



EVALUATION OF THE FRANCE-CANADA RESEARCH FUND

SUMMARY

EVALUATION REPORT

#127



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Summary of the final report presented in June 2013

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Preamble

CONDUCT OF THE EVALUATION

The evaluation drew on documentation provided chiefly by the Directorate-General of Global Affairs, Development and Partnerships of the French Ministry of Foreign Affairs and by the University of Ottawa, which manages the France-Canada Research Fund (FCRF).

It continued with interviews conducted in France and Canada with all stakeholders of the scheme under evaluation. Particular attention was paid to the views of players not associated with the project who nevertheless have a good picture of French and Canadian scientific cooperation. Most of the information was gathered during a field trip to Canada, which involved three evaluators in 14 days of meetings with 12 universities and 74 players. Researchers from both communities who have been supported by the FCRF were also canvassed by means of a comprehensive online questionnaire (183 full answers were received) and supplementary interviews with project initiators in France. A comparative analysis was undertaken with the help of managers of other scientific cooperation funds around the world.

Table of contents

Preamble.....	4
Chapter 1 Overall context of scientific cooperation between France and Canada.....	6
1.1. The French and Canadian higher education and research systems	
1.2. Main instruments of the French-Canadian scientific cooperation	
1.3. Other French scientific cooperation funds around the world	
Chapter 2 The FCRF and how it works.....	8
2.1. History	
2.2. Projects supported	
2.3. How the FCRF works	
Chapter 3 FCRF outcomes.....	13
3.1. Satisfaction	
3.2. Outcomes	
3.3. Sustainability	
3.4. Other effects	
Chapter 4 Answers to the evaluation questionnaire.....	15
4.1. To what extent have the projects financed by the Fund helped to sustainably build capacity in the teams and to make scientific advances?	
4.2. To what extent has the FCRF had an effect on the development and structuring of scientific and academic exchanges between France and Canada?	
4.3. Are the FCRF's form and operation appropriate and optimal for achieving its objectives?	
4.4. How do the scientific community and private-sector players in France and Canada perceive the visibility and transparency of the FCRF?	
4.5. To what extent does the FCRF address the needs and strategies of its French and Canadian partners? Is it complementary to other research support mechanisms?	
Chapter 5 Main recommendations.....	18
5.1. General organisation of the FCRF	
5.2. Project selection	
5.3. The FCRF's medium-term strategy	
5.4. Financing the FCRF	
Conclusion.....	21
List of abbreviations.....	22

Chapter 1

OVERALL CONTEXT OF ACADEMIC COOPERATION BETWEEN FRANCE AND CANADA

1.1 The French and Canadian higher education and research systems

Rooted in a shared history, Canada and France enjoy rich and close relations at all levels and in many fields. To a large extent, this is the fruit of real cooperation on governance and social matters such as immigration/integration, healthcare, justice and public security, and on international issues.

While all Western countries are facing comparable challenges in higher education and research, the French and Canadian systems are organised very differently. In France, the Ministry of Higher Education and Research is a key player, implementing the main policies in the sector. In Canada, public policies and programs are drawn up and implemented by political and

administrative bodies at federal and provincial level. On average, the federal government funds 23.3 percent of the costs of supporting research at Canadian universities. The following table gives an overview of the two countries' higher education and research systems.

1.2 Main instruments of the French-Canadian scientific cooperation

Canada and France enjoy excellent relations in scientific cooperation. There are over 300 interuniversity student mobility agreements between France and Canada. There are also many bilateral research agreements between Canadian universities and French research institutions and between funding bodies in both countries.

CANADA ¹	FRANCE ²
1.2 million students registered on degree courses in 2010.	1,4 million students registered in French universities (including overseas universities) in 2011-2012.
Approximately 103,000 foreign students were studying at Canadian universities in 2010. France was the second largest country of origin, with 7,200 students, behind China, with 15,800.	Approximately 288,000 foreign students were studying at French higher education institutions in 2011. Canada is not among the leading countries of origin, since fewer than 10% of foreign students come from North America.
42,801 students were registered on doctoral courses in Canadian universities in 2008-2009.	65,800 students were registered on doctoral courses in 290 doctoral schools in 2012.
5,421 doctorates were awarded in 2008, a 40% increase in five years.	11,400 doctorates are awarded each year.
79,000 scientific publications in 2010.	87,000 scientific publications in 2010.
3,173 copublications in 2010 (3.67% of French publications and 4.11% of Canadian publications), most of them in medicine, life sciences and physics.	

1 - Main source for Canada: Association of Universities and Colleges of Canada website (www.aucc.ca)

2 - Main source for France: Ministry of Higher Education and Research website (www.enseignementsup-recherche.gouv.fr)

The Office for Science and Technology (OST) at the Embassy of France in Canada supports Franco-Canadian research cooperation and runs a number of programs to promote French research and technology, including an Invitations and Missions program and a Scientific Stays for Tenured Researchers program (*Séjours scientifiques de haut niveau*, SSHN). The FCRF is a key element of the system.

The Canadian Embassy in France also runs science and technology programs designed to enhance scientific cooperation between Canada and France, such as a technological inputs program, the Industrial Research Assistance Program (IRAP) run by Canada's National Research Council and the International Trade Ministry's Going Global program.

1.3 Other French scientific cooperation funds around the world

As part of the evaluation, a comparative analysis of other funds and programs was carried out, focusing on precise aspects, with the aim of identifying ideas for recommendations derived from the observation of best practice elsewhere. Twelve funds were studied, looking at particular aspects such as their governance, selection processes, business model and links with the private sector. The detailed results of this study are contained in the full report and its annexes. The table below gives a broad comparison of the North American funds supported by French cooperation.

Fund ⁴	Capital endowment	Grants	Projects funded	Average amount per project
Stanford	€3.2 million	€ 103,000	10	€9,600
Chicago	€2.2 million	€ 79,000	10	€ 7,800
FFCR	€2 million	€ 126,000	16	€ 7,700
Alliance	€ 1.7 million	€ 45,000	5	€ 9,000
Berkeley	€ 3.8 million	€ 180,000	23	€ 9,500
MIT	€ 1.4 million	€ 76,000	6	€ 13,200

Source: French embassies and fund managers. Processing: Pluricité.

3- Cai Yuanpei (China); High Council for Scientific and Technological Research (Israel); Indo-French Centre for the Promotion of Advanced Research (IFCPAR); France-Stanford Center for Interdisciplinary Studies; French Committee for the Evaluation of Academic and Scientific Cooperation with Brazil (COFECUB); France-Berkeley Fund; France-Chicago Fund; Partner University Fund (PUF); Alliance Program (United States); MIT-France Program; Massachusetts Institute of Technology (MIT); Franco-German University (deutsche-französische Universität, DFU).

4- The data provided in this table cover the period 2008-2012, with the exception of those concerning the Alliance Fund which cover solely 2012.

Chapter 2

THE FCRF AND HOW IT WORKS

2.1 History

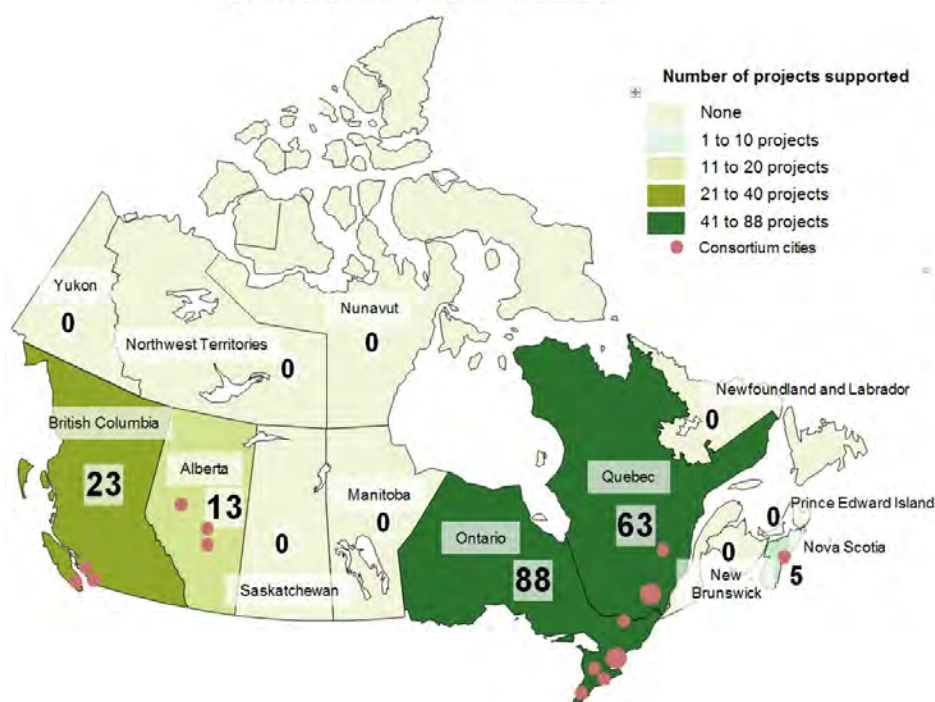
The FCRF was created in 2000 on the initiative of the Office for Science and Technology (OST) at the embassy of France in Canada with several well-known Canadian universities, with the aim of boosting and structuring bilateral scientific cooperation. The embassy wanted the new instrument to serve as an “undeniable guarantee of the quality of exchanges” for high-level bilateral projects with considerable industrial potential.

The FCRF was modeled on the France-Berkeley Fund (FBF), created by the French Ministry of Foreign Affairs and the University of California, Berkeley in 1993, at the time the only other bilateral scientific fund supported by France in North America. This type of partnership is founded on an initial capital endowment funded equally by the two parties (generally several million US dollars), incorporated into the endowment of the foreign partner univer-

sity, which therefore manages the fund. The interest income is used to cofinance a number of research projects each year (mobility support, limited to a few thousand dollars), selected after a call for projects in much the same way as the Hubert Curien Partnerships (PHC) set up by the French Ministry of Foreign Affairs with over 60 countries since the 1980s.

Unlike the funds created in the United States, it was decided to open the FCRF on the Canadian side not with just one university but with a consortium of partners. The members are among the top 20 Canadian universities from across the whole country (including Quebec and the Maritime Provinces) and their specialisations cover all the priority issues of bilateral cooperation. The initial consortium of 16 universities was enlarged to 19 members in 2007, including one from the private sector (the Canadian branch of the French oil firm Total).

Number of projects supported 2001-2012



Source: Embassy of France in Canada website. Processing Pluricité.

2.2 Projects supported

The FCRF has supported fifteen or so research projects each year for over 10 years. Grants have ranged between €6,000 and €11,500, with an average amount of around €8,000, and must be used exclusively for mobility costs (stays in France or Canada, associated international and domestic travel). From its inception until 2012, the FCRF had supported 190 projects selected from among the applications submitted.

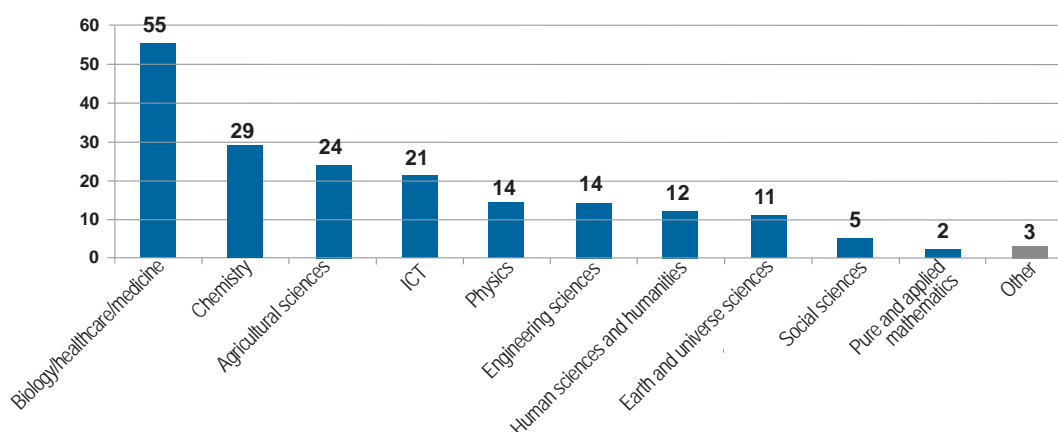
Although all the Canadian universities that are consortium members have taken part in projects funded by the FCRF, they have not all done so with the same intensity (see table below).

On the French side, over 100 different institutions had benefited between the FCRF's inception and 2012. Of the 190 projects supported over the period, 157 involved researchers from research institutions or members of a joint research unit (including over 100 from the CNRS). Since 2012, the FCRF has had a French co-chair, one aspect of whose brief is to better represent French research institutions and teams within the fund. However, his task will be made difficult by the fact that projects are spread over a large number of institutions. Analysis of university pairings confirms the dispersion of relationships supported by the FCRF, which, far from being concentrated, form a network with numerous contact points. Only two university pairs have been supported on three occasions (and with six different teams): the University of Ottawa with Bordeaux 1 and *Université Paris 6* with McGill University.

Canadian universities	Number of projects supported from 2001 to 2012
<i>Université de Montréal</i>	23
University of Ottawa	22
<i>Université Laval</i>	19
McGill University	18
University of Toronto	13
University of British Columbia	13
University of Waterloo	12
University of Calgary	10
Western University	10
Queen's University	8
University of Guelph	7
Simon Fraser University	7
Carleton University	6
McMaster University	6
Dalhousie University	5
University of Alberta	3
University of Victoria	3
York University	3
<i>Université du Québec à Montréal (UQAM)</i>	2

Source: Embassy of France in Canada website.

Number of projects supported by the FCRF by scientific discipline from 2001 to 2011



Source: Embassy of France in Canada. Processing: Pluricité.

When you submitted your application, would you say your project was:

Response rate : 99%	Number	Percentage
In its initial stage	99	54%
Already well-established	52	29%
An intuition, an idea to explore	31	17%
Total	182	100%

Source: Pluricit . Taken from the survey of initiators of supported projects (Canadian and French).

As far as disciplines are concerned, the FCRF broadly follows the trend of scientific cooperation between France and Canada. There has not been any obvious tropism or particular shift over the years.

In terms of scientific approach, the supported projects are generally submitted by teams familiar with international cooperation, especially between France and Canada. Projects are very varied, from the most innovative to the most assured, in proportions which accurately correspond to the idea of a seed fund.

The FCRF's policy in recent years of giving priority to entirely new collaborations is reflected in the facts, since in 2010 over 80% of project initiators had never worked with a colleague from the other country before submitting the application. The idea tended to come to them more by serendipity than as a result of a structured approach, in very many cases after discussions at a conference.

Abandonments are rare and generally due to unforeseeable factors, such as health problems, recruitment issues or scientific failure. Overall, mobility between France and Canada does not pose researchers any problems, either practical or scientific.

The projects supported by the FCRF generally involve one or more doctoral or postdoctoral students. Nearly half the projects have involved mobility for one or more doctoral or postdoctoral students. Over the years, the supported projects have increasingly involved the mobility of students, at the expense of projects which involved only the project leader.

Annual FCRF process

September	Launch of annual call for projects.
November	Receipt of applications.
End of January	Preselection by universities.
April	Evaluations.
June	Joint committee, final selection of projects.

2.3 How the FCRF works

2.3.1 Project selection

2.3.1.1 Information about the FCRF

The embassy of France issues the FCRF call for projects to member universities each year through the FCRF correspondent. Generally a member of the research office staff, the correspondent is responsible for circulating the call for projects to the university's research community. Practices in the matter differ according to the relations and resources developed in the university concerned.

2.3.1.2 Project selection

Remarkably, the FCRF has attracted considerable attention since its first call for projects, since 238 preliminary projects were submitted and 20 ultimately supported in 2001. This popularity (and the high degree of selectivity) has continued ever since, the selection rate running at around 10-11% between 2002 and 2011.

Each project submitted to the FCRF undergoes three separate evaluations as detailed below.

- A preselection process within the Canadian universities, which can select up to five projects (three until 2011), whatever the size of the university or the range of its disciplines. The selection rate at this level varies greatly from one university to another, directly linked to the ratio between the number of projects submitted by researchers and the university's quota (in 2011, for example, 32 projects were submitted to *Université de Montréal* but only one to Calgary University). Each university has its own evaluation methods; the FCRF criteria are used only as an indication of what the FCRF expects because they are relatively vague (see the full report for a full analysis of this point).
- The preselected projects are then subjected to two further evaluations, one by each party.
 - On the French side, the evaluation is carried out by the international expert assessment unit (*Mission d'expertise internationale*, MEI) at the French Ministry of Higher Education and Research, which coordinates a network of 250 experts and nine leading sector experts and evaluates the majority of projects falling within bilateral scientific partnerships entered into by the French Ministry of Foreign Affairs. The experts are appointed according to their area of expertise. The embassy of France presents the unit's recommendations to the joint committee. The experts use a standardised set of evaluation criteria.
 - On the Canadian side, the evaluation is conducted by a committee of international experts. There is no formal set of evaluation criteria. The Canadian vice-chair of the FCRF presents the committee's recommendations to the joint committee.

As the two evaluations are consultative and specific to each country, the joint committee consolidates them in order to draw up a list of successful applicants. Each year the task of consolidation is undertaken by discussion in committee until agreement is reached on a final list of 15 successful applicants.

2.3.1.3 Project monitoring

After the joint committee has made its decision, the embassy sends a letter of congratulation to the successful applicants and forwards the list, with the project initiators' contact details, to the University of Ottawa Finance Department, which orders the funds to be transferred to the Canadian universities where the

selected project initiators are based. From that time onwards, it is the responsibility of each Canadian university to ensure that the funds are used properly. There is no monitoring or oversight by the FCRF itself, which relies on the rules prevailing in the universities concerned to manage the grants.

2.3.2 Project players and governance

All aspects of the FCRF's work (finances, project selection, introduction of new partners, etc.) are overseen by a single body, the executive committee. Meeting annually in Ottawa or Paris, its members comprise representatives of the French Ministry of Foreign Affairs and the embassy of France in Canada, the Vice-Rector for Research of the University of Ottawa and representatives of the French Ministry of Higher Education and Research, the Canadian ministry in charge of Industry, Total Canada and some representative of university consortium members, invited annually.

The Fund's regulations do not dictate the frequency of Canadian universities' participation in the consortium administered by the University of Ottawa. The table on the following page shows consortium members' participation in the executive committee. The years marked "O" indicate actual attendance, while the boxes marked "X" indicate an apology for absence.

The number of invited universities stabilised from 2007, when the executive committee decided that three universities would be invited each year on a rotating basis. Although the number roughly corresponds to that rule, the rotation has not been entirely consistent. 12 years after the consortium was created, four of the 16 founding universities, including Toronto University, have never taken part in the FCRF's decision-taking governance. Of the three universities admitted in 2007-2008, two have not yet been invited, while the third, Dalhousie, has been invited three times.

2.3.3 Overall financial situation

Under the terms of the FCRF's founding document, government agencies, research funding bodies, universities, research organisations and the private sector in both countries can contribute to the capital endowment. The document also states that joint research projects will be funded on an equal basis from the income of the France-Canada Research Fund. The French Ministry of Foreign Affairs was the leading contributor to the FCRF over the period 2001-2010, making the substantial annual contributions required to maintain the number of supported projects.

Consortium member	Number of participation	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Ottawa University	11	○	○	X	○	○	○	○	○	○	○	○	○
Calgary University	7		○	○	○	○	○	○	○				
Simon Fraser University	4		X					○	○	○	○		
Université de Montréal	4		○	○	○		○	○					
Western University	3		○	○	○								
McGill University	3		○						○		○		
Dalhousie University	2	■	■	■	■	■	■				X	○	○
Victoria University	2		○	○									
Université de Laval	2		○		○								
University of British Columbia	1		X									○	X
Guelph University	1		○										
Carleton University	1		○										
Waterloo University	1		○							○			
York University	0		X										
McMaster University	0		X										
Toronto University	0		X										
Queen's University	0		X										
UQAM	0	■	■	■	■	■	■	■					
Alberta University	0	■	■	■	■	■	■						
Number of universities invited (including Ottawa)		1	16	5	5	2	3	4	4	3	4	3	3

Key: Present ○ Apology for absence X Not a member of the consortium ■

Source: minutes of executive committee meetings.

The French Ministry of Higher Education and Research is also an important contributor to the FCRF, through an annual contribution of €50,000 paid since 2006 and the introduction of three doctoral scholarships since 2007 at an estimated cost of €270,000 a year.

The French side (excluding the private sector) contributed 64% of the FCRF's endowment over the period 2001-2010. A little over four million Canadian dollars have been invested in the Fund since its inception. The FCRF's endowment at 31 July 2011 stood at CAD 2,631,055. Less than the Parties' total con-

tributions to the Fund since 2000, this figure is due to recurrent draw-downs of the endowment in order to support a substantial number of projects each year. A new period of growth in value is expected, with a fresh contribution of CAD 500,000 in 2013. From the outset, the University of Ottawa has provided administrative and financial management of the FCRF on behalf of the consortium members under the oversight of the executive committee. It has several essential tasks, which include administering the FCRF's account, preparing financial statements, making payments and generally tracking the grants awarded to each project.

Chapter 3

FCRF OUTCOMES

3.1 Satisfaction

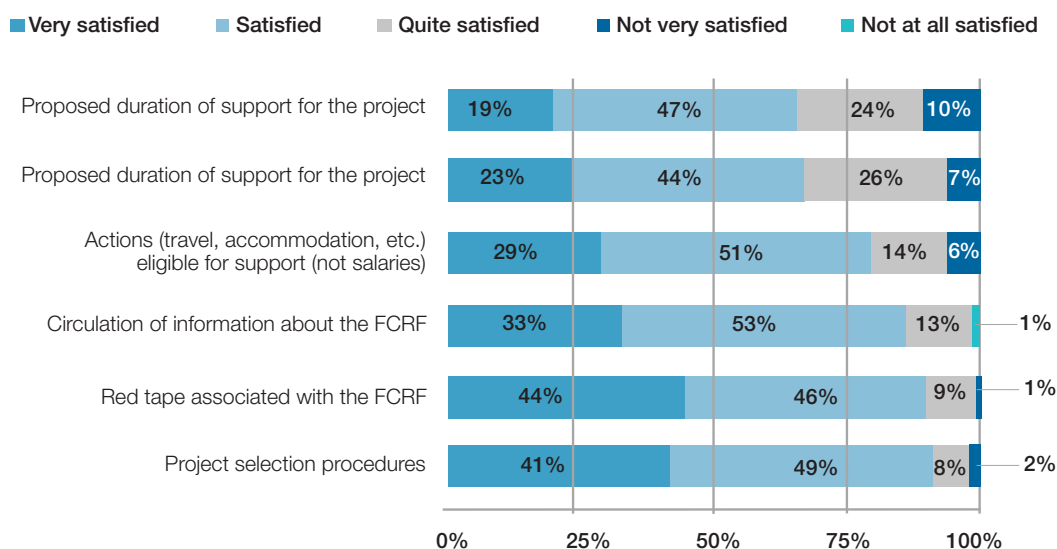
Questioning during the evaluation focused primarily on the project initiators ultimately selected, who were more inclined to look favourably on the procedures which had led to their selection. In that context, the overall satisfaction rate was 98%, with 60% of respondents saying they were “entirely satisfied”⁵. 93% of Canadian respondents said that they had “recommended colleagues, partners or students to submit a project to the FCRF”.

3.2 Outcomes

The main project outcomes are scientific, mostly relating to fundamental research. The outcomes take the form of copublications, joint papers and participation in or organisation of international events.

Between 2001 and 2010, the FCRF is estimated to have contributed directly or indirectly to at least 250 joint papers, 200 tier 1 copublications and 60 organised events.

How satisfied are you with the following elements?

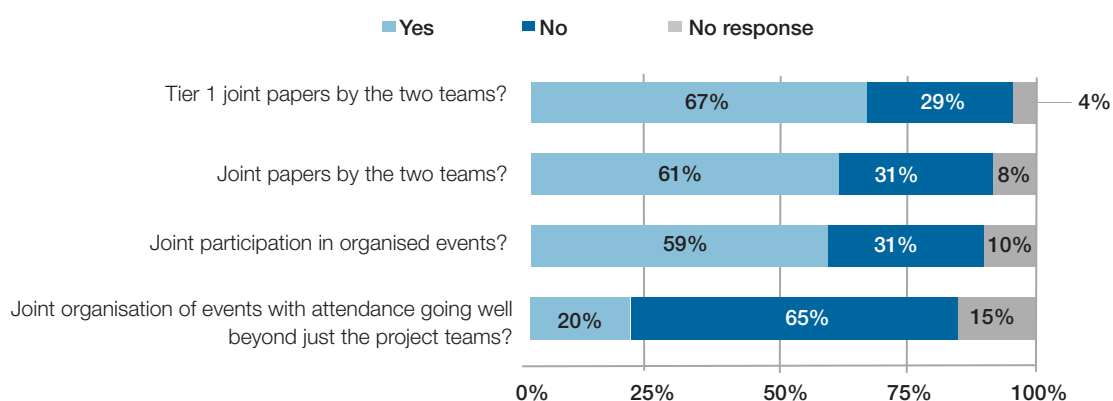


Source: Pluricité. Taken from the survey of initiators of supported projects (Canadian and French).

5 - The exact question was “Overall, how satisfied are you with the FCRF as a whole?”



Did your project have any of the following outcomes?



Source: Pluricité. Taken from the survey of initiators of supported projects (Canadian and French).

3.3 Sustainability

The vast majority of collaborations initiated by the FCRF continue beyond the supported project (88% according to the survey). For the most part, subsequent cooperation “merely” involved taking part in conferences and seminars related to the subject of the joint research. In several cases, however, the cooperation continued through the hosting of students, interns and postdoctoral students in the two partner countries. In one case out of five, copublications came after the project, showing that the cooperation continued over time. In several cases, FCRF support also ultimately resulted in a doctoral student or researcher being taken on by a laboratory.

3.4 Other effects

The effects of FCRF support on the team conducting the research project are relatively plain to see. FCRF funding has favoured specialisation in research teams, which have stepped up their work on the subject of the research project and acquired visibility and an “expert” tag in the field on an international scale. By supporting scientific projects, the FCRF gives impetus to the research team, which works harder and will seek to keep the project going by extending its quest for new funding.

However, it is unusual for these collaborations to have much effect on relations between the researchers’ universities. Examples of industrial application are rare, though effects have been found in 22 projects out of the 122 for which at least one answer was obtained, generally in the form of continuation of the research with the support of an industrial partner or public money from national research funding organisations.

Chapter 4

ANSWERS TO THE EVALUATION QUESTIONNAIRE

The evaluation questionnaire used the customary evaluation criteria⁶. The preparatory phase resulted in an evaluation framework comprising six questions derived from the input of the steering committee and the 15 questions of the evaluation specifications. The framework, in the form of tables showing “question – criteria – indicators”, is included in the full report.

4.1 To what extent have the projects financed by the Fund helped to sustainably build capacity in the teams and to make scientific advances?

By granting relatively modest financial support to French and Canadian research teams, the FCRF helps to expand joint scientific activities which lead in a certain number of cases to scientific advances.

The vast majority of research projects take place in accordance with the researchers’ expectations. Outcomes are real. Between 2001 and 2010, the FCRF is estimated to have contributed directly or indirectly to at least 250 joint papers, 200 tier 1 copublications and 60 organised events.

The FCRF fosters partnerships between teams which often find it difficult to keep going afterwards because of a lack of means of support for collaborations which are only recent.

Collaborations regularly continue, though in a less structured form than in the FCRF framework (hosting a doctoral or post-doctoral student, participation in a thesis jury, sabbatical leave, attendance at a summer school). This is due to the sometimes limited maturity of projects after a new collaboration lasting a “mere” two years, and to the limited possibilities for finding specific funding for this type of international cooperation other than through major international calls for projects.

According to the survey of FCRF beneficiaries, a little over half of the projects obtained further funding after the FCRF. In fact, this mostly takes the form of national research funding which does not necessarily aim to foster international cooperation but to support research projects. Some were able to raise regional

or provincial funding or, much less often, European, industrial or foundation funding.

About half the project initiators said they had continued to conduct joint research projects, to publish jointly in peer-reviewed journals and to arrange for mobility within their teams. A small number of FCRF-funded projects became the first step towards larger-scale international projects.

4.2 To what extent has the FCRF had an effect on the development and structuring of scientific and academic exchanges between France and Canada?

As a seed fund, the FCRF enables French and Canadian researchers to initiate or formalise a partnership which in a certain number of cases is continued in joint research activities. The FCRF’s effects on the development and structuring of scientific and academic exchanges between French and Canadian institutions are reckoned to be slight, taking various forms but rarely going very far.

- In the majority of cases, the project initiators use the FCRF funding to facilitate the mobility of research team members (mainly young researchers). The FCRF thus helps to foster or formalise collaborations by going beyond existing, often informal interpersonal relationships to encourage greater involvement of teams on both sides of the Atlantic.
- One out of four project initiators considers that the FCRF has helped to develop and structure their discipline within their university.
- One out of five project initiators considers that research relations between their university and their partner’s university are a direct result of the FCRF funding.
- Fewer than one project in ten led to the development of joint courses (master’s, cotutelle, mobility program).

6 - OECD Development Assistance Committee criteria: relevance, effectiveness, efficiency, impact, sustainability.

4.3 Are the FCRF's form and operation appropriate and optimal for achieving its objectives?

The FCRF's governance is effective. The governing body meets every year, the meetings take place in good conditions and decisions are taken.

However, governance remains relatively informal. There is no rule for inviting universities to the annual meetings of the executive committee, or for the invitees' role. There is no term of office, either for the Canadian and French co-chairs or for the FCRF's management.

- The commitment of the players involved means that the FCRF has never experienced any shortcomings in its decision-taking since 2001.
- The consortium of Canadian universities has no real operational existence. The Canadian universities are not systematically or formally consulted about major decisions concerning the FCRF (e.g., enlargement plans, new cycle of capital contributions). The consortium has never formally met, has no mailing list or exchange platform and no collective voice within the FCRF.
- Knowledge about the FCRF's governance becomes vaguer and dissatisfaction with that governance increases with distance from Ottawa (university and embassy), linked to an impression that the FCRF's methods of operation and selection are opaque.

The current form and operation of the FCRF are not optimal for achieving its objectives. The lack of precise criteria for selection or for use of the funding allocated to researchers creates uncertainty and confusion among French and Canadian universities and researchers.

- Almost all the researchers appreciated the "flexibility" of the program, which enables a program to be carried out "quickly". However, the absence of reasons for rejection by the executive committee is a cause of dissatisfaction.
- Many players consider the annual calendar to be inefficient. Evaluation lead times are very long in relation to the time available to researchers to submit an application following notification of the call for projects.

- Research administrators and researchers find the selection criteria unclear. The methods for evaluating preselected projects are not the same in France and in Canada.
- Project follow-up is mostly limited to financial information, making it impossible for the FCRF's administrators to support their decisions on the basis of the outcomes of supported projects, and even more so to convince new partners of the value of the FCRF as an instrument for scientific cooperation in France and Canada.

4.4 How do the scientific community and private-sector players in France and Canada perceive the visibility and transparency of the FCRF?

The FCRF's visibility varies enormously between French and Canadian universities. Very limited in France, it is greater in Canada, which has a network of FCRF correspondents.

- The FCRF enjoys relatively good visibility among Canadian researchers through information provided by the universities themselves and *via* word of mouth among researchers who have links with France. The efforts made by embassy and consulate staff greatly help to promote the FCRF to researchers and to establish relationships with the scientific community.
- In France, only a small minority of researchers receive any information about the existence of the FCRF through their universities, the vast majority of which know little or nothing about the FCRF, do not realise the specific nature of the program and hence do not incorporate it into their international policy. The FCRF does not carry out any communication campaign other than on the embassy of France in Canada website.

The FCRF has virtually no visibility at all among private-sector players, insofar as no specific action has been taken to target them.



4.5 To what extent does the FCRF address the needs and strategies of its French and Canadian partners? Is it complementary to other research support mechanisms?

The FCRF is an instrument which meets the needs of researchers who have to find various sources of funding and new collaborations in order to start, carry out and continue their research in an academic environment where internationalisation is playing a growing role.

- Within a decade, fundamental changes have taken place in the role, methods and importance of international collaborations and exchanges. The internet has greatly facilitated direct contacts, while competition in research has become more intense. At the same time, it is becoming increasingly difficult to obtain the funding needed to conduct high-level research, and multiple collaborations are essential in order to qualify for international programs. In addition, the increasing globalisation of research (and higher education in general) has sparked fierce competition between countries to attract the best researchers.

The FCRF has responded appropriately to the need for internationalisation and for cooperation between Canada and France by providing a simple and quick way to encourage the rapid emergence of high-level research partnerships between researchers in the two countries. It is complementary to the main sources of research funding, which offer fewer opportunities to fund international mobility intended to expand research networks.

- By applying to the FCRF, project initiators are seeking to start or formalise a new collaboration in order to develop complementarities, enhance skills and expertise and/or explore new scientific fields.
- All the players interviewed emphasised the importance and attraction of being able specifically to fund mobility in order to facilitate international collaborations.

- For some researchers, another reason for applying to the FCRF is their wish to try, in a quick and flexible way, to “take a gamble”, try out an avenue of research or a subject, knowing that although success is not necessarily clear-cut, the fact of having seed money is a great advantage, and that in all events the collaboration will produce a few publications and lead to greater familiarity with the partner, which may be useful later.

Chapter 5

MAIN RECOMMENDATIONS

5.1 General organisation of the FCRF

The FCRF has been in existence for over ten years and has not encountered any major difficulties in its operation, implementation or governance.

5.1.1 Operation and implementation of the FCRF

Cooperation between staff at the embassy of France and the University of Ottawa is good. However, interviewees identified a number of areas of dissatisfaction. Managerial improvements are necessary and to hand. They include:

- introducing procedures to provide information to non-selected project initiators;
- computerising tracking data (project by project) and indicators for executive committee meetings;
- defining eligibility criteria (what formal criteria are used to judge a “new” cooperation?) and selection criteria more precisely on the website and giving access to applications for the current year;
- instituting an eligibility check sufficiently far in advance to ensure that projects preselected by universities do not turn out to be ineligible;
 - making provision to extend projects if unforeseen circumstances arise (e.g., illness or maternity);
- instituting project tracking that goes beyond just financial elements in order both to keep a database of selected projects and to establish a medium-term strategy for the FCRF (e.g., disciplines taken into consideration);
 - requiring follow-up and acknowledgment from researchers (e.g., acknowledgment in publications, papers and other scientific activities).

5.1.2 Governance of the FCRF

The FCRF’s current governance, though it has demonstrated real fluidity in decision-taking, is a source of incomprehension or even tension for partners who feel out in the cold. Certain options can be explored in order to involve the different partners more, facilitate decision-taking, secure the position of those who

are responsible for taking decisions and increase the FCRF’s visibility.

The situation of each of the Canadian universities should be defined more precisely so that they can participate in the FCRF’s management. It seems essential that the FCRF’s management should include French heads of higher education and research institutions who can give the FCRF political support (with the secondary effect of limiting the dispersion of projects on the French side).

- Clarify the processes for appointing executive committee members and chairs (e.g., rotation of members and chairs, as in the Ontario-Rhône-Alpes scheme).
- Draw a distinction between operational matters (project selection) and strategic matters (two executive committee meetings a year?).
- Breathe life into the consortium of Canadian universities. On this point, it is important to emphasise that some universities are not looking for any greater involvement, whereas most expect to know more about what the FCRF is doing:
 - organise meetings of consortium members or with all the FCRF’s partners at important moments in the fund’s life (enlargement of the consortium, new endowment, evaluation, etc.);
 - circulate specific FCRF information to consortium members in preparation for each executive committee meeting;
 - introduce a process for appointing representatives of the Canadian side on the executive committee, possibly supplemented by a system of powers of attorney exercised by each consortium member.

5.2 Project selection

The project selection procedure is the aspect of the FCRF which generates the most tension among the FCRF’s stakeholders, especially because of the energy expended in relation to the amount of funding provided. Consequently, it seems advisable to explore a number of options:

- clarify the project eligibility and selection criteria, both in the call for projects documents and to the FCRF’s partner universities;
- ensure that the evaluation focuses on the teams and not

mainly or solely on the initiator (because an experienced initiator can support a doctoral student; the FCRF has demonstrated an interesting capacity to initiate team-to-team relationships);

- propose a set of project preselection criteria to the Canadian universities (for information, or for use in their own preselection procedures);
- explore the possibility of real joint Franco-Canadian evaluation/ expert assessment (group of French and Canadian experts);
- set a predetermined annual schedule, advancing the executive committee meeting to early spring (with the help of a faster, unified expert assessment process) in order to notify successful applicants sooner so that they can take advantage of mobility opportunities in the first summer.

5.3 The FCRF's medium-term strategy

The FCRF is very popular with the French and Canadian research communities, reflected in the large number of applications every year. By applying to the FCRF, project initiators are seeking to start or formalise a new collaboration in order to develop complementarities, enhance skills and expertise and/ or explore new scientific fields. The outcomes and impacts observed by the evaluation team validate the scheme's appeal and relevance. However, the players interviewed pointed out a number of shortcomings which greatly limit the FCRF's potential and effects. A number of options could be explored in order to significantly enhance the FCRF's effects:

- Make the FCRF's purpose and distinguishing features clearer: is it to provide short-term support to a high-level project which, by definition, is put forward by experienced researchers, or to invest by fostering bold projects involving young researchers and two laboratories in the two partner countries, in which case postproject follow-up is essential?
 - Provide for ways of sustaining collaborations after the initial start-up phase:
 - by requiring researchers to consider them in the project application,
 - or by identifying possible sources of support for further cooperation (NSERC, FP, etc.),
 - or by providing for the possibility of further support for projects of proven merit which deserve longer-term support (one to two years?).

- Consider giving the FCRF an annual thematic focus, which can be multidisciplinary, in order to raise the selection rate to between 30% and 40%, encourage networking and foster interdisciplinary events which capitalise on experience and raise the FCRF's visibility.
- Implement a permanent steering structure for the FCRF in order to raise its visibility.
- Earmark a quota of projects for human and social sciences to ensure that they are represented.
- Develop a program which would chiefly fund scientific cooperation by encouraging the mobility of doctoral students under the oversight of scientific teams in France and Canada, for example along the lines of the doctoral colleges scheme.
- Specify the role and place of cotutelle in a short-term scheme with a deliberately moderate level of support.
- Consider reorganising the Fund's current structure in Canada in order to develop a more comprehensive program, of which mobility would be only one element.

5.4 Financing the FCRF

Nota bene: these recommendations do not concern the FCRF's investment policy or budget autonomy, which were explicitly ruled out of the evaluation.

- Is the aim to raise more money to fund more projects or to set rules for allocating the available money in a different or more precise way?
 - The idea of raising more money is the most attractive. Under consideration since 2002, it has borne some fruit, though not enough to ensure the FCRF's long-term sustainability at this level of expenditure.
 - The other option is to give the FCRF a means for adjusting expenditure to income. Given that grants are already small, that means limiting the number of recipients. This option is difficult to take forward, however, since the FCRF is already unable to award a grant to one project a year from each university. It would be viable only if the call for projects were more tightly focused, limiting applications in order to eliminate the preselection phase and raise the selection rate.
 - The search for funding can also be passed on to researchers or their departments, by requiring initiators to top up FCRF funding with funding of their own. However, this option rather contradicts the reason for having a seed fund in the first place.



- The role of industry is a sensitive issue, raised by several researchers. At the stage where a research project is beginning to emerge (which is one of the FCRF's aims), it is not certain that industry support is either necessary or desirable. However, it would be of interest to consider possible industry involvement in the further development of a project, after FCRF funding has come to an end.
- More broadly, the issue of post-FCRF funding is a major factor in the FCRF's possible impact on research.



Conclusion

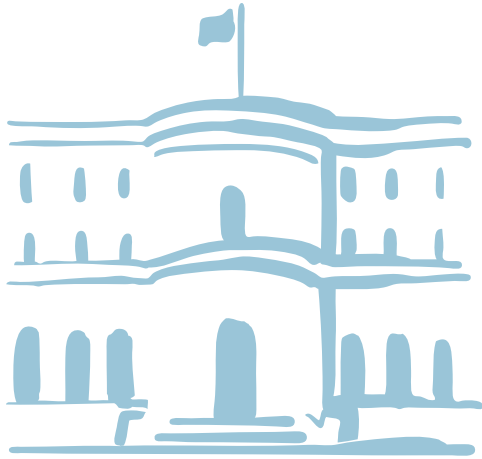
From its inception, the FCRF has demonstrated its relevance and effectiveness in initiating cooperation between Canadian and French researchers.

More than ten years after its creation, because of changes in the international research environment, growing financial constraints and the role of players in research in both countries, it is necessary to renew the FCRF's ambitions and resources. This adjustment to the challenges of the forthcoming decade involves a stronger assertion of what is expected of the fund, an improvement in certain aspects of its operation and overall governance, and a target average selection rate of around 30%.

Several options are possible, playing on thematic focus, the emphasis on young researchers or on teams, a policy of following-up projects, bringing in new partners, etc. Depending on the chosen options, changes to the FCRF's operational structure will follow. The FCRF needs to enter a new phase: drawing on its experience, it will be able to do so and to strengthen research cooperation between Canada and France.

List of abbreviations

CAD	Canadian dollars
CNRS	French National Centre for Scientific Research / <i>Centre national de la recherche scientifique</i>
COFECUB	French Committee for the Evaluation of Academic and Scientific Cooperation with Brazil
DFU	Franco-German University / <i>deutsche-französische Universität</i>
e.g.	For example / <i>exempli gratia</i>
FBF	France-Berkeley Fund
FCRF	France-Canada Research Fund
FP	Framework Programme
ICT	Information and communications technology
IFCPAR	Indo-French Centre for the Promotion of Advanced Research
IRAP	Industrial Research Assistance Program
MEI	International expert assessment unit / <i>Mission d'expertise internationale</i>
MIT	Massachusetts Institute of Technology
NSERC	Natural Sciences and Engineering Research Council of Canada
OECD	Organisation for Economic Cooperation and Development
OST	Office for Science and Technology
PHC	Hubert Curien Partnerships / <i>Partenariats Hubert Curien</i>
PUF	Partner University Fund
SSHN	Scientific Stays for Tenured Researchers program / <i>Séjours scientifiques de haut niveau</i>
UQAM	University of Quebec in Montreal / <i>Université du Québec à Montréal</i>



EVALUATION OF THE FRANCE-CANADA RESEARCH FUND

The France-Canada Research Fund (FCRF) is designed to support joint Franco-Canadian high-level research projects by financing student, PhD and researcher mobility schemes. The FCRF was created in 2000 at the initiative of the French embassy in Canada and a consortium of leading Canadian universities to boost and structure bilateral scientific cooperation.

More than 10 years after its creation, an initial evaluation was necessary to pinpoint the strengths and weaknesses of this instrument. This analysis, which confirms the quality of Franco-Canadian relations, has helped identify avenues for improvement in terms of strategic orientation, governance, efficiency and the marshalling of funds.

The evaluation, entrusted to an external consultancy, was carried out based on the documentation provided for the most part by the Directorate-General of Global Affairs, Development and Partnerships of the French Ministry of Foreign Affairs, by the French embassy in Canada and by the University of Ottawa, which manages the FCRF. It was supplemented by interviews held in France and Canada of all stakeholders in the fund.

The evaluation conclusions and recommendations should enable the FCRF to adapt to the challenges of the next decade.