities spend a little more on Chair-related administrative costs, as well as technical and professional services.
- ◆ Small and medium-sized institutions spend slightly more on student and non-student salaries.

OPERATIONAL ISSUES

Equity in the program

Equity was first identified as an issue in the 2001 review of the Chairs Program, where it was noted that the proportion of women being nominated was significantly lower than the proportion of women on faculty. Since that time, through numerous actions, the proportion of female chairholders has more than doubled (see Figure 1) and currently is equal to the proportion of female academics holding federal research grants.

Figure 1: Proportion of female chairholders, 2000–07



In November 2006 a settlement agreement was negotiated to a human rights complaint lodged against Industry Canada regarding the Canada Research Chairs Program. The complaint centred around concerns of equity in the ranks of chairholders. The settlement agreement is designed to reinforce the program's emphasis on excellence by ensuring that all candidates have fair and equitable access to the program.

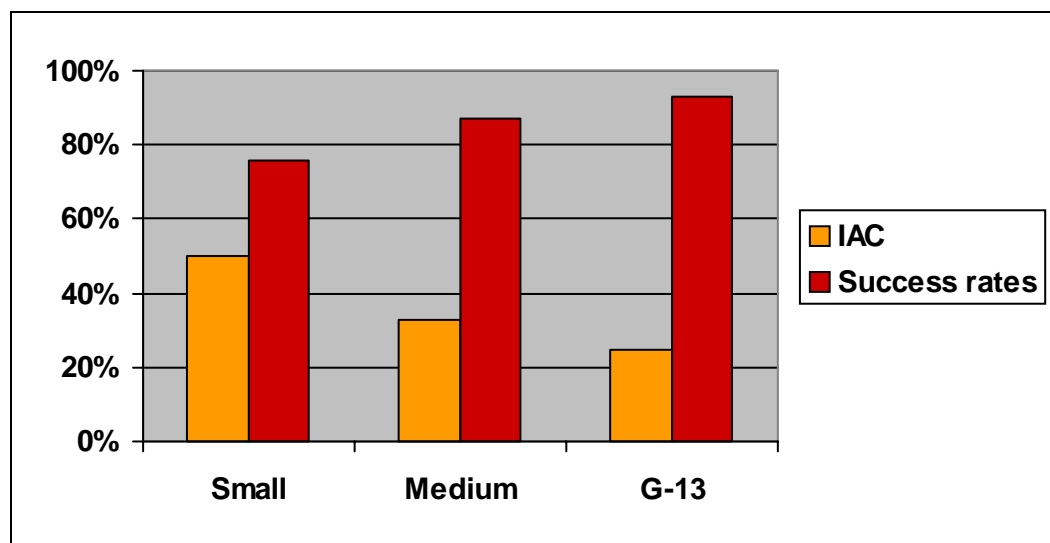
In the settlement agreement the Canada Research Chairs Program agreed to implement some changes in the administration of the program. These are grouped into four main categories:

- ◆ collecting data on the status of Chair nominees in terms of membership in four designated groups;
- ◆ instructing universities to set targets for the representation of members of the four protected groups in Canada Research Chairs;
- ◆ ensuring that transparent, open and equitable processes are employed in the recruitment and nomination of Chairs; and
- ◆ establishing a process to provide recognition to universities with exemplary equity practices in recruiting, nominating and/or appointing Chairs and meeting equity targets.

Small universities

A comparison of outcomes for nominations from small, medium-sized and G-13³ universities indicates that smaller universities have a higher frequency of referral to the Interdisciplinary Adjudication Committee and a lower success rate. There is little difference between the outcomes for nominations from medium-sized and G-13 universities. The findings are presented in Figure 2 below.

Figure 2: Outcomes for nominations from small, medium-sized and G-13 universities, 2000–07



The fifth-year review of the Canada Research Chairs Program⁴ revealed that most smaller universities feel that the Chairs Program has a more significant impact in smaller or medium-sized universities than in larger universities, mainly in helping establish the “critical mass” needed to create and expand centres of research excellence. Chairholders from smaller universities reported that their research centres more than doubled in size, compared to a 57% increase among Chairs from medium-sized or large universities. In addition, chairholders from smaller universities reported a greater relative increase in the number of peer-reviewed publications, technical presentations or papers, and national/international conferences compared to chairholders from medium-sized and large universities. This is despite the additional challenges faced by smaller universities because of their more limited financial resources and greater difficulty recruiting top students and researchers.

³ The G-13 universities include the University of Alberta, The University of British Columbia, the University of Calgary, Dalhousie University, Université Laval, McGill University, McMaster University, the Université de Montréal, the University of Ottawa, Queen’s University, the University of Toronto, the University of Waterloo and The University of Western Ontario.

⁴http://www.chairs.gc.ca/web/about/publications/fifth_year_review_e.pdf

International Research Chairs Initiative

In 2007, as part of its overall Canadian Partnerships Strategy, the International Development Research Centre (IDRC) created the International Research Chairs Initiative, which will establish research chairs in developing countries' universities, twinned with Canada Research Chairs. The IDRC–Chairs Program partnership will support up to five research chairs in middle- to low-income country universities, in one or more of the following thematic areas: Information and Communication Technologies for Development; Social and Economic Policy; Environment and Natural Resource Management; and Innovation, Policy and Science.

This approach to building university research capacity and international research linkages seeks to enhance the impact, training and knowledge mobilization objectives of IDRC and the Chairs Program. The central objective of the International Research Chairs Initiative is to build healthier, more equitable and more prosperous societies in low- and middle-income countries through strengthening the research capabilities of universities in these countries.

Through the involvement of the Canada Research Chairs Program and its chairholders, this initiative also seeks to create opportunities for chairholders in low- and middle-income countries and in Canada to implement joint research programs, provide unique training and fieldwork opportunities for students, and identify new avenues for knowledge, policy or technology transfer.

COMMUNICATIONS

Ministerial announcements

During the period covered by this report, the Canada Research Chairs Program communications team organized three ministerial announcements for a national audience in collaboration with CFI and the university community. The aim of the announcements was to make public the names of the 320 researchers selected as chairholders during the year.

The three announcements enabled the federal government to highlight its role in creating a climate conducive to innovation in Canadian universities. The announcements also proved to be good opportunities for showing how money invested by the Government of Canada in academic research helps to strengthen Canada's economic growth and enhance quality of life for Canadians. The federal investment totalled \$244.1 million.

Industry Minister Maxime Bernier took part in the announcement on April 28, 2006 at Université Laval. The July 2006 announcement was made solely through a news release. Member of Parliament James Rajotte represented Minister Bernier at the announcement on December 7, 2006 at the University of Ottawa.

University celebrations and other events

From April 2006 to March 2007, the program's communications team took part in eight celebrations organized by Canadian universities to pay tribute to their chairholders. No political official attended these events.

The program also participated in the 2006 conferences of the Canadian Association of University Research Administrators, the Association francophone pour le savoir and the Biotechnology Industry Organization, as well as in the 2006 Congress of the Humanities and Social Sciences.

Media relations and media coverage

During 2006–07, the Canada Research Chairs Program participated in drafting newspaper articles highlighting chairholders. The articles were for News Canada, a database of free articles for the use of regional and community newspapers.

In addition, to increase its visibility within the national community of science journalists, the program took part in the 2006 annual conference of the Professional Writers Association of Canada.

In all, more than 1,000 articles mentioning the program and its chairholders were published between April 2006 and March 2007. The majority of the articles quoted chairholders as experts in a given field or highlighted their research work.

Website

The website (www.chairs.gc.ca) of the Canada Research Chairs Program is its main communications tool. The site includes a database giving an overview of each chairholders' research. During 2006–07, more than 750,000 people consulted the program's website.