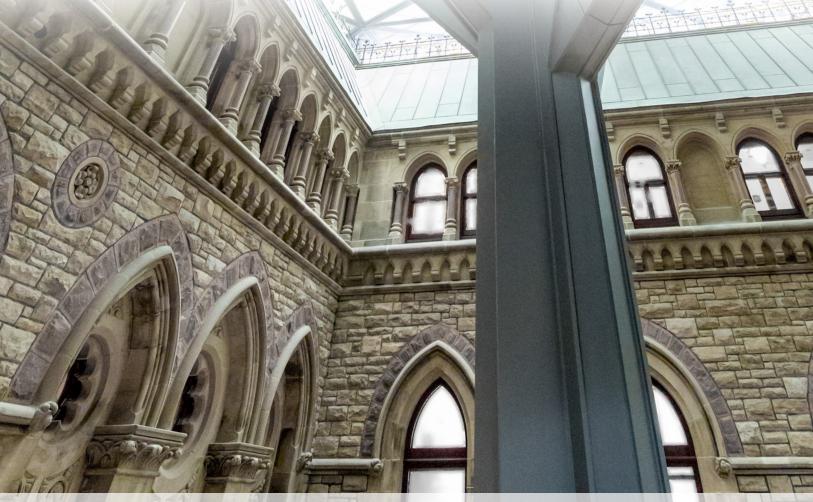


DISTRIBUTION OF FEDERAL FUNDING AMONG CANADA'S POST-SECONDARY INSTITUTIONS

Report of the Standing Committee on Science and Research

Valerie Bradford, Chair



DECEMBER 2024 44th PARLIAMENT, 1st SESSION Published under the authority of the Speaker of the House of Commons

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NOTICE TO READER
Reports from committees presented to the House of Commons
Presenting a report to the House is the way a committee makes public its findings and recommendations on a particular topic. Substantive reports on a subject-matter study usually contain a synopsis of the testimony heard, the recommendations made by the committee, as well as the reasons for those recommendations.

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has the honour to present its

TWELFTH REPORT

Pursuant to its mandate under Standing Order 108(3)(i), the committee has studied the distribution of federal government funding among Canada's post-secondary institutions and has agreed to report the following:

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Each year the Government of Canada spends around \$4.5 billion to support research at post-secondary institutions across the country. This funding includes research grants for researchers, scholarships for students, research support funds for institutions, and programs to improve research infrastructure. Most of this funding is awarded through competitions run by the three granting agencies: the Social Sciences and Humanities Research Council (SSHRC), the Natural Sciences and Engineering Research Council (NSERC) and the Canadian Institutes of Health Research (CIHR); as well as by the Canada Foundation for Innovation (CFI).

The House of Commons Standing Committee on Science and Research undertook a study on the distribution of this funding among post-secondary institutions — universities and colleges — across the country. Based on the evidence heard, the Committee learned that federal research funding is concentrated in Canada's largest universities: nearly 80% of federal funding goes to 15 universities representing 52% of Canadian researchers and 59% of graduate students. Meanwhile, colleges receive only 2.9% of the total funding awarded by the three granting agencies.

The witnesses who took part in this study discussed the consequences and impacts of this distribution for research, post-secondary institutions, researchers and students. The issues raised included the capacity of small and medium-sized institutions and colleges to conduct research, the ability of students to study in their home region, accessibility of higher education, and the impact on research in French. As part of this study, the Committee focused on how federal funding is distributed among post-secondary institutions, rather than among individual researchers. As such, this report does not directly address any differences in funding that may exist among researchers on the basis of gender, age or other identity factors.

The witnesses discussed a series of challenges and possible solutions to provide balanced funding for research support. First, they focused on the need to increase the overall level of federal support for research in order to better capitalize on the potential of all institutions.

The Committee also looked at the allocation criteria of the granting agencies' funding programs. It was noted that some programs are not open to colleges or smaller institutions. Several programs allocate funding based on the amounts that institutions previously received, putting smaller institutions at a disadvantage. Although witnesses expressed support for the peer review process, there was some discussion about the

criteria used to assess the excellence of funding applications. Some witnesses spoke about possible unconscious bias in favour of larger universities and about traditional evaluation criteria that disadvantage smaller institutions and colleges because they poorly reflect their reality.

The Committee also heard evidence about how difficult it is for small and medium-sized institutions to provide administrative support for research and to fund the necessary infrastructure.

Lastly, witnesses discussed the importance of collaboration between post-secondary institutions, one of the strengths of Canada's research ecosystem.

Based on the evidence, the Committee provided the federal government with 13 recommendations to ensure that the research funding system most effectively capitalizes on the potential of all post-secondary institutions in Canada.

LIST OF RECOMMENDATIONS

As a result of their deliberations committees may make recommendations which they include in their reports for the consideration of the House of Commons or the Government. Recommendations related to this study are listed below.

Recommendation 1

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Recommendation 5

That the Government of Canada, through the granting agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada and the Canadian Institutes of Health Research, look at the composition of review committees evaluating funding applications and improve unconscious bias training in order to avoid penalizing post-secondary institutions based on their size or region
Recommendation 6
That the Government of Canada, through the granting agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada and the Canadian Institutes of Health Research, review the funding application merit review criteria, in line with the San Francisco Declaration on Research Assessment, to take better account of the diversity of researchers and types of research
Recommendation 7
That the Government of Canada, through the granting agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada and the Canadian Institutes of Health Research, experiment with new approaches to allocating some of its funding, such as anonymizing funding applications or randomly distributing part of the funding
Recommendation 8
That the Government of Canada review and simplify the funding application processes for the programs of the granting agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada, the Canadian Institutes of Health Research, and the Canada Foundation for Innovation
Recommendation 9
That the Government of Canada review how the Research Support Fund operates so as to better support small and medium-sized post-secondary

institutions and colleges in covering the indirect costs of research.......45

Recommendation 10

That the Government of Canada amend the rules governing the granting agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada and the Canadian Institutes of Health Research, to encourage collaboration between post-secondary institutions, particularly between colleges, CEGEPs, college centers for the transfer of technology in the domain of innovative social practices, Technology Access Centres, polytechnics and universities, in current and future research funding programs.

Recommendation 11

That the Government of Canada increase the share of research funding allocated to colleges, institutes, CEGEPs, CCTTs, TACs and polytechnics through the College and Community Innovation Program and other programs of the granting agencies; that it adapt the current funding programs open to these institutions in order to better reflect their unique features and contributions and to facilitate the transfer of research and innovation they produce to the benefit of society; and that it give greater consideration to these aspects when developing future programs.

Recommendation 12

Recommendation 13



DISTRIBUTION OF FEDERAL FUNDING AMONG CANADA'S POST-SECONDARY INSTITUTIONS

INTRODUCTION

Each year the Government of Canada spends around \$4.5 billion to support research at post-secondary institutions across the country, primarily through the three granting agencies: the Social Sciences and Humanities Research Council (SSHRC), the Natural Sciences and Engineering Research Council (NSERC) and the Canadian Institutes of Health Research (CIHR); and through the Canada Foundation for Innovation (CFI). This funding includes research grants for researchers, scholarships for students, research support funds for institutions, and programs to improve research infrastructure. Most of this funding is awarded through competitions.

The House of Commons Standing Committee on Science and Research (the Committee) undertook a study on "the balance of federal government funding among Canada's universities, and more specifically on the concentration of funding among U15 member universities in comparison with small and medium-sized universities." The Committee decided to include all post-secondary institutions, including colleges, CEGEPs, college centers for the transfer of technology in the domain of innovative social practices (CCTT), Technology Access Centres (TAC) and polytechnics, in its study.

The Committee held six meetings for its study, during which it heard 33 witnesses. Witnesses included university and college officials, faculty and student representatives, individual experts and officials from the three granting agencies. The Committee also received 50 written briefs. The Committee would like to sincerely thank all those who took the time to contribute to this study.

As part of this study, the Committee focused on how federal funding is distributed among post-secondary institutions, rather than among individual researchers. As such,

See: Statistics Canada, <u>Revenue of universities by type of revenues and funds (in current Canadian dollars) (x 1,000)</u>, Table 37-10-0026-01; and Statistics Canada, <u>Revenues of colleges by type of revenues and funds (in current Canadian dollars) (x 1,000)</u>, Table 37-10-0028-01.

² House of Commons, Standing Committee on Science and Research (SRSR), <u>Minutes of Proceedings</u>, 30 January 2024.

³ SRSR, *Minutes of Proceedings*, 15 February 2024.



this report does not directly address any differences in funding that may exist among researchers on the basis of gender, age or other identity factors.

The witnesses described to the Committee the specific features of research carried out in the various types of post-secondary institutions, as well as the benefits of this research for Canada. In particular, a distinction was made between basic and applied research.

The evidence also helped the Committee paint a picture of federal research funding. The Committee looked at the overall level of this support, then at the distribution of federal funding among universities by size, and lastly at the level of funding for college-based research.

The Committee heard that federal funding is concentrated in the larger universities, while college-based research receives little federal research funding. Witnesses spoke about the impact of this concentration on research, as well as on students and researchers. They touched on the capacity of smaller institutions and colleges to conduct research, attract talent and train students. Witnesses also discussed the possibility of students being able to study in their home regions.

This report has taken the evidence received to come up with solutions for balanced, merit-based research funding in Canada that both supports research conducted in the leading institutions and capitalizes on the capabilities and potential of small and medium-sized institutions and colleges. Based on the evidence gathered, the Committee has made 13 recommendations to the Government of Canada.

CHAPTER 1: POST-SECONDARY RESEARCH AND ITS BENEFITS

1.1 Diversity of Research Contributions

The evidence heard by the Committee highlighted the diversity of post-secondary institutions and their contributions to research across the country. A brief from the University of British Columbia described this diversity as one of the strengths of Canada's research ecosystem:

Institutional diversity is a core feature and strength of Canada's post-secondary education system. All institutions play important and differing roles in addressing local, regional and national priorities and needs, with varying levels of intensity and comprehensiveness across fields and disciplines. Academic researchers also collaborate

on projects and research initiatives within and across [post-secondary institutions], leveraging the research assets, strengths and expertise found at institutions of all sizes.⁴

Post-secondary institutions can be differentiated by type and size. Canada has roughly 100 universities, nearly 140 colleges, institutes, CEGEPs and polytechnics⁵, 59 CCTTs and 67 TACs. Universities vary significantly depending on their size. The 15 universities that make up U15,⁶ a "collective of Canada's leading research-intensive universities,"⁷ "employ half of the country's full-time university teaching staff who teach graduate and undergraduate students—64% and 45% respectively of all university students."⁸ There are also many small and medium-sized universities throughout the country. Some have joined forces under umbrella organizations like the Alliance of Canadian Comprehensive Research Universities (ACCRU) or the Maple League of Universities.

All these institutions contribute in their own way to Canadian research. Witnesses frequently made a distinction between basic and applied research. Basic research, usually initiated by researchers, aims to answer key scientific questions and advance knowledge. In contrast, applied research aims to develop practical solutions to address concrete challenges, building on the findings of basic research.⁹ Not everyone in the research community contributes in the same way to these two types of research.

Universities, especially the larger ones, devote considerable effort to basic research, with financial support from both the federal and provincial governments. Universities also conduct applied research in conjunction with industry. Specifically, "three quarters of industry-sponsored research with higher education each year characteristically occurs

⁴ University of British Columbia, <u>Study of the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 14 May 2024, p. 3.

Unless otherwise noted, in this report, the terms "college" and "college level" are used to refer to all colleges, institutes, CEGEPs and polytechnics.

The U15 members are the University of Alberta, the University of British Columbia, the University of Calgary, Dalhousie University, Laval University, the University of Manitoba, McGill University, McMaster University, the University of Montreal, the University of Ottawa, Queen's University, the University of Saskatchewan, the University of Toronto, the University of Waterloo and Western University. U15 Group of Canadian Research Universities, *Qur Members*.

⁷ U15 Group of Canadian Research Universities (U15), <u>Study on the Distribution of Federal Government</u>
<u>Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 4 April 2024, p. 8.

⁸ Ibid., p. 1.

⁹ SRSR, <u>Evidence</u>, 30 April 2024, 1220 (Susan Blum, Associate Vice President, Applied Research and Continuing Education, Saskatchewan Polytechnic).



at U15 universities."¹⁰ The largest research-intensive universities in terms of size and activity "act as catalysts in Canada's entire diversified research ecosystem."¹¹ These institutions carry out large-scale research projects in collaboration with researchers from other institutions of all sizes.¹²

Small and medium-sized universities often conduct research on matters that have a particular relevance in their regions. Nicole Vaugeois, the Associate Vice-President of Research and Graduate Studies of the Alliance of Canadian Comprehensive Research Universities (ACCRU), described institutions in that organization as follows: "[S]ome characteristics include world-class expertise in disciplines that are often closely aligned with the economic, social and environmental priorities in their regions." For example, Shannon Wagner, the Vice-President of Research at Thompson Rivers University, talked about work being done at her institution in the field of research and education on wildfires. Furthermore, small and medium-sized universities play an important role in developing regional talent by providing local students with access to post-secondary education.

Colleges, meanwhile, have developed applied research capacity. Their research model has several specific features, which Pari Johnston, President and Chief Executive Officer (CEO) of Colleges and Institutes Canada, summarized as follows:

Research questions are determined by external partners, predominantly small Canadian businesses and non-profits, with practical implications in local enterprise. The research is conducted and applied efficiently. About 80% of all projects are complete in under a year, and any [intellectual property] generated remains with the local partner, ensuring

¹⁰ U15, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 4 April 2024, p. 1.

SRSR, *Evidence*, 21 March 2024, 1105 (Chad Gaffield, Chief Executive Officer, U15 Group of Canadian Research Universities).

¹² Ibid., 1125.

SRSR, <u>Evidence</u>, 21 March 2024, 1100 (Nicole Vaugeois, Associate Vice-President, Research and Graduate Studies, Alliance of Canadian Comprehensive Research Universities); SRSR, <u>Evidence</u>, 18 April 2024, 1105 (Dena McMartin, Vice-President, Research, University of Lethbridge); and University of Quebec, <u>Fair distribution of wealth: In favour of a better-performing Canadian research system and stronger communities</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 17 April 2024, p. 6.

¹⁴ SRSR, Evidence, 21 March 2024, 1100 (Nicole Vaugeois).

SRSR, <u>Evidence</u>, 11 April 2024, 1100 (Shannon Wagner, Vice-President, Research, Thompson Rivers University).

¹⁶ SRSR, Evidence, 21 March 2024, 1130 (Nicole Vaugeois).

the research results flow to the Canadian economy, maximizing innovation and productivity gains. 17

Research projects led by partners, which include private enterprises, public agencies and non-profit organizations, have helped create prototypes, new products and process improvements. In doing so, colleges play an important role in the innovation ecosystem, facilitating the application of discoveries made through basic research and bringing them to market. Colleges can help innovative companies and organizations get through the period from discovery to market, in other words, through the "valley of death. Several witnesses emphasized that any intellectual property generated from applied research conducted at colleges remains with the local partner, which is an important advantage. These specific features help colleges establish close relationships with the local business community and develop expertise in areas of interest to companies in their region. President of Okanagan College, told the Committee that his institution has a CFI- and NSERC-funded biology lab that "helps start-up food and beverage companies test for bacterial contamination so that they can get their product to market more quickly.

1.2 Benefits of Research

Research conducted at post-secondary institutions has significant benefits for Canada, both nationally and regionally. Witnesses provided many examples of these benefits, several of which are outlined below.

¹⁷ SRSR, *Evidence*, 21 March 2024, 1200 (Pari Johnston, President & CEO, Colleges and Institutes Canada).

¹⁸ Ibid.; and SRSR, <u>Evidence</u>, 21 March 2024, 1205 (Sarah Watts-Rynard, Chief Executive Officer, Polytechnics Canada).

¹⁹ SRSR, <u>Evidence</u>, 21 March 2024, 1205 (Sarah Watts-Rynard); and SRSR, <u>Evidence</u>, 30 April 2024, 1100 (Michelle Chrétien, Vice President, Research and Innovation, Conestoga College Institute of Technology and Advanced Learning).

²⁰ SRSR, *Evidence*, 30 April 2024, 1115 (Neil Fassina, President, Okanagan College).

SRSR, <u>Evidence</u>, 21 March 2024, 1200 (Pari Johnston); SRSR, <u>Evidence</u>, 21 March 2024, 1240 (Sarah Watts-Rynard); SRSR, <u>Evidence</u>, 11 April 2024, 1205 (Marc Nantel, Vice-President, Research, Innovation and Strategic Enterprises, Niagara College); SRSR, <u>Evidence</u>, 16 April 2024, 1205 and 1230 (Ben Cecil, President and CEO, Olds College of Agriculture & Technology); and SRSR, <u>Evidence</u>, 30 April 2024, 1220 (Susan Blum).

For example, SRSR, *Evidence*, 30 April 2024, 1100 (Michelle Chrétien); SRSR, *Evidence*, 30 April 2024, 1110 (Kari Kramp, Senior Scientific Manager, Applied Research and Innovation, Loyalist College of Applied Arts and Technology); SRSR, *Evidence*, 30 April 2024, 1115 (Neil Fassina); and Assiniboine Community College, *Brief*, Brief submitted to the House of Commons Standing Committee on Science and Research, 22 May 2024, p. 2.

²³ SRSR, *Evidence*, 30 April 2024, 1115 (Neil Fassina).



Officials from large universities provided the Committee with examples of large-scale research projects, such as the research being done at Western University's nuclear hub.²⁴ The Committee also learned about a number of collaborative projects. For instance, Edward McCauley, President and Vice-Chancellor of the University of Calgary, said that his institution "and University of Alberta partnered with the University of Lethbridge and Northwestern Polytechnic in Grande Prairie to expand rural medical training." Alice Aiken, Vice-President of Research and Innovation at Dalhousie University, talked about "Transforming Climate Action: Addressing the Missing Ocean," an initiative led by Dalhousie University in collaboration with the University of Quebec at Rimouski, Laval University and Memorial University of Newfoundland and Labrador, funded by a \$154 million grant through the Canada First Research Excellence Fund. The project focuses on the ocean's critical climate role. The knowledge generated by this research has a wide range of applications.

Witnesses from small and medium-sized universities often highlighted the wide variety of research areas being pursued and the local impact their work is having. At the Emily Carr University of Art + Design, for example, "the Health Design Lab uses participatory design methods to catalyze, support and amplify initiatives that address complex health challenges." St. Thomas University, which is in Fredericton, New Brunswick, gave the following examples in its written brief:

Many [St. Thomas University] faculty researchers work at a grassroots level with smaller-scale community organizations on pressing topics like aging and long-term care, social isolation among seniors, migration and belonging, and youth mental health, as well as broader issues of international concern like the social impacts of mining and energy projects, intimate partner and domestic violence, international relations, human rights, and many other topics.²⁸

²⁴ SRSR, *Evidence*, 11 April 2024, 1145 (Penny Pexman, Vice-President, Research, Western University).

²⁵ SRSR, <u>Evidence</u>, 11 April 2024, 1105 (Edward McCauley, President and Vice-Chancellor, University of Calgary).

The Canada First Research Excellence Fund, administered by the three granting agencies, invests approximately \$200 million "to boost the strengths of Canadian post-secondary institutions so that they can achieve global success in research areas that create long-term social and economic advantages for Canada." Government of Canada, <u>Canada First Research Excellence Fund—About us</u>.

Emily Carr University of Art + Design, <u>Federal Government Funding Among Post-Secondary Education</u>
<u>Institutions Brief</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 23 May 2024, p. 2.

St. Thomas University, <u>Brief presented to the Standing Committee on Science and Research on the topic of the distribution of Federal Government funding among Canada's post-secondary institutions</u>, **21 May 2024**, p. 2.

Lastly, by its very nature, applied research conducted at colleges generates direct benefits for partners and local communities. Pippa Seccombe-Hett, Vice-President of Research at Aurora College, described the Western Arctic Research Centre, located in Inuvik. She also talked about a "partnership we hold with our territorial government and regional partners monitoring permafrost along the Inuvik Tuktoyaktuk Highway." Ben Cecil, President and CEO of Olds College of Agriculture & Technology, in Alberta, presented the benefits of the smart farm created by his institution:

Since its inception in 2018, the smart farm—the cornerstone of research at Olds College—has supported 263 companies and organizations, and 142 projects. This has resulted in 394 process and product improvements with over 720 jobs created. It has contributed over \$811 million directly back to the firms that we have worked with, which channels its way directly into the Canadian economy. That's over \$6.39 million per small and medium-sized enterprise that we work with.

Several witnesses pointed out that much of the research being conducted at these various institutions is addressing some of the main challenges facing Canada.³¹ According to Steven Murphy, President and Vice-Chancellor of Ontario Tech University, all together, universities "conduct more than 40% of Canada's total [research and development (R&D)], producing over \$55 billion annually in economic activity and supporting 680,000 direct and indirect jobs in communities of all sizes."³² According to the 2021–2022 Applied Research Survey conducted by Colleges and Institutes Canada, in

For example, Georgian College, <u>Study on the distribution of Federal government funding among Canada's post-secondary</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 10 May 2024, p. 2; and Lakeland College, <u>Federal Funding Distribution among Post-Secondary Institutions in Canada</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 7 May 2024, p. 4.

³⁰ SRSR, Evidence, 11 April 2024, 1235 (Pippa Seccombe-Hett, Vice-President, Research, Aurora College).

For example, SRSR, *Evidence*, 11 April 2024, 1105 (Edward McCauley); SRSR, *Evidence*, 18 April 2024, 1105 (Dena McMartin); SRSR, *Evidence*, 18 April 2024, 1205 (Céline Poncelin de Raucourt, Vice-President, Teaching and Research, University of Quebec); SRSR, *Evidence*, 30 April 2024, 1140 (Neil Fassina); University of Northern British Columbia, *The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions*, Brief submitted to the House of Commons Standing Committee on Science and Research, 23 May 2024, p. 1 and 2; Memorial University of Newfoundland, *Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions*, Brief submitted to the House of Commons Standing Committee on Science and Research, 6 May 2024, p. 3; and University of Quebec at Montreal, *Université du Québec à Montréal (UQAM) Submission to the House of Commons of Canada Standing Committee on Science and Research as part of Its Study on the Distribution of Federal Funding Among Post-Secondary Institutions, 10 May 2024, p. 2.*

³² SRSR, *Evidence*, 16 April 2024, 1215 (Steven Murphy, President and Vice-Chancellor, Ontario Tech University).



2021–2022, colleges completed 8,150 applied research projects, resulting in more than 6,436 new processes, products, prototypes and services.³³

CHAPTER 2: DISTRIBUTION OF FEDERAL RESEARCH FUNDING

2.1 Overall Level of Federal Research Support

As several witnesses pointed out, in 2022 Canada spent roughly 1.7% of its gross domestic product (GDP) on R&D, ranking 17th among the 30 Organisation for Economic Co-operation and Development (OECD) countries for which data are available.³⁴ The U15 group wrote the following in a brief:

With federal investment in science and technology reaching its lowest level in over two decades at only 3.5% of the federal budget in 2023–24, and a 15.5% drop in inflationadjusted federal support for higher education research between 2020 and 2022.³⁵

Canada's federal post-secondary research support system relies primarily on the three granting agencies—NSERC, SSHRC and CIHR—and the CFI. The three granting agencies provide funding in the form of graduate scholarships paid to students and research grants paid to researchers. The three agencies have also created programs to allocate funds directly to post-secondary institutions. As for the CFI, it provides support to post-secondary institutions to fund their research infrastructure.

In addition to the funding provided by the three granting agencies and the CFI, the federal government also supports research through specific programs managed by several departments and agencies. For instance, in 2023, Cape Breton University was awarded "almost \$1 million over four years through the Public Health Agency of Canada's Dementia Community Investment (DCI) program." 36

³³ Colleges & Institutes Canada, Applied research at colleges and institutes.

SRSR, <u>Evidence</u>, 16 April 2024, 1215 (Steven Murphy); Synchronex, <u>The Distribution of Federal Government Funding Among Canada's Post-secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 4; University of Manitoba, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 May 2024, p. 4; and Organisation for Economic Co-operation and Development, "<u>Gross Domestic Expenditure on R&D (GERD)</u>", Main Science and Technology Indicators (MSTI database), OECD Data Explorer, Database, accessed 29 July 2024.

³⁵ U15, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 4 April 2024, p. 5.

Cape Breton University, <u>Brief</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 16 May 2024, p. 2.

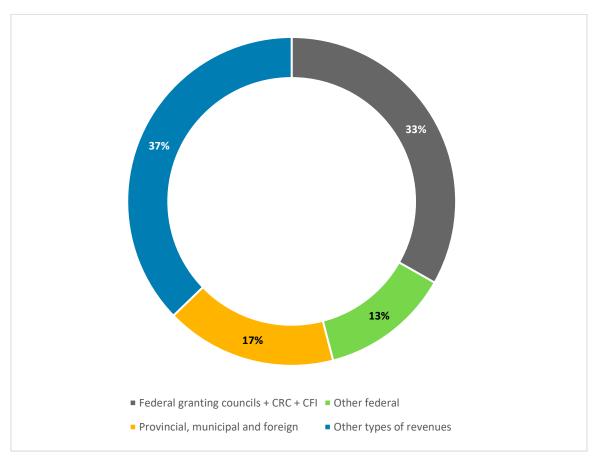
Whereas education in Canada is primarily a provincial responsibility, both the federal government and the provinces provide funding for research at post-secondary institutions. The federal government provides more funding than the provinces in this regard. In 2022–2023, the federal government funded 24% of all R&D carried out at institutions of higher learning.³⁷ More specifically, looking solely at sponsored research, according to Statistics Canada, in 2022–2023, universities received a total of \$9.6 billion for sponsored research. Figure 1 shows that 46% of this funding came from the federal government. In total, the three granting agencies and the CFI invested over \$3.2 billion in sponsored research at universities in 2022–2023.³⁸

³⁷ Statistics Canada, <u>Gross domestic expenditures on research and development, by science type and by funder and performer sector (x 1,000,000)</u> Table 27-10-0273-01. Other funding sources are, in order of value, as follows: post-secondary institutions themselves, the private non-profit sector, provincial governments, commercial enterprises and foreign sources.

This figure includes the Canada Research Chairs program. Statistics Canada, <u>Revenue of universities by type of revenues and funds (in current Canadian dollars) (x 1,000)</u>, Table 37-10-0026-01.



Figure 1—Funding Sources for Sponsored Research at Canadian Universities, 2022–2023



Note: "CRC" is the Canada Research Chairs program, which is operated by the Tri-agency Institutional Programs Secretariat of the federal granting councils. The "Other federal" category includes grants from federal departments and agencies. The "Other types of revenues" category includes donations and grants from individuals, the private sector and non-profit organizations.

Source: Figure based on data from Statistics Canada, <u>Revenue of universities by type of revenues and funds (in current Canadian dollars) (x 1,000)</u>, Table 37-10-0026-01.

As for colleges, they received \$135 million for sponsored research in 2021–2022. Figure 2 shows that 46% of this funding came from the federal government. Most of this funding comes from the College and Community Innovation Program (CCIP), which is administered by NSERC.

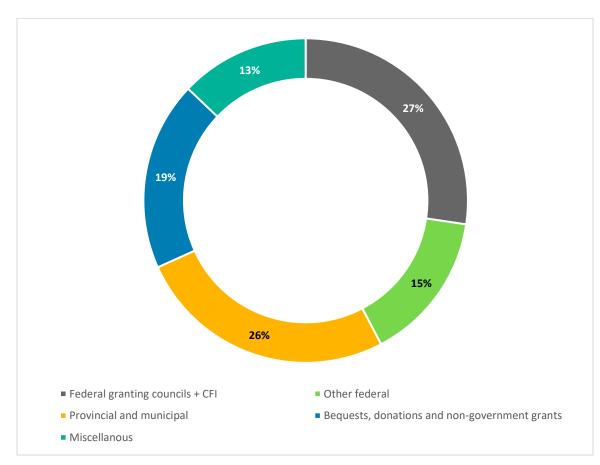


Figure 2—Funding Sources for Sponsored Research at Canadian Colleges, 2021–2022

Note: The "Other federal" category includes grants from federal departments and agencies.

Source: Figure based on data from Statistics Canada, <u>Revenues of colleges by type of revenues and funds</u> (in current Canadian dollars) (x 1,000), Table 37-10-0028-01.

2.2 Distribution of Federal Funding Among Universities

The witnesses provided the Committee with information on the distribution of federal funding among universities and researchers. The evidence heard by the Committee shows that federal funding tends to be concentrated in a small number of large universities.

According to Nicole Vaugeois of the Alliance of Canadian Comprehensive Research Universities, "79% of all federal funding goes to 15 of Canada's universities that



represent 52% of Canadian researchers and 59% of grad students."³⁹ Several other witnesses provided the same numbers.⁴⁰

Table 1 summarizes the funding granted by the three granting agencies and illustrates this concentration of funding.

Table 1—Average Funding in Percentage from the Three Granting Agencies and the Canada Foundation for Innovation Allocated to Canadian Universities from 2017-2018 to 2021-2022

	U15	ACCRU	Others
SSHRC	62.4%	12.1%	25.5%
NSERC	68.8%	8.7%	22.5%
CIHR	91.6%	2.2%	6.3%
CFI	78.4%	4.6%	17.0%

Notes: NSERC data do not include the Research Support Fund. CFI data do include the Infrastructure Operating Fund.

The ACCRU category includes the 48 member institutions of the Alliance of Canadian Comprehensive Research Universities. The "Others" category includes 34 other universities.

Source: ACCRU, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief presented to the House of Commons Standing Committee on Science and Research, 24 April 2024, p. 2.

These numbers align with the data provided by the three granting agencies (Figure 3).

³⁹ SRSR, Evidence, 21 March 2024, 1100 (Nicole Vaugeois).

For example, SRSR, <u>Evidence</u>, 2 May 2024, 1140 (Martin Maltais, President, Acfas – Association francophone pour le savoir); SRSR, <u>Evidence</u>, 18 April 2024, 1205 (Céline Poncelin de Raucourt); University of Moncton, <u>Brief Presented to the House of Commons Standing Committee on Science and Research as Part of the Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, 6 May 2024, p. 4; and Athabasca University, <u>The Distribution of Federal Government Funding Among Canada's Post-secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 May 2024, p. 4.</u>

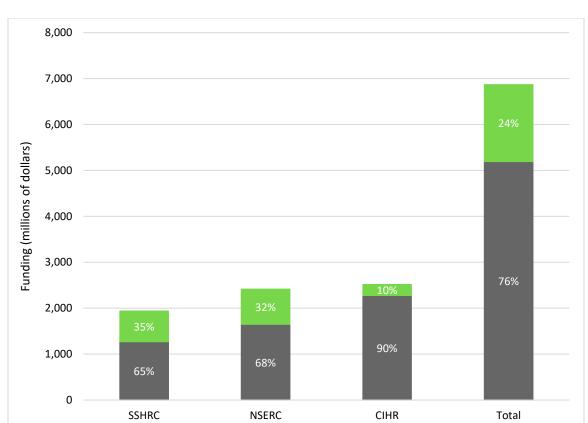


Figure 3—Distribution of Funding in Millions of Dollars and Percentages from the Three Granting Agencies among U15 Universities and Small and Medium-Sized Universities from 2021–2022 to 2022–2023

Source: Figure based on data from Government of Canada, <u>Inquiry of Ministry: Q–2370</u>, House of Commons, sessional paper 8555-441-2370.

■ U15

These data show that the 15 members of the U15 group receive the majority of funding from each of the granting agencies. Funding from the Canadian Institutes of Health Research is particularly concentrated, with over 90% of funds allocated to research projects or researchers affiliated with those 15 universities.

■ Small and Medium-sized Universities

The Committee's attention was drawn to the fact that greater concentration of funding in the health sector could be because "most of the Canadian Institutes of Health Research (CIHR) funding is directed to health researchers at the nation's 17 accredited medical schools, 14 of which are within U15 universities, along with their affiliated



research hospitals."⁴¹ In addition, a portion of CIHR funding to universities is earmarked for research projects conducted by and at their affiliated hospitals.⁴² For example, 10 hospitals are associated with the University of Toronto.⁴³ Lastly, although health research institutes and hospitals can submit funding applications directly to CIHR, "they must go through their affiliated universities when applying to most other federal research and innovation agencies and programs."⁴⁴

Witnesses also talked about a significant concentration of funding from the CFI, whose mandate is provide financial support to institutions to help them acquire research infrastructure. For example, the results of the CFI's 2023 Innovation Fund competition show that U15 institutions and their affiliated hospitals received 84% of the funding granted, while 10% went to medium-sized institutions and 6% went to small institutions. The success rate in this competition for U15 institutions and their affiliated hospitals was also higher than it was for small and medium-sized institutions.

Lastly, with regard to funding provided to support research at post-secondary institutions by other federal bodies (e.g., departments and agencies), the distribution of this funding varies among U15 members and other universities. For example, of the \$23.7 million in research funding allocated by Innovation, Science and Economic Development Canada from November 2021 to February 2024, 57.3% went to small and

U15, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>,
Brief submitted to the House of Commons Standing Committee on Science and Research, 4 April 2024, p. 5;
see also University of British Columbia, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 14 May 2024, p. 7. The three non-U15 medical schools are located at Memorial University of Newfoundland, the Northern Ontario School of Medicine and the University of Sherbrooke.

⁴² University of British Columbia, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 14 May 2024, p. 7.

⁴³ SRSR, *Evidence*, 18 April 2024, 1145 (Alice Aiken, Vice-President, Research and Innovation, Dalhousie University).

⁴⁴ HealthCareCAN, <u>Submission to the Standing Committee on Science and Research—Study on The Distribution</u>
of Federal Government Funding Among Canada's Post-Secondary Institutions, April 2024, p. 3.

Olivier Bégin-Caouette, Eya Benhassine and Silvia Mirlene Nakano Koga, <u>Federal Government Funding</u>
<u>Distribution Among Canada's Post-Secondary Education Institutions: Distribute to Diversify!</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 29 May 2024, p. 8; and University of Quebec at Trois-Rivières, <u>Brief Submitted to the Standing Committee on Science and Research as part of the mandate on the Distributions of Federal Government Funding Among Canada's Post-Secondary Institutions, 29 April 2024, p. 3.</u>

⁴⁶ Canada Foundation for Innovation, <u>2023 Innovation Fund competition: By the numbers</u>, March 2024, p. 4.

⁴⁷ Ibid.

medium-sized universities. At the same time, of the \$16.5 million in research support allocated by Transport Canada, 66.9% went to U15 members.⁴⁸

Witnesses pointed out to the Committee that Canada is not the only country where research funding is concentrated in a small number of large universities.⁴⁹ According to U15:

Universities who compose groups such as the American Association of Universities (AAU) in the U.S., Australia's Group of Eight (Go8), and the UK's Russell Group, are characteristically awarded by selection committees 64%, 67% and 75% of federal/national funding, respectively.⁵⁰

According to Vincent Larivière, a professor at the University of Montreal who appeared as an individual, funding in Canada might even be "a little less concentrated than in other countries." ⁵¹

Aside from the distribution of funding among universities, several witnesses pointed out to the Committee that there is also a concentration of research funding in favour of a small number of researchers. ⁵² According to numbers from the Alliance of Canadian Comprehensive Research Universities, "20% of the most financed researchers in Canada received 77% of all funding and the top 1% receive 23% of funding." ⁵³ The University of Quebec provided the following numbers:

The top 10% of funded researchers received 61% of funding from the three councils, while the top 1% of funded researchers received 23%. Nearly 9 out of 10 researchers (86%) in the latter subset were from the U15.⁵⁴

⁴⁸ Government of Canada, <u>Inquiry of Ministry: Q–2369</u>, House of Commons, sessional paper 8555-441-2369.

⁴⁹ SRSR, Evidence, 18 April 2024, 1200 (Vincent Larivière, Professor, University of Montreal, As an Individual).

⁵⁰ U15, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 4 April 2024, p. 1.

⁵¹ SRSR, *Evidence*, 18 April 2024, 1200 (Vincent Larivière).

⁵² SRSR, <u>Evidence</u>, 21 March 2024, 1100 (Nicole Vaugeois); SRSR, <u>Evidence</u>, 18 April 2024, 1205 (Céline Poncelin de Raucourt); and Vincent Larivière, <u>Concentration of Research Funding: A Few Empirical Observations</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 May 2024, p. 2.

Alliance of Canadian Comprehensive Research Universities (ACCRU) <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 April 2024, p. 3.

University of Quebec, <u>Fair distribution of wealth: In favour of a better-performing Canadian research system and stronger communities</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 17 April 2024, p. 4.



In a written brief, U15 noted that federal government funding policy typically requires that research funds be formally awarded to a single principal investigator for financial accountability purposes. This requirement "distorts and minimizes the active engagement of other researchers and institutions, masking the true extent of collaboration and the distributed nature of research efforts across the country, often led by research-intensive universities." ⁵⁵

Witnesses also talked about the reality facing francophone institutions and researchers. According to Céline Poncelin de Raucourt, "[s]ince 2004, the share of total research funding granted by the federal government to francophone institutions has been declining. Francophone researchers now receive a percentage of the funding that is smaller than their demographic weight."⁵⁶ It was noted that only two of the 15 members of U15 are francophone institutions (Laval University and University of Montreal; the University of Ottawa is bilingual).⁵⁷ Martin Maltais, President of Acfas (Association francophone pour le savoir), noted the following:

The 12 anglophone universities in the U15 group share approximately 60% of Canadian government funding, even though they have just over 40% of faculty and graduate students. The two francophone universities share just over 10%, and account for 8% of faculty, and 14% of graduate students in Canada. ⁵⁸

According to Sophie Montreuil, Executive Director of Acfas, francophone researchers face a particularly challenging situation because they often work at small or medium-sized institutions. She noted:

A researcher who wants to do research in French at an anglophone or bilingual institution doesn't have access to the same services in support of their research applications and ends up abandoning the idea of submitting an application. That means that the university in question is depriving itself of some of the funding available for research in French. Many francophone researchers work at small institutions where there are fewer professors and hence smaller budgets, and where less funding is available from the granting agencies. ⁵⁹

⁵⁵ U15, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 4 April 2024, p. 4.

⁵⁶ SRSR, *Evidence*, 18 April 2024, 1205 (Céline Poncelin de Raucourt).

⁵⁷ SRSR, *Evidence*, 2 May 2024, 1140 (Martin Maltais).

⁵⁸ Ibid.

⁵⁹ SRSR, <u>Evidence</u>, 2 May 2024, 1200 (Sophie Montreuil, Executive Director, Acfas – Association francophone pour le savoir).

2.3 Federal Funding for Colleges, CEGEPs and Institutes

A number of observations were made regarding federal funding to support college-based research. According to Pari Johnston from Colleges and Institutes Canada, only 2.9% of funding from the three granting agencies, or approximately \$109 million, is dedicated to research at colleges. ⁶⁰ This number, also cited by other witnesses, corresponds to the funding allocated by the College and Community Innovation Program (CCIP), which is administered by NSERC and is the main program through which applied research at colleges is funded. ⁶¹ This funding is shared among 119 eligible institutions. ⁶² The CCIP offers a range of funding opportunities for colleges, including College and Community Social Innovation Fund grants, Technology Access Centre grants, Applied Research Tools and Instruments grants and Applied Research and Development grants. ⁶³

As for CFI, of the 553 projects it supported CFI in 2022–2023, only 17 projects were being carried out at colleges, for a total of \$15.5 million or roughly 4%.⁶⁴

Marc Nantel, Vice-President of Research, Innovation and Strategic Enterprises at Niagara College, also pointed out that his institution receives funding from the Federal Economic Development Agency for Southern Ontario, or FedDev Ontario. ⁶⁵ The six federal government regional development agencies provide targeted funding to colleges in their regions across Canada. ⁶⁶

Several witnesses were asked whether federal funding to support applied research at colleges was concentrated among the largest institutions. Sarah Watts-Rynard, CEO at Polytechnics Canada, felt that although "the bigger institutions have a larger footprint when it comes to their facilities, their equipment and their capacity," several smaller

⁶⁰ SRSR, *Evidence*, 21 March 2024, 1200 (Pari Johnston).

⁶¹ SRSR, <u>Evidence</u>, 16 April 2024, 1205 (Ben Cecil); SRSR, <u>Evidence</u>, 30 April 2024, 1100 (Michelle Chrétien); SRSR, <u>Evidence</u>, 30 April 2024, 1220 (Susan Blum); and SRSR, <u>Evidence</u>, 2 May 2024, 1140 (Martin Maltais).

⁶² SRSR, Evidence, 21 March 2024, 1205 (Sarah Watts-Rynard).

⁶³ See: Natural Sciences and Engineering Research Council of Canada, <u>Innovate/College and Community</u> <u>Innovation program</u>.

⁶⁴ Ibid.

⁶⁵ SRSR, *Evidence*, 11 April 2024, 1220 (Marc Nantel).

The Government of Canada's regional development agencies are: Canadian Northern Economic Development Agency; Federal Economic Development Agency for Northern Ontario; Atlantic Canada Opportunities Agency; Pacific Economic Development Canada; Prairies Economic Development Canada; Canada Economic Development for Quebec Regions; and Federal Economic Development Agency for Southern Ontario. Government of Canada, <u>Canada's Regional Development Agencies</u>.



institutions nevertheless have "a substantive applied research footprint." She went on to specify that "[t]he concentration is not quite the same." In a written brief, Lambton College pointed out that there is "a substantial variance in both the number of projects and total funding" allocated by NSERC, SSHRC and CFI, "with Ontario and Quebec securing significant share of funding, followed by Alberta and British Columbia."

In a written brief, Victoriaville CEGEP pointed out that "no distinction is made between a small regional college and a larger college located in the heart of a major city with several hundred thousand inhabitants and a host of specialized enterprises." Funding program requirements do not take into account the difference in resources available at colleges, depending on their size.

CHAPTER 3: IMPLICATIONS OF THE DISTRIBUTION OF FEDERAL FUNDING

3.1 Research Implications

Witnesses explained the implications of the concentration of federal funding for research at post-secondary institutions to the Committee.

According to a written brief from U15, the current research funding model has enabled Canada's leading research universities to build a centre of excellence that benefits the entire research ecosystem:

As beacons of global excellence and domestic innovation, Canada's research-intensive universities are key to attracting leading scholars to the country, serving as critical research hubs for a wide array of organizations embarking on research and innovation endeavors.⁷¹

To illustrate this, the University of Toronto highlighted the excellence it has achieved, with its researchers representing "48 per cent of major international awards won by

69 Lambton College <u>Federal Government Funding Among Post-Secondary Education Institutions Brief</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 22 April 2024, p. 5.

⁶⁷ SRSR, Evidence, 21 March 2024, 1230 (Sarah Watts-Rynard).

⁶⁸ Ibid.

Victoriaville CEGEP, <u>Brief Submitted by the Cégep de Victoriaville to the House of Commons Standing</u>

<u>Committee on Science and Research as Part of its Study on the Distribution of Federal Government Funding</u>

<u>Among Canada's Post-Secondary Institutions</u>, 24 May 2024, p. 3.

⁷¹ U15, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 4 April 2024, p. 3.

Canadian university researchers," and the university ranking "among the top 10 per cent of universities globally in the impact of research publications." ⁷²

However, other witnesses looked into research productivity and wondered how efficient the current system is. Vincent Larivière shared the results of his research on the implications of the concentration of research funding with the Committee. In his view, two approaches to research funding can be distinguished: a model based on excellence, "concentrating resources in the hands of a scientific elite by granting large amounts to this elite," and a model based on discovery, "granting smaller amounts to more researchers." Vincent Larivière's work revealed the following trend:

The scientific literature and empirical data suggest that concentration of research funding is associated mainly with diminishing returns. The more funding received by a single researcher or organization, the higher the cost of the research conducted.⁷⁴

Allocating additional funding to researchers or institutions that are already quite well funded results in higher costs per item produced. The same witness noted that "when you take into account the quality of the work, as well, you also see the same kind of diminishing returns. In other words, higher quality would not explain the higher cost of research."

Martin Maltais used the following analogy to illustrate the situation:

A colleague of mine called Michel Umbriaco used to compare universities to a symphony orchestra. He would say that the more investment a university receives for research, the higher the quality of the music it plays. When all is said and done, quality is not really infinite. The same is true of a university's research capacity.⁷⁶

This means that the concentration of funding is not an optimal situation in terms of either productivity or quality of research: "For example, a \$100,000 grant given to a

⁷² University of Toronto, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 21 May 2024, p. 3.

Vincent Larivière, <u>Concentration of Research Funding: A Few Empirical Observations</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 May 2024, p. 2.

⁷⁴ Ibid., p. 5.

⁷⁵ SRSR, *Evidence*, 18 April 2024, 1205 (Vincent Larivière).

⁷⁶ Ibid., 1215.



large university is a drop in the bucket. However, giving the same amount to a smaller university can really make a difference."⁷⁷

Vincent Larivière further explained that these results do not mean that we should "tak[e] money from well-funded universities and giv[e] it to less funded universities, as that would generate the same kind of diminishing returns." Rather, it is a matter of "better understanding the level of interinstitutional inequality that makes it possible to generate the most collective benefits."

Witnesses raised a second point regarding the risk that research themes or topics, especially those of regional importance, will be neglected as a result of the concentration of federal funding in a few large universities. As previously mentioned, one of the strengths of small and medium-sized universities is their local foundation and their ability to conduct research on themes that matter in their regions. In a written brief, the University of the Fraser Valley indicated that the concentration of resources is "thus reducing the regional impacts and recognition of technical, economic, and social challenges facing Canada." The development of excellence funding programs with lower success rates can also lead researchers to reproduce models of "winning" research projects in order to obtain funding, which can inhibit the diversity of subjects studied and the methodologies used. ⁸¹

According to Acfas, the design of federal funding programs emphasizes researchers' backgrounds rather than how their research will benefit society. 82 As a result, the concentration of funding jeopardizes territorial and linguistic equity: "The diversity of research produced in Canada is invaluable, but the funding imbalance jeopardizes this ideal as well as scientific activities in French." According to the written brief submitted by Frédéric Lacroix "federal overfunding of the English university network in Quebec"

⁷⁷ SRSR, Evidence, 2 May 2024, 1205 (Martin Maltais).

⁷⁸ SRSR, *Evidence*, 18 April 2024, 1215 (Vincent Larivière).

⁷⁹ Ibid.

University of the Fraser Valley, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 22 May 2024, p. 3.

Olivier Bégin-Caouette, Eya Benhassine and Silvia Mirlene Nakano Koga, <u>Federal Government Funding</u>

<u>Distribution Among Canada's Post-Secondary Education Institutions: Distribute to Diversify!</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 29 May 2024, p. 5.

Acfas – Association francophone pour le savoir, <u>Brief Submitted by Acfas to the Standing Committee on Science and Research</u>, May 2024, p. 4.

⁸³ Ibid.

has also had an impact on the province's linguistic balance, contributing to the decline of the French language.⁸⁴

Lastly, colleges' ability to conduct applied research is limited by the concentration of research funding among universities.⁸⁵ As previously mentioned, one of the strengths of colleges is their ability to work with local partners to develop innovative research-based solutions. Witnesses pointed out that, without access to sufficient funding, some of this potential is being wasted. According to Susan Blum, Associate Vice-Presidente of Applied Research and Continuing Education at Saskatchewan Polytechnic:

This disparity not only impedes our capacity to invest in infrastructure and faculty development but also hampers our ability to offer innovative solutions tailored to meeting the evolving needs of industry and communities. In essence, it's a disservice to the essential role that polytechnics play in fostering practical education and training and providing real-world solutions.⁸⁶

Several witnesses drew the Committee's attention to the multiplier effect of funding that is invested in college-based research.⁸⁷ For example, according to Polytechnics Canada, "for every dollar invested in applied research, there is a return that ranges from a low of \$8.24 to a high of \$18.82."88 Within that context, Ben Cecil from the Olds College of Agriculture and Technology wondered whether the distribution of federal research funding corresponds to the priorities of Canadians.⁸⁹

Frédéric Lacroix, <u>Federal Overfunding of English Universities in Quebec: A Direct Cause of the Decline of French</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 5.

For example, SRSR, <u>Evidence</u>, 30 April 2024, 1110 (Kalina Kamenova, Director, Applied Research and Innovation, Loyalist College of Applied Arts and Technology); SRSR, <u>Evidence</u>, 30 April 2024, 1220 (Susan Blum); SRSR, <u>Evidence</u>, 11 April 2024, 1205 (Marc Nantel); and NorQuest College <u>Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 14 May 2024, p. 3.

⁸⁶ SRSR, *Evidence*, 30 April 2024, 1220 (Susan Blum).

⁸⁷ Fédération des cégeps, <u>Distribution of Research Funding in Higher Education</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 2; Polytechnics Canada, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 4; and SRSR, <u>Evidence</u>, 21 March 2024, 1240 (Pari Johnston).

Polytechnics Canada, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 3.

⁸⁹ SRSR, *Evidence*, 16 April 2024, 1205 (Ben Cecil).



3.2 Consequences for Researchers and Students

The committee heard many examples of how to distribute funds more equitably. This section presents these observations.

The Committee heard that research is an integral part of the educational mission of post-secondary institutions and contributes directly to student training. According to Sarah Watts-Rynard of Polytechnics Canada:

These aren't researchers who are separate from instructors. These are the instructors who are being freed up to work on real projects and real challenges, and who are then turning that around both in terms of work-integrated learning opportunities for the students and also in terms of informing a curriculum that's trying to stay on top of a very fast-moving labour market. 90

Several witnesses made the point that working on research projects gives students skills that are useful when they enter the job market. ⁹¹ In the case of colleges, applied research improves students' chances of finding employment in the local economy upon graduation. ⁹²

The Committee also heard that the distribution of research funding has implications for accessing graduate programs. Most graduate students do not receive federal scholarships, instead paying for their education through research grants obtained by their professors. ⁹³ Concentrating this funding in the top universities could therefore threaten the ability of students to pursue higher learning in small and medium-sized universities, which receive

⁹⁰ SRSR, Evidence, 21 March 2024, 1240 (Sarah Watts-Rynard).

SRSR, <u>Evidence</u>, 11 April 2024, 1225 (Marc Nantel); SRSR, <u>Evidence</u>, 16 April 2024, 1220 (Ben Cecil); SRSR, <u>Evidence</u>, 30 April 2024, 1100 (Michelle Chrétien); SRSR, <u>Evidence</u>, 30 April 2024, 1135 (Kari Kramp); SRSR, <u>Evidence</u>, 30 April 2024, 1140 (Neil Fassina); Lakeland College <u>Federal Funding Distribution Among Post-Secondary Institutions in Canada</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 7 May 2024, p. 3; and Sheridan College, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 2 May 2024, p. 3.

⁹² SRSR, <u>Evidence</u>, 21 March 2024, 1205 (Sarah Watts-Rynard); and SRSR, <u>Evidence</u>, 11 April 2024, 1225 (Marc Nantel).

⁹³ SRSR, <u>Evidence</u>, 16 April 2024, 1240 (Steven Murphy); and SRSR, <u>Evidence</u>, 18 April 2024, 1220 (Céline Poncelin de Raucourt).

less funding.⁹⁴ This threatens the ability of smaller institutions to retain a regional student population.⁹⁵

According to Nicole Vaugeois:

We know from studies that rural students are under-represented in post-secondary institutions. For them, if they can't go somewhere local, they choose not to go. If they do go, it's a great financial burden to the family. They have to leave their community of residence. This is particularly important for Indigenous students. For them, it's the added costs associated with their departure. ⁹⁶

Because of this, students and researchers interested in pursuing a research career are pushed toward larger institutions, where they can receive more support than in small or medium-sized institutions.⁹⁷

This situation puts institutions in a vicious circle:

[L]ess funding for research means fewer funded researchers; fewer funded researchers means fewer graduate students; fewer graduate students means a smaller operations budget; a smaller operations budget means fewer professors and fewer teams to support them.⁹⁸

Students' financial challenges were brought up several times during the hearings. Eric Weissman, Associate Professor and member of the Post-secondary Student Homeless/Housing Research Network, presented his work and pleaded for support for student housing:

Five per cent of Canada's 2.2 million post-secondary students live in some form of homelessness. That's close to 110,000 students every day. Sixty-four per cent of them allocate more than 30% of their income to housing. Fifty per cent suffer mental health issues, and at some of our smaller sites in our research close to 70% of students would leave school if faced with that hardship and over 30% had done so in the past. ⁹⁹

⁹⁴ SRSR, <u>Evidence</u>, 21 March 2024, 1100 (Nicole Vaugeois); and University of Moncton, <u>Brief Presented to the House of Commons Standing Committee on Science and Research as Part of the Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, 6 May 2024, p. 3.</u>

⁹⁵ SRSR, *Evidence*, 2 May 2024, 1240 (Martin Maltais).

⁹⁶ SRSR, Evidence, 21 March 2024, 1130 (Nicole Vaugeois).

⁹⁷ Ibid., 1135.

⁹⁸ SRSR, Evidence, 18 April 2024, 1245 (Céline Poncelin de Raucourt).

⁹⁹ SRSR, *Evidence*, 16 April 2024, 1110 (Eric Weissman, Associate Professor, Post-secondary Student Homeless/Housing Research Network).



Students in financial difficulty frequently have to use food banks, 100 and those who do not receive scholarships are forced to work while attending school. 101 Pippa Seccombe-Hett, from Aurora College, told the Committee that costs are even higher in the North, while funding is the same. 102

Some of the witnesses said that costs for students could be lower at some smaller institutions outside the big cities, since the cost of living is lower there. Some are also turning to colleges and polytechnics because it is less expensive to study there.

Education accessibility is also an equity issue. According to June Francis, Professor and Director of the Institute for Black and African Diaspora Research and Engagement at Simon Fraser University, "greater distribution of funds among universities of various sizes would better support [diversity, equity and inclusion] goals." Disparities in funding distribution disproportionately affect certain groups. June Francis spoke about the situation facing racialized students and researchers:

In response to the fact that our racialized researchers do not feel well supported, our students do not feel well supported in being able to be supervised as students and getting access to some of the research topics they're interested in because of the funding deficit. In fact, in terms of access to research, that is one of our greatest challenges. ¹⁰⁶

In a brief, Olivier Bégin-Caouette, a professor at the University of Montreal; and Eya Benhassine and Silvia Mirlene Nakano Koga, both doctoral candidates at the

SRSR, <u>Evidence</u>, 2 May 2024, 1155 (Gishleine Oukouomi, National Treasurer, Canadian Federation of Students); SRSR, <u>Evidence</u>, 16 April 2024, 1150 (Fahim Quadir, Vice-President, Canadian Association for Graduate Studies); SRSR, <u>Evidence</u>, 18 April 2024, 1140 (Dena McMartin); and SRSR, <u>Evidence</u>, 18 April 2024, 1150 (Alice Aiken).

SRSR, *Evidence*, 18 April 2024, 1220 (Céline Poncelin de Raucourt).

SRSR, *Evidence*, 11 April 2024, 1240 (Pippa Seccombe-Hett).

¹⁰³ SRSR, <u>Evidence</u>, 18 April 2024, 1140 (Dena McMartin); and SRSR, <u>Evidence</u>, 30 April 2024, 1225 (Susan Blum).

¹⁰⁴ SRSR, Evidence, 21 March 2024, 1215 (Sarah Watts-Rynard).

SRSR, <u>Evidence</u>, 30 April 2024, 1205 (June Francis, Professor and Director, Institute for Black and African Diaspora Research and Engagement, Simon Fraser University).

¹⁰⁶ Ibid., 1230.

University of Montreal, argued that the concentration of funding can "hinder the career advancement of young researchers." ¹⁰⁷

Rebalancing how funding is distributed could benefit these groups of researchers and students at risk of being left out. Referring to Black and racialized researchers, June Francis put it this way:

Black and racialized researchers are not concentrated in U15 universities. In fact, they are fragmented across the research spectrum of universities. Therefore, more diverse funding would better address the needs of [diversity, equity and inclusion] in research.¹⁰⁸

CHAPTER 4: CHALLENGES AND SOLUTIONS TO ACHIEVE BALANCED FUNDING

4.1 Overall Level of Federal Research Funding

Throughout this study, the Committee heard several witnesses say essentially the same thing: it would be better to serve up a bigger pie instead of just dividing it up differently among the various players. ¹⁰⁹ Many witnesses stressed the importance of the overall level of federal support for science and brought up the risk of Canada losing its competitive edge on the global stage. ¹¹⁰ Donna Strickland, professor and co-laureate with Gérard Mourou of the 2018 Nobel Prize in physics, speaking on behalf of the Canadian Committee for Science and Technology, cited the example of South Korea, which spends "almost 5% of their GDP on research and development." ¹¹¹ Some witnesses invoked the risk of brain drain if the overall level of research funding is not

Olivier Bégin-Caouette, Eya Benhassine and Silvia Mirlene Nakano Koga, <u>Federal Government Funding</u>
<u>Distribution Among Canada's Post-Secondary Education Institutions: Distribute to Diversify!</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 29 May 2024, p. 3.

¹⁰⁸ SRSR, *Evidence*, 30 April 2024, 1205 (June Francis).

SRSR, <u>Evidence</u>, 21 March 2024, 1105 (Chad Gaffield); SRSR, <u>Evidence</u>, 21 March 2024, 1110 (Philip Landon, Chief Operating Officer, Universities Canada); SRSR, <u>Evidence</u>, 11 April 2024, 1105 (Edward McCauley); SRSR, <u>Evidence</u>, 11 April 2024, 1130 (Shannon Wagner); SRSR, <u>Evidence</u>, 16 April 2024, 1140 (Robin Whitaker, Vice-President, Canadian Association of University Teachers); SRSR, <u>Evidence</u>, 18 April 2024, 1125 (Alice Aiken); and SRSR, <u>Evidence</u>, 30 April 2024, 1240 (Donna Strickland, Professor, Canadian Committee for Science and Technology).

For example, SRSR, <u>Evidence</u>, 21 March 2024, 1105 (Chad Gaffield); SRSR, <u>Evidence</u>, 21 March 2024, 1110 (Philip Landon); SRSR, <u>Evidence</u>, 11 April 2024, 1105 (Edward McCauley); and SRSR, <u>Evidence</u>, 30 April 2024, 1230 (Donna Strickland).

¹¹¹ SRSR, *Evidence*, 30 April 2024, 1210 (Donna Strickland).



high enough. 112 Increasing support for research would also allow universities to reduce their financial dependence on international students. 113

Many witnesses backed up these observations by referring to the findings of the report from the Advisory Panel on the Federal Research Support System, dubbed the Bouchard Report. These witnesses supported the report's recommendation that "the government should commit to an increase of at least ten percent annually for five years to the [granting agencies'] total base budgets for their core grant programming. However, witnesses also stressed that in addition to an increase in the overall level of support for research, there should be efforts to rebalance how this funding is distributed.

Several witnesses welcomed certain announcements in Budget 2024, which was tabled during the Committee's study. In particular, some spoke positively about the increase in the granting agencies' budgets and in the number and amount of post-graduate scholarships awarded by the federal government.¹¹⁷

Witnesses also focused on the overall operations of the federal research support system. Budget 2024 announced the creation of an umbrella organization for research funding and an advisory Council on Science and Innovation, which will be responsible for "a national science and innovation strategy." 118 It was suggested that this council include

SRSR, <u>Evidence</u>, 16 April 2024, 1240 (Steven Murphy); and SRSR, <u>Evidence</u>, 30 April 2024, 1235 (Donna Strickland).

SRSR, *Evidence*, 2 May 2024, 1145 (Gishleine Oukouomi).

SRSR, <u>Evidence</u>, 21 March 2024, 1100 (Nicole Vaugeois); SRSR, <u>Evidence</u>, 21 March 2024, 1105 (Chad Gaffield); SRSR, <u>Evidence</u>, 21 March 2024, 1110 (Philip Landon); SRSR, <u>Evidence</u>, 11 April 2024, 1110 (Penny Pexman); SRSR, <u>Evidence</u>, 16 April 2024, 1115 (Robin Whitaker); SRSR, <u>Evidence</u>, 18 April 2024, 1105 (Dena McMartin); SRSR, <u>Evidence</u>, 18 April 2024, 1205 (Céline Poncelin de Raucourt); SRSR, <u>Evidence</u>, 30 April 2024, 1245 (Donna Strickland); and University of Lethbridge, <u>Submission to the Standing Committee on Science and Research Regarding the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, 3 May 2024, p. 3. See: Government of Canada, <u>Report of the Advisory Panel on the Federal Research Support System</u>, 2023.</u>

Government of Canada, <u>Report of the Advisory Panel on the Federal Research Support System</u>, 2023.

¹¹⁶ For example, SRSR, *Evidence*, 18 April 2024, 1205 (Céline Poncelin de Raucourt).

SRSR, <u>Evidence</u>, 18 April 2024, 1125 (Alice Aiken); SRSR, <u>Evidence</u>, 18 April 2024, 1200 (Vincent Larivière); SRSR, <u>Evidence</u>, 18 April 2024, 1205 (Céline Poncelin de Raucourt); SRSR, <u>Evidence</u>, 30 April 2024, 1210 (Donna Strickland); SRSR, <u>Evidence</u>, 2 May 2024, 1140 (Martin Maltais); SRSR, <u>Evidence</u>, 2 May 2024, 1145 (Gishleine Oukouomi); and University of Toronto, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 21 May 2024, p. 3.

¹¹⁸ Government of Canada, *Fairness for every generation*, Budget 2024.

representatives from the entire research ecosystem. ¹¹⁹ More generally, several witnesses spoke about the need to better reflect the contribution and role of small and medium-sized institutions, rural institutions and colleges in the research ecosystem. ¹²⁰ Shannon Wagner from Thompson Rivers University believes that regional needs and the unique strengths included in the relationships with the community should be better accounted for in funding calls. ¹²¹

Lastly, some witnesses called for a more balanced distribution of funding among the three granting agencies. Robin Whitaker, Vice-President of the Canadian Association of University Teachers (CAUT), told the Committee that SSHRC receives only about one-fifth of federal research funding, while the majority of Canadian researchers work in the social sciences and humanities. Vincent Larivière said the following:

People often say that social sciences cost less, but they cost less because the decision was made to pay students a pittance. However, in reality, there is no reason why a student in the sciences should be paid more than a student in the social sciences and humanities. 124

In light of the above evidence, the Committee recommends:

Recommendation 1

That the Government of Canada implement the recommendations of the report from the Advisory Panel on the Federal Research Support System, and that it ensure that the composition of the future advisory council on science and industry is representative of the entire research ecosystem.

SRSR, <u>Evidence</u>, 18 April 2024, 1130 (Alice Aiken); SRSR, <u>Evidence</u>, 18 April 2024, 1135 (Dena McMartin); SRSR, <u>Evidence</u>, 18 April 2024, 1250 (Céline Poncelin de Raucourt); SRSR, <u>Evidence</u>, 30 April 2024, 1150 (Kalina Kamenova); and SRSR, <u>Evidence</u>, 30 April 2024, 1155 (Michelle Chrétien).

¹²⁰ For example, SRSR, <u>Evidence</u>, 16 April 2024, 1205 (Ben Cecil); SRSR, <u>Evidence</u>, 30 April 2024, 1155 (Neil Fassina); and Colleges and Institutes Canada, <u>Harnessing Applied Research to Meet Canada's Challenges</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 5.

¹²¹ SRSR, *Evidence*, 11 April 2024, 1100 (Shannon Wagner).

SRSR, <u>Evidence</u>, 16 April 2024, 1115 and 1205 (Robin Whitaker); SRSR, <u>Evidence</u>, 18 April 2024, 1205 (Céline Poncelin de Raucourt); and SRSR, <u>Evidence</u>, 18 April 2024, 1230 (Vincent Larivière).

¹²³ SRSR, *Evidence*, 16 April 2024, 1115 (Robin Whitaker).

SRSR, *Evidence*, 18 April 2024, 1230 (Vincent Larivière).



4.2 Funding Allocation Criteria

4.2.1 Institutional Eligibility Criteria

Witnesses focused on the eligibility of post-secondary institutions for certain federal funding programs. Some funding mechanisms or programs are not open to colleges or smaller institutions. For instance, colleges and polytechnics are not eligible for the Canada Research Chairs program. Some federal funding programs allow colleges to participate, but only as partner institutions, not as lead applicants. Pippa Seccombe-Hett, Vice-President of Research at Aurora College, said that there is a supplement to research grants for projects carried out in the North, but this is not open to colleges.

The Committee heard that sometimes, even when small schools and colleges are eligible for certain funding programs, the allocation criteria place them at a disadvantage. For example, Dena McMartin, Vice-President, Research at the University of Lethbridge, said that while the funding agencies opened the door to smaller institutions by changing the way the Canada First Research Excellence Fund is distributed, "the challenge now is I can see the door, but I can't quite open it." As for colleges, Pari Johnston of Colleges and Institutes Canada complained that funding programs are designed for universities and are simply "also" open to colleges, disregarding what makes colleges different. She believes that the eligibility criteria "must appreciate institutional differences and take advantage of opportunities beyond the academic."

Several federal programs award funding based on the amount of funding previously received by the host institution. For example, this is the case for the Canada Research Chairs program, the Research Support Fund and the Government of Canada's graduate scholarship programs.

SRSR, <u>Evidence</u>, 21 March 2024, 1120 (Nicole Vaugeois); and SRSR, <u>Evidence</u>, 21 March 2024, 1220 (Pari Johnston).

¹²⁶ SRSR, *Evidence*, 16 April 2024, 1230 (Ben Cecil).

¹²⁷ SRSR, *Evidence*, 11 April 2024, 1205 (Marc Nantel).

SRSR, *Evidence*, 11 April 2024, 1210 (Pippa Seccombe-Hett).

SRSR, <u>Evidence</u>, 21 March 2024, 1100 (Nicole Vaugeois); and SRSR, <u>Evidence</u>, 11 April 2024, 1100 (Shannon Wagner).

¹³⁰ SRSR, Evidence, 18 April 2024, 1130 (Dena McMartin).

¹³¹ SRSR, *Evidence*, 21 March 2024, 1205 (Pari Johnston).

¹³² Ibid.

The Canada Research Chairs (CRC) program, administered jointly by the three granting agencies, allocates a certain number of Chairs to eligible institutions, based on the average funding received by the institution's researchers over the previous three years. Only certain federal funding programs are included in this calculation. Several funding programs specifically for colleges are excluded, including the College and Community Innovation Program. The CRC program also provides a special allocation of Chairs to institutions that have received less funding. 135

As for the Research Support Fund (RSF), it "assists Canadian postsecondary institutions and their affiliated research hospitals and institutes with the expenses associated with managing the research funded by the three federal research granting agencies." ¹³⁶ The amount of funding provided to institutions is based on the funding provided to the institution's researchers by the three federal agencies over the previous three years. ¹³⁷ The calculation formula uses a sliding scale and "provides higher rates of funding for the institutions that receive the least amount of money from the federal research funding agencies." ¹³⁸ As with the CRC program, certain granting agency programs, such as the College and Community Innovation Program, are excluded from this calculation. ¹³⁹ For the research security stream of the RSF, there is a set threshold of \$2 million. ¹⁴⁰ Witnesses said that many of the smaller institutions were excluded from this funding because of the threshold or received little in the way of research security funding. ¹⁴¹ It was recommended by one witness that the threshold be reviewed. ¹⁴²

Canada Graduate Scholarships are awarded to students through post-secondary institutions. Each institution is allocated a quota of master's scholarships to be distributed among its students, as well as a quota of candidates it can nominate for

¹³³ Canada Research Chairs, <u>Method of Allocating Chairs</u>.

¹³⁴ Ibid.; and SRSR, *Evidence*, 21 March 2024, 1220 (Sarah Watts-Rynard).

¹³⁵ U15, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 4 April 2024, p. 4.

¹³⁶ Research Support Fund, About the program.

¹³⁷ Research Support Fund, Grant calculations.

¹³⁸ Ibid.

SRSR, <u>Evidence</u>, 21 March 2024, 1220 (Sarah Watts-Rynard); and Polytechnics Canada, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 6.

¹⁴⁰ SRSR, Evidence, 21 March 2024, 1135 (Nicole Vaugeois).

¹⁴¹ Ibid.; and SRSR, *Evidence*, 18 April 2024, 1230 (Céline Poncelin de Raucourt).

¹⁴² SRSR, Evidence, 2 May 2024, 1340 (Ted Hewitt, President, Social Sciences and Humanities Research Council).



doctoral scholarships. These quotas are calculated based on the average funding received by the institution over the previous three years.

Several witnesses told the Committee that this mechanism for allocating scholarship quotas could result in students having to turn to the best-endowed institutions rather than study in their own region. For greater equity, Fahim Quadir, on behalf of the Canadian Association for Graduate Studies, recommended that graduate scholarship quotas awarded to post-secondary institutions be calculated based on the number of graduate students enrolled in research programs at each institution, rather than on the basis of funding received. This was supported by several witnesses.

According to several witnesses, this system creates a "Matthew effect," meaning that "the more visibility you have in the scientific field, the more funding you receive and the easier it becomes to receive more funding." The current criteria for awarding funding also result in a vicious circle making it very difficult for institutions that have received little funding to receive more in the future. In a brief, MacEwan University described the challenges encountered in developing its research ecosystem. This is how Dena McMartin summed up the situation:

SRSR, <u>Evidence</u>, 21 March 2024, 1100 (Nicole Vaugeois); SRSR, <u>Evidence</u>, 18 April 2024, 1145 (Dena McMartin); SRSR, <u>Evidence</u>, 18 April 2024, 1220 (Céline Poncelin de Raucourt); and University of Regina, <u>Brief</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 30 April 2024, p. 1.

¹⁴⁴ SRSR, *Evidence*, 16 April 2024, 1105 (Fahim Quadir).

For example, SRSR, <u>Evidence</u>, 18 April 2024, 1220 (Céline Poncelin de Raucourt); ACCRU, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 April 2024, p. 4; University of Moncton, <u>Brief Presented to the House of Commons Standing Committee on Science and Research as Part of the Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, 6 May 2024, p. 4; and Vancouver Island University, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 7 May 2024, p. 4.

SRSR, *Evidence*, 18 April 2024, 1250 (Vincent Larivière). See also: SRSR, *Evidence*, 21 March 2024, 1100 (Nicole Vaugeois).

SRSR, <u>Evidence</u>, 21 March 2024, 1135 (Nicole Vaugeois); SRSR, <u>Evidence</u>, 21 March 2024, 1250 (Sarah Watts-Rynard); SRSR, <u>Evidence</u>, 16 April 2024, 1250 (Steven Murphy); SRSR, <u>Evidence</u>, 18 April 2024, 1130 (Dena McMartin); University of New Brunswick, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 1 May 2024, p. 2; and Vancouver Island University, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 7 May 2024, p. 2.

MacEwan University, <u>Brief</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 May 2024, p. 2.

The challenge then, of course, is that when a lead institution receives those funds, they also receive significant overhead funding that provides that boost in project management and administrative supports that can lead to the next big grant. Our challenge has been that if we can't get on that hamster wheel it's impossible to become part of that cycle. Once you're in that cycle, it's easier. It's not easy, but it's easier to stay on that funding cycle. It's really hard to break in. 149

The witnesses presented the Committee with several recommendations. Ben Cecil supported the idea of eliminating the dichotomy between colleges and universities in calls for proposals, instead focusing on the type of research and the ability to support that research.¹⁵⁰

ACCRU recommended undertaking a "revision of the proportion and impact of research funding based on previous success rate." ¹⁵¹ They also called for 10% of funding from the Canada First Research Excellence Fund to be redirected to create new Canada Research Chairs at small and medium-sized universities, and for a review of the how Canada Research Chairs are awarded. ¹⁵² The University of Quebec recommended establishing a "minimum threshold per higher education institution … for awarding Canada Research Chairs based on the number of researchers in their employ." ¹⁵³

Thompson Rivers University recommended a more inclusive funding model to evaluate funding proposals "based on their potential to drive meaningful outcomes and advancements, rather than relying on past successes," aligning with the Small Institution Fund, part of the Canadian Foundation for Innovation's John R. Evans Leaders Fund. 154

Eric Weissman expressed support for tying research funding eligibility to certain student housing accessibility or availability indicators in order to encourage universities to focus

¹⁴⁹ SRSR, *Evidence*, 18 April 2024, 1130 (Dena McMartin).

¹⁵⁰ SRSR, Evidence, 16 April 2024, 1245 and 1255 (Ben Cecil).

ACCRU, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 April 2024, p. 2.

¹⁵² Ibid., pp. 3–4.

University of Quebec, *Fair distribution of wealth: In favour of a better-performing Canadian research system and stronger communities*, Brief submitted to the House of Commons Standing Committee on Science and
Research, 17 April 2024, p. 2.

Thompson Rivers University, <u>Submission to the Standing Committee on Science and Research on The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, **21 May 2024**, p. 4.



more on this issue.¹⁵⁵ However, Fahim Quadir believes that universities lack the resources to provide student housing.¹⁵⁶

In light of the above evidence, the Committee recommends:

Recommendation 2

That the Government of Canada review the funding criteria used by the granting agencies and the Canada Foundation for Innovation and stop using criteria based on past grant amounts awarded, in order to avoid penalizing small and medium-sized post-secondary institutions.

Recommendation 3

That the Government of Canada review the system for allocating Canada Graduate Scholarship quotas to post-secondary institutions in order to take into account the number of graduate students enrolled in each institution's research programs.

4.2.2 Peer Review and Merit Assessment Criteria

Based on the evidence heard by the Committee, there is consensus on the use of peer review as the basis for the federal government's funding allocation process. ¹⁵⁷ Philip Landon, Chief Operating Officer of Universities Canada, said that "having merit-based, peer-reviewed competitions is extremely important to ensure that the best research, the right research is being funded." ¹⁵⁸

While there is consensus on the principle of peer review, there was some discussion about the practice and criteria used to review applications.

¹⁵⁵ SRSR, *Evidence*, 16 April 2024, 1145 (Eric Weissman).

¹⁵⁶ SRSR, *Evidence*, 16 April 2024, 1150 (Fahim Quadir).

For example, SRSR, <u>Evidence</u>, 21 March 2024, 1140 (Philip Landon); ACCRU, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 April 2024, p. 2; U15, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 4 April 2024, p. 7; Canadian Association of University Teachers (CAUT), <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 3; and University of Manitoba, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 May 2024, p. 5.

¹⁵⁸ SRSR, *Evidence*, 21 March 2024, 1140 (Philip Landon).

First, with regard to the practice of peer review, the Committee was presented with a number of different perspectives. Tammy Clifford, CIHR Acting President, said that the peer review system in place is a "fair and transparent process … protected from biases or conflicts of interest."¹⁵⁹ This view was supported by several witnesses. ¹⁶⁰ Chad Gaffield, on behalf of U15, said that "Canada is internationally recognized for its best practices in the assessment of scholarly and scientific research." ¹⁶¹

Other witnesses felt that there are biases that disadvantage certain categories of institutions. Nicole Vaugeois, for ACCRU, said there was "systemic bias" against researchers from small universities. ¹⁶² This was echoed by several witnesses and briefs from small and medium-sized universities. ¹⁶³ The composition of granting agencies' review committees was raised as an issue. ¹⁶⁴

Among ACCRU's recommendations are "eliminate institutional size bias from the design of all new and existing programs" and undertake a "review of the composition of Council peer-review committees, including their Chairs, ... to remove institutional bias in funding decisions." The organization also hopes that training on the implicit biases of funding agencies will include "institutional size and geographical bias." 166

SRSR, *Evidence*, 2 May 2024, 1250 (Tammy Clifford, Acting President, Canadian Institutes of Health Research).

SRSR, <u>Evidence</u>, 2 May 2024, 1255 (Alejandro Adem, President, Natural Sciences and Engineering Research Council); SRSR, <u>Evidence</u>, 2 May 2024, 1300 (Ted Hewitt); SRSR, <u>Evidence</u>, 21 March 2024, 1105 (Chad Gaffield); and University of Waterloo, <u>Brief</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 6 May 2024, p. 2.

SRSR, Evidence, 21 March 2024, 1105 (Chad Gaffield).

SRSR, Evidence, 21 March 2024, 1130 (Nicole Vaugeois).

For example, SRSR, Evidence, 11 April 2024, 1155 (Penny Pexman); SRSR, Evidence, 16 April 2024, 1135 (Philippe-Edwin Bélanger, President, Canadian Association for Graduate Studies); SRSR, Evidence, 18 April 2024, 1205 (Céline Poncelin de Raucourt); Maple League of Universities, Submission to the Standing Committee on Science and Research: Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, 7 May 2024, p. 3; and University of the Fraser Valley, The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, Brief submitted to the House of Commons Standing Committee on Science and Research, 22 May 2024, p. 1.

SRSR, <u>Evidence</u>, 21 March 2024, 1130 (Nicole Vaugeois); Athabasca University, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 May 2024, p.4; and École de technologie supérieure, <u>Investing in Innovative Universities</u>: <u>a Vector of Collective Wealth</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 6.

ACCRU, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 April 2024, p. 2.

¹⁶⁶ Ibid.



It was nevertheless noted that peer review "has gone through a continual process to guard against bias, through ensuring diversity of panel members, training, and guidelines." Officials from the granting agencies highlighted the measures already being taken to avoid bias in funding decisions. 168

There was also discussion about the criteria used to assess the quality of research projects. The Committee heard that some of the criteria used disadvantage smaller institutions and colleges, as they poorly reflect their reality. 169

For example, small and medium-sized institutions often recruit mid-career researchers or practitioners who have experience but not much of a track record in terms of funding or publications. Using criteria of excellence that give a lot of weight to publications can penalize this type of profile. Similarly, college faculty conducting applied research do not usually aim to publish scientific papers. The success of their projects cannot be measured this way.

Several witnesses recommended reviewing the programs and criteria for evaluating funding applications to better account for the diversity of researchers and types of research.¹⁷³ Witnesses spoke about the importance of considering the potential impact of research when making funding decisions and of using appropriate indicators.¹⁷⁴ For

¹⁶⁷ CAUT, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 3.

SRSR, <u>Evidence</u>, 2 May 2024, 1250 (Tammy Clifford); SRSR, <u>Evidence</u>, 2 May 2024, 1255 (Alejandro Adem); and SRSR, <u>Evidence</u>, 2 May 2024, 1300 (Ted Hewitt).

For example, SRSR, *Evidence*, 21 March 2024, 1250 (Sarah Watts-Rynard); SRSR, *Evidence*, 21 March 2024, 1250 (Pari Johnston); and SRSR, *Evidence*, 16 April 2024, 1205 and 1235 (Ben Cecil).

¹⁷⁰ SRSR, Evidence, 11 April 2024, 1135 (Shannon Wagner).

¹⁷¹ SRSR, *Evidence*, 18 April 2024, 1145 (Dena McMartin).

Polytechnics Canada, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 4; and SRSR, <u>Evidence</u>, 11 April 2024, 1220 (Marc Nantel).

Olivier Bégin-Caouette, Eya Benhassine and Silvia Mirlene Nakano Koga, <u>Federal Government Funding Distribution Among Canada's Post-Secondary Education Institutions: Distribute to Diversify!</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 29 May 2024, p. 1; Polytechnics Canada, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 2; SRSR, <u>Evidence</u>, 11 April 2024, 1135 (Shannon Wagner); SRSR, <u>Evidence</u>, 11 April 2024, 1255 (Marc Nantel); and SRSR, <u>Evidence</u>, 16 April 2024, 1110 (Eric Weissman).

SRSR, <u>Evidence</u>, 11 April 2024, 1115 (Edward McCauley); SRSR, <u>Evidence</u>, 11 April 2024, 1225 (Marc Nantel); SRSR, <u>Evidence</u>, 16 April 2024, 1205 (Ben Cecil); SRSR, <u>Evidence</u>, 16 April 2024, 1225 (Steven Murphy); and SRSR, <u>Evidence</u>, 18 April 2024, 1240 (Céline Poncelin de Raucourt).

example, for college-based research, Polytechnics Canada suggested encouraging evaluators to "recognize factors such as industry partnership, technology transfer and demonstrated impact as having equal value to publication history." ¹⁷⁵

Another evaluation criterion that was criticized concerns the ability of institutions to support research projects. Dena McMartin, from the University of Lethbridge, felt that it was inappropriate to ask evaluators "who have never been to my university or don't know my university" to judge the institutional capacity required to complete the proposed project. This criticism was supported by other witnesses. This criticism was supported by other witnesses. NSERC President Alejandro Adem remarked that this issue has been reported to NSERC and that his organization is working with the review committees to adopt best practices.

The Committee also heard that the granting agencies collectively endorsed the San Francisco Declaration on Research Assessment (DORA) in November 2019. According to CAUT, [t]his global initiative promotes best practices in the assessment of scholarly research by encouraging use of a broader range of metrics to capture the value and impact of all research outputs. 180

Also on the issue of merit assessment criteria, discussions touched on the role of diversity, equity and inclusion measures. Witnesses were asked about the controversy

Polytechnics Canada, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 4.

¹⁷⁶ SRSR, *Evidence*, 18 April 2024, 1125 (Dena McMartin).

For example, St. Thomas University, <u>Brief Presented to the Standing Committee on Science and Research on the Topic of Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, 21 May 2024, p. 3; and Thompson Rivers University, <u>Submission to the Standing Committee on Science and Research on The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, 21 May 2024, p. 5.</u></u>

¹⁷⁸ SRSR, *Evidence*, 2 May 2024, 1335 (Alejandro Adem).

U15, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>,
Brief submitted to the House of Commons Standing Committee on Science and Research, 4 April 2024, p. 3;
CAUT, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>,
Brief submitted to the House of Commons Standing Committee on Science and
Research, May 2024, p. 3; Maple League of Universities, <u>Submission to the Standing Committee on Science and Research: Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, 7 May 2024, p. 4; and University of Manitoba, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 May 2024, p. 3.

¹⁸⁰ CAUT, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 3.



surrounding equity targets for the Canada Research Chairs program. SSHRC President Ted Hewitt said that the granting agencies pursue "policies that were established in law by the Federal Court and subject to a mediation that was overseen by the Canada Human Rights Commission." The agencies are working "with the institutions to develop targets and thereby encourage them to use whatever hiring practices are allowed under the laws of Canada and the provinces to achieve those." Edline Poncelin de Raucourt said that academic institutions' concerns are to "promote a system that is as fair and diverse as possible," and she said that ensuring this diversity is not going against excellence and merit. However, the Committee received a brief signed by 39 researchers who believe that "[c]ostly and inequitable Tri-Council [equity, diversity and inclusion] policies should be abolished."

There were several recommendations from witnesses concerning peer review. Vincent Larivière suggested anonymizing research projects that request funding in order to give less weight to curriculum vitæ when evaluating applications. This was supported by the University of Quebec. 186

Vincent Larivière also encouraged the granting agencies to experiment with new ways to award funding. For example, he said that part of the funding could be distributed randomly. This was also proposed in briefs from ACCRU and from St. Thomas University. 188

Consequently, the Committee recommends:

183 SRSR, Evidence, 18 April 2024, 1210 (Céline Poncelin de Raucourt).

¹⁸¹ SRSR, *Evidence*, 2 May 2024, 1305 (Ted Hewitt).

¹⁸² Ibid., 1315.

Douglas W. Allen et al., <u>Study on the Distribution of Federal Government Funding Among Canada's Postsecondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 May 2024, p. 1.

SRSR, *Evidence*, 18 April 2024, 1245 (Vincent Larivière).

SRSR, *Evidence*, 18 April 2024, 1245 (Céline Poncelin de Raucourt).

¹⁸⁷ SRSR, *Evidence*, 18 April 2024, 1245 (Vincent Larivière).

ACCRU, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 April 2024, p. 2; and St. Thomas University, <u>Brief Presented to the Standing Committee on Science and Research on the Topic of Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, 21 May 2024, p. 2.</u>

Recommendation 4

That the Government of Canada maintain peer review as the foundation for allocating research funding awarded by the granting agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada and the Canadian Institutes of Health Research.

Recommendation 5

That the Government of Canada, through the granting agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada and the Canadian Institutes of Health Research, look at the composition of review committees evaluating funding applications and improve unconscious bias training in order to avoid penalizing post-secondary institutions based on their size or region.

Recommendation 6

That the Government of Canada, through the granting agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada and the Canadian Institutes of Health Research, review the funding application merit review criteria, in line with the San Francisco Declaration on Research Assessment, to take better account of the diversity of researchers and types of research.

Recommendation 7

That the Government of Canada, through the granting agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada and the Canadian Institutes of Health Research, experiment with new approaches to allocating some of its funding, such as anonymizing funding applications or randomly distributing part of the funding.

4.3 Infrastructure and Indirect Costs of Research

One major challenge for small and medium-sized institutions and colleges is funding research infrastructure and the indirect costs of research.



Many witnesses spoke of the limited resources of smaller institutions and colleges to support the research of their researchers and students. These issues are particularly acute when supporting researchers in completing and submitting their funding program applications with the granting agencies. It was also mentioned that these difficulties are even more acute for francophone researchers who wish to submit funding applications in French, particularly when they work in institutions in a minority language context.

Many witnesses cited the administrative complexity of the application process and the growing number of requirements for applicants as barriers for the smallest institutions. These new requirements include equity, diversity and inclusion priorities, research data management, digital research infrastructure and research security. 193

As mentioned above, funding from the RSF, the main federal program to cover the indirect costs of research, is allocated based on funding obtained by institutions in previous years. This allocation system effectively excludes most colleges, since the CCIP is excluded from this calculation. For smaller academic institutions, the complexity of funding program eligibility requirements reduces their ability to obtain funding, which in turn limits the funding they can obtain from the RSF. Several universities also pointed

SRSR, <u>Evidence</u>, 11 April 2024, 1220 (Marc Nantel); SRSR, <u>Evidence</u>, 18 April 2024, 1230 (Céline Poncelin de Raucourt); SRSR, <u>Evidence</u>, 30 April 2024, 1125 (Neil Fassina); and Maple League of Universities, <u>Submission to the Standing Committee on Science and Research: Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, 7 May 2024, p. 4.</u>

SRSR, <u>Evidence</u>, 21 March 2024, 1140 (Philip Landon); SRSR, <u>Evidence</u>, 11 April 2024, 1125 (Penny Pexman); SRSR, <u>Evidence</u>, 11 April 2024, 1125 (Edward McCauley); SRSR, <u>Evidence</u>, 16 April 2024, 1125 (Philippe-Edwin Bélanger); and SRSR, <u>Evidence</u>, 18 April 2024, 1220 (Céline Poncelin de Raucourt).

¹⁹¹ SRSR, Evidence, 2 May 2024, 1235 (Sophie Montreuil).

SRSR, <u>Evidence</u>, 21 March 2024, 1100 and 1130 (Nicole Vaugeois); SRSR, <u>Evidence</u>, 21 March 2024, 1110 (Philip Landon); SRSR, <u>Evidence</u>, 11 April 2024, 1220 (Pippa Seccombe-Hett); SRSR, <u>Evidence</u>, 16 April 2024, 1140 (Philippe-Edwin Bélanger); SRSR, <u>Evidence</u>, 16 April 2024, 1140 (Robin Whitaker); SRSR, <u>Evidence</u>, 16 April 2024, 1225 (Steven Murphy); SRSR, <u>Evidence</u>, 18 April 2024, 1105 and 1130 (Dena McMartin); University of Northern British Columbia, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 23 May 2024, p. 2; University of New Brunswick, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 1 May 2024, p. 2; and Vancouver Island University, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 7 May 2024, p. 3.

Athabasca University, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 May 2024, pp. 5–6.

¹⁹⁴ SRSR, Evidence, 21 March 2024, 1210 (Sarah Watts-Rynard).

¹⁹⁵ Ibid., 1220; and SRSR, *Evidence*, 21 March 2024, 1135 (Nicole Vaugeois).

out that the RSF allocation formula, based on funding received in previous years, results in a multi-year lag between the awarding of a notable grant or award and the increase in funding provided. ¹⁹⁶

The Committee's attention was also drawn to the distribution of RSF credits between institutions collaborating on a research project. ¹⁹⁷ Under the current system, in the majority of cases, credits are divided based on the number of researchers involved in the project, even though the principal investigator's institution actually bears the bulk of the costs. This disadvantages smaller institutions that initiate collaborative projects.

The Committee therefore recommends:

Recommendation 8

That the Government of Canada review and simplify the funding application processes for the programs of the granting agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada, the Canadian Institutes of Health Research, and the Canada Foundation for Innovation.

Recommendation 9

That the Government of Canada review how the Research Support Fund operates so as to better support small and medium-sized post-secondary institutions and colleges in covering the indirect costs of research.

4.4 Collaboration Between Institutions

Collaboration between institutions, regardless of size or geographical location, was presented as a strength of Canada's research ecosystem. According to U15, research projects funded by the Canada First Research Excellence Fund in 2022 include 11 projects, with six involving U15 members collaborating with 18 additional

Yukon University, <u>Standing Committee on Science and Research Study on the Distribution of Federal</u>
<u>Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of
Commons Standing Committee on Science and Research, 23 May 2024, p. 2; and Vancouver Island
University, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>,
Brief submitted to the House of Commons Standing Committee on Science and Research, 7 May 2024, p. 2.

¹⁹⁷ St. Thomas University, <u>Brief Presented to the Standing Committee on Science and Research on the Topic of Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions,</u> 21 May 2024, p. 4.

¹⁹⁸ SRSR, *Evidence*, 21 March 2024, 1125 (Chad Gaffield).



institutions."¹⁹⁹ Penny Pexman, Vice-President of Research at Western University, gave as an example a research project from her institution, conducted in partnership with Simon Fraser, Dalhousie and Memorial universities, preparing primary care providers for future pandemics.²⁰⁰

These collaborations can lead to the creation of networks involving colleges and universities. For example, Marc Nantel presented the Southern Ontario Network for Advanced Manufacturing Innovation, or SONAMI, a network launched by Niagara College, involving nine colleges and two universities. According to figures provided by Marc Nantel, in eight years SONAMI has undertaken more than 460 projects with 316 industry partners that commercialized 149 products, and the network has created more than 280 jobs.²⁰¹

Several witnesses recommended promoting collaboration between institutions, including between colleges and universities. Shannon Wagner cited NSERC's Lab2Market grant program, which requires interinstitutional partnerships for eligibility, as an excellent model for how to bring together post-secondary institutions in Canada. Some witnesses recommended allowing colleges to lead research projects in collaboration with universities. Some

199 Ibid., 1105.

200 SRSR, *Evidence*, 11 April 2024, 1110 (Penny Pexman).

201 SRSR, *Evidence*, 11 April 2024, 1205 (Marc Nantel).

202 For example, SRSR, Evidence, 11 April 2024, 1100 (Shannon Wagner); SRSR, Evidence, 18 April 2024, 1145 (Alice Aiken); SRSR, Evidence, 21 March 2024, 1230 (Pari Johnston); SRSR, Evidence, 11 April 2024, 1210 (Pippa Seccombe-Hett); ACCRU, The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 April 2024, p. 4; Fédération des cégeps, Distribution of Research Funding in Higher Education, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 2; Acfas – Association francophone pour le savoir, Brief Submitted by Acfas to the Standing Committee on Science and Research, p. 7; Athabasca University, The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, Brief submitted to the House of Commons Standing Committee on Science and Research, 24 May 2024, p. 5; University of Lethbridge, Submission to the Standing Committee on Science and Research Regarding the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, 3 May 2024, p. 4; Vancouver Island University, The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, Brief submitted to the House of Commons Standing Committee on Science and Research, 7 May 2024, p. 3; and Cape Breton University, Brief, Brief submitted to the House of Commons Standing Committee on Science and Research, 16 May 2024, p. 3.

203 SRSR, *Evidence*, 11 April 2024, 1100 (Shannon Wagner).

204 SRSR, *Evidence*, 16 April 2024, 1235 (Ben Cecil); and SRSR, *Evidence*, 30 April 2024, 1155 (Michelle Chrétien).

Recommendation 10

That the Government of Canada amend the rules governing the granting agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada and the Canadian Institutes of Health Research, to encourage collaboration between post-secondary institutions, particularly between colleges, CEGEPs, college centers for the transfer of technology in the domain of innovative social practices, Technology Access Centres, polytechnics and universities, in current and future research funding programs.

4.5 Support for College-Based Research

Specific recommendations were made concerning support for college-based research.

Witnesses first recommended increasing the share of federal research support directed to colleges. Kalina Kamenova, Director of Applied Research and Innovation at Loyalist College of Applied Arts and Technology, recommended increasing funding to colleges from 3% to 6% of total granting agency funding. This was supported by Michelle Chrétien, Vice President of Research and Innovation at Conestoga College Institute of Technology and Advanced Learning. For its part, Fédération des cégeps recommended [t] hat a minimum of 10% of higher education research funding be dedicated to the college sector, primarily for the purpose of conducting applied research, and that this funding be sustainable and predictable.

A portion of this additional funding could be invested in existing programs. Lambton College noted the stagnation of the College and Community Innovation Program (CCIP) envelope, and Polytechnics Canada recommended increasing it to \$125 million per year. Kalina Kamenova recommended increased funding for individual projects under the CCIP. The Victoriaville CEGEP promoted the Applied Research Tools and Instruments

²⁰⁵ SRSR, *Evidence*, 30 April 2024, 1105 and 1130 (Kalina Kamenova).

²⁰⁶ SRSR, Evidence, 30 April 2024, 1140 (Michelle Chrétien).

²⁰⁷ Fédération des cégeps, <u>Distribution of Research Funding in Higher Education</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 4.

²⁰⁸ Lambton College <u>Federal Government Funding Among Post-Secondary Education Institutions Brief</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 22 April 2024, p. 7; and Polytechnics Canada, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 5.

²⁰⁹ SRSR, *Evidence*, 30 April 2024, 1130 (Kalina Kamenova).



competition, a component of the CCIP.²¹⁰ Another aspect of this program that attracted the attention of witnesses was Technology Access Centre grants.²¹¹

As for the other existing programs, the Committee was told that they were not always sensitive to the realities of colleges. For example, one feature of college-based applied research is that it can rapidly address a need or issue identified by a partner. However, not all of the granting agencies' existing funding programs have the flexibility to provide funds quickly when an opportunity arises. Heádération des cégeps cited NSERC's "Engage" program as "a good example of directed funding that recognizes the uniqueness of colleges and allows for the rapid launch of short-term research projects that meet local needs." Ben Cecil suggested creating an open pool that an institution could quickly access when an opportunity arises. Engage 10 open pool that an institution could quickly access when an opportunity arises.

Asked whether it would be better to create new funding programs specifically for colleges or to adapt existing ones, Marc Nantel of Niagara College replied that it depends on what the desired outcomes of the program are: "If what you want is something that universities are excellent at bringing, then I think it's a university program. If it's something that colleges are excellent at bringing, then make it a college program." 217 Ben Cecil believes that it is important to have "a rebalanced and reframed system that takes a systems

Victoriaville CEGEP, <u>Brief Submitted by the Cégep de Victoriaville to the House of Commons Standing</u>

<u>Committee on Science and Research as Part of its Study on the Distribution of Federal Government Funding</u>

<u>Among Canada's Post-Secondary Institutions</u>, 24 May 2024, p. 4.

SRSR, <u>Evidence</u>, 30 April 2024, 1130 (Kalina Kamenova); and Synchronex, <u>The Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, pp. 7–8.

SRSR, <u>Evidence</u>, 21 March 2024, 1225 (Pari Johnston); and SRSR, <u>Evidence</u>, 11 April 2024, 1255 (Marc Nantel).

²¹³ SRSR, <u>Evidence</u>, 30 April 2024, 1200 (Michelle Chrétien); SRSR, <u>Evidence</u>, 30 April 2024, 1135 (Kari Kramp); and SRSR, <u>Evidence</u>, 30 April 2024, 1225 (Susan Blum).

Victoriaville CEGEP, <u>Brief Submitted by the Cégep de Victoriaville to the House of Commons Standing Committee on Science and Research as Part of its Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, 24 May 2024, p. 5; and Lakeland College <u>Federal Funding Distribution Among Post-Secondary Institutions in Canada</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 7 May 2024, p. 4.</u>

Fédération des cégeps, <u>Distribution of Research Funding in Higher Education</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 3.

²¹⁶ SRSR, *Evidence*, 16 April 2024, 1240 (Ben Cecil).

²¹⁷ SRSR, *Evidence*, 11 April 2024, 1220 (Marc Nantel).

approach, the entire ecosystem, to leverage the infrastructure that Canadians have invested into colleges and universities."²¹⁸

Recommendation 11

That the Government of Canada increase the share of research funding allocated to colleges, institutes, CEGEPs, CCTTs, TACs and polytechnics through the College and Community Innovation Program and other programs of the granting agencies; that it adapt the current funding programs open to these institutions in order to better reflect their unique features and contributions and to facilitate the transfer of research and innovation they produce to the benefit of society; and that it give greater consideration to these aspects when developing future programs.

4.6 Support for Research in French

Over the course of its study, the Committee heard evidence and received recommendations specifically concerning research in French. According to Acfas, the research funding model "impedes the francophone research community, primarily because the majority of researchers working in that language are found in small and medium-sized universities, often outside major centres."²¹⁹

As shown by the Committee's June 2023 report *Revitalizing Research and Scientific Publication in French in Canada*, research and scientific publication in French faces major challenges.²²⁰ The 30,000 francophone researchers working outside Quebec have difficulty accessing support services to help them apply for funding from granting agencies.²²¹ In fact, some francophone researchers submit their grant applications in English.²²² In a brief, the University of Alberta's Campus Saint-Jean also raised the issue

²¹⁸ SRSR, *Evidence*, 16 April 2024, 1235 (Ben Cecil).

Acfas – Association francophone pour le savoir, <u>Brief Submitted by Acfas to the Standing Committee on Science and Research</u>, p. 4.

²²⁰ SRSR, <u>Revitalizing research and scientific publication in French in Canada</u>, 1st Session, 44th Parliament, June 2023.

²²¹ Ibid.

SRSR, <u>Evidence</u>, 2 May 2024, 1200 (Sophie Montreuil); and Olivier Bégin-Caouette, Eya Benhassine and Silvia Mirlene Nakano Koga, <u>Federal Government Funding Distribution Among Canada's Post-Secondary Education Institutions: Distribute to Diversify!</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 29 May 2024, p. 7.



of the poor representation of francophone researchers working in small minority institutions on granting agency assessment boards.²²³

Witnesses stressed the consequences of this for the country as a whole:

What is at stake here is the country's collective wealth. If all of the best-paid and most stimulating jobs are in positions requiring a university degree, often at the graduate or post-graduate level, a segment of the non-anglophone population is condemned to a lower, less stimulating relative wealth. The francophone population, which totals almost 9 million out of a national population of 41 million, is under-represented in terms of research activity, research funding and the number of students who undertake graduate studies. 224

It was mentioned that in the new *Official Languages Act*, the federal government "is committed to advancing formal, nonformal and informal opportunities for members of English and French linguistic minority communities to pursue quality learning in their own language throughout their lives, including from early childhood to postsecondary education."²²⁵

Martin Maltais, for Acfas, recommended a better linguistic distribution of research funding, which is only possible by supporting small and medium-sized institutions. According to Acfas, this requires earmarking "a portion of new research investments allocated to the three Canadian granting councils ... to support the production and dissemination of the results of scientific research in French."

In a written brief, Frédéric Lacroix recommended that the awarding of research grants "aim to achieve institutional completeness for each official language community in Quebec." To that end, "10% of federal research grants should go to the English-

Campus Saint-Jean, University of Alberta, <u>Research in the Minority Context in Alberta: Realities and Perspectives</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 29 May 2024, p. 3.

Acfas – Association francophone pour le savoir, <u>Brief Submitted by Acfas to the Standing Committee on Science and Research</u>, p. 4.

^{225 &}lt;u>Official Languages Act</u>, R.S.C. (1985), c. 31 (4th Supp.), 41 (3); and University of Moncton, <u>Brief Presented to the House of Commons Standing Committee on Science and Research as Part of the Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions, 6 May 2024, p. 2.</u>

²²⁶ SRSR, *Evidence*, 2 May 2024, 1145 (Martin Maltais).

Acfas – Association francophone pour le savoir, <u>Brief Submitted by Acfas to the Standing Committee on Science and Research</u>, p. 5.

Frédéric Lacroix, <u>Federal Overfunding of English Universities in Quebec: A Direct Cause of the Decline of French</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 15.

speaking community and 90% should go to the French-speaking community, in line with the respective demographic weight of each community."²²⁹

Gishleine Oukouomi, National Treasurer of the Canadian Federation of Students, said that "the three granting councils should include francophone identity as one of the factors in establishing minority status, as is done for black or Indigenous people, and that francophones should receive priority funding." ²³⁰

CAUT recommended that the federal government continue funding for the Service to Assist Research in French project launched by Acfas and increase financial support for scientific publication in French and for French-language and bilingual scholarly journals.²³¹

Lastly, witnesses recommended that the granting agencies ensure that research funding applications submitted in French are treated equitably.²³²

Consequently, the Committee recommends:

Recommendation 12

That the Government of Canada, through the funding agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada and the Canadian Institutes of Health Research, ensure that funding applications submitted in French are treated equitably, and that it provide support measures for research and scientific publication in French.

Recommendation 13

That the Government of Canada, through the funding agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada and the Canadian Institutes of Health Research, take

²²⁹ Ibid.

²³⁰ SRSR, Evidence, 2 May 2024, 1210 (Gishleine Oukouomi).

²³¹ CAUT, <u>Study on the Distribution of Federal Government Funding Among Canada's Post-Secondary Institutions</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, May 2024, p. 3.

Olivier Bégin-Caouette, Eya Benhassine and Silvia Mirlene Nakano Koga, <u>Federal Government Funding</u>
<u>Distribution Among Canada's Post-Secondary Education Institutions: Distribute to Diversify!</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 29 May 2024, p. 1; and University of Quebec, <u>Fair distribution of wealth: In favour of a better-performing Canadian research system and stronger communities</u>, Brief submitted to the House of Commons Standing Committee on Science and Research, 17 April 2024, p. 2.



necessary measures to estimate the number of francophone researchers outside of Quebec and that it recognize francophone researchers and students as a minority group for research funding purposes.

APPENDIX A: LIST OF WITNESSES

The following table lists the witnesses who appeared before the committee at its meetings related to this report. Transcripts of all public meetings related to this report are available on the committee's <u>webpage for this study</u>.

Organizations and Individuals	Date	Meeting
Alliance of Canadian Comprehensive Research Universities	2024/03/21	78
Nicole Vaugeois, Associate Vice-President, Research and Graduate Studies		
Colleges and Institutes Canada	2024/03/21	78
Pari Johnston, President & CEO		
Polytechnics Canada	2024/03/21	78
Sarah Watts-Rynard, Chief Executive Officer		
U15 Group of Canadian Research Universities	2024/03/21	78
Chad Gaffield, Chief Executive Officer		
Universities Canada	2024/03/21	78
Philip Landon, Chief Operating Officer		
Aurora College	2024/04/11	80
Pippa Seccombe-Hett, Vice President, Research		
Niagara College	2024/04/11	80
Marc Nantel, Vice-President, Research, Innovation and Strategic Enterprises		
Thompson Rivers University	2024/04/11	80
Shannon Wagner, Vice-President, Research		
University of Calgary	2024/04/11	80
Edward McCauley, President and Vice-Chancellor		
Western University	2024/04/11	80
Penny Pexman, Vice-President, Research		

Organizations and Individuals	Date	Meeting
Canadian Association for Graduate Studies	2024/04/16	81
Philippe-Edwin Bélanger, President		
Fahim Quadir, Vice-President		
Canadian Association of University Teachers	2024/04/16	81
Robin Whitaker, Vice-President		
Olds College of Agriculture & Technology	2024/04/16	81
Ben Cecil, President & CEO		
Ontario Tech University	2024/04/16	81
Steven Murphy, President and Vice-Chancellor		
Post-secondary Student Homelessness Research Network	2024/04/16	81
Eric Weissman, Associate Professor		
As an individual	2024/04/18	82
Vincent Larivière, Professor, University of Montreal		
Dalhousie University	2024/04/18	82
Alice Aiken, Vice-President, Research and Innovation		
University of Québec	2024/04/18	82
Céline Poncelin de Raucourt, Vice-President, Teaching and Research		
University of Lethbridge	2024/04/18	82
Dena McMartin, Vice-President, Research		
Canadian Committee for Science and Technology	2024/04/30	83
Donna Strickland, Professor		
Conestoga College Institute of Technology and Advanced Learning	2024/04/30	83
Michelle Chrétien, Vice President, Research and Innovation		
Institute for Black and African Diaspora Research and Engagement, Simon Fraser University	2024/04/30	83
June Francis, Professor and Director		

Organizations and Individuals	Date	Meeting
Loyalist College of Applied Arts and Technology	2024/04/30	83
Kalina Kamenova, Director, Applied Research and Innovation		
Kari Kramp, Senior Scientific Manager, Applied Research and Innovation		
Okanagan College	2024/04/30	83
Neil Fassina, President		
Saskatchewan Polytechnic	2024/04/30	83
Susan Blum, Associate Vice President, Applied Research and Continuing Education		
Acfas – Association francophone pour le savoir	2024/05/02	84
Martin Maltais, President		
Sophie Montreuil, Executive Director		
Canadian Federation of Students	2024/05/02	84
Gishleine Oukouomi, National Treasurer		
Canadian Institutes of Health Research	2024/05/02	84
Tammy Clifford, Acting President		
Natural Sciences and Engineering Research Council	2024/05/02	84
Alejandro Adem, President		
Marc G. Fortin, Vice-President, Research Grants and Scholarships Directorate		
Social Sciences and Humanities Research Council	2024/05/02	84
Ted Hewitt, President		
Sylvie Lamoureux, Vice-President, Research		

APPENDIX B: LIST OF BRIEFS

The following is an alphabetical list of organizations and individuals who submitted briefs to the committee related to this report. For more information, please consult the committee's webpage for this study.

Acfas - Association francophone pour le savoir

Allen, Douglas

Alliance of Canadian Comprehensive Research Universities

Altman, Rachel

Assiniboine Community College

Athabasca University

Azar, Rima

B'nai Brith Canada

Bégin-Caouette, Olivier

Benhassine, Eya

Campus Saint-Jean, University of Alberta

Canadian Association of University Teachers

Canadian Brain Research Strategy

Cape Breton University

Caron, François

Cégep de Victoriaville

Charbonneau, François

Collard, Mark

Colleges and Institutes Canada

Coskun, Altay

Craig, John

Davies, Scott

Drapeau, Martin

Dummitt, Christopher

École de technologie supérieure

Emily Carr University of Art + Design

Fédération des cégeps

Fedy, Brad

Fiamengo, Janice

Frank, Richard

Georgian College

Guyot, Julie

Hart, Mike

Haskell, David

HealthCareCAN

Horsman, Geoff

Klotz, Laurence

Kramar, Kirsten

Krauss, Lawrence M.

Kwantlen Polytechnic University

Lacroix, Frédéric

Lacroix, Yannick

Lakeland College

Lambton College

Larivière, Vincent

Lupker, Stephen

Lysova, Alexandra

MacEwan University

Maple League of Universities

McNally, William

Memorial University of Newfoundland

Nakano Koga, Silvia Mirlene

Niagara College

NorQuest College

Olds College of Agriculture & Technology

Patterson, Zachary

Polytechnics Canada

Quilley, Stephen

Revers, Leigh

Robie, Chet

Salzman, Philip Carl

Sandgathe, Dennis

Sheridan College

Smith, Brian F.

Smith, Scott

St. Thomas University

Synchronex

Thompson Rivers University

Thomson, Ron

U15 Group of Canadian Research Universities

University of British Columbia

University of the Fraser Valley

University of Lethbridge

University of Manitoba

University of Moncton

University of New Brunswick

University of Northern British Columbia

University of Québec

University of Québec at Montréal

University of Québec at Trois-Rivières

University of Regina

University of Toronto

University of Waterloo

Vancouver Island University

Vrscay, Edward

Whitley, Rob

Widdowson, Frances

Wolkowicz, Gail S. K.

Wolkowicz, Henry

Yukon University

REQUEST FOR GOVERNMENT RESPONSE

Pursuant to Standing Order 109, the committee requests that the government table a comprehensive response to this Report.

A copy of the relevant *Minutes of Proceedings* (Meetings Nos. $\underline{78}$, $\underline{80}$, $\underline{81}$, $\underline{82}$, $\underline{83}$, $\underline{84}$, $\underline{85}$, $\underline{101}$, $\underline{104}$ and $\underline{107}$) is tabled.

Respectfully submitted,

Valerie Bradford Chair

Dissenting Opinion of His Majesty's Official Opposition

Regarding the Distribution of Federal Government Funding among Canada's Post-Secondary Institutions

The Conservative Party of Canada disagrees with the recommendations in this report that call for unfunded spending. Research and innovation are of vital importance to Canada's future and in order to ensure the long term well-being of Canada's post-secondary institutions, as well as the students and teachers who compose them, it is vital for everyone to remember that for every additional dollar spent the government must first find a dollar that it will save rather than imposing debts upon future generations through reckless spending. Reckless spending leads to runaway inflation which leads to life becoming increasingly unaffordable for more and more Canadians.

Furthermore, it should be reiterated that the research Tri-councils are already obligated to commit "to develop and implement effective and equitable policies" and yet they have failed to deal with the various problems including the growth of anti-Semitic incidents on campus and have even funded researchers who have used these resources for partisan interference in elections. Canadians expect and deserve better.

¹ Government of Canada. Agreement on the Administration of Agency Grants and Awards by Research Institutions. https://science.gc.ca/site/science/en/interagency-research-funding/policies-and-guidelines/institutional-agreement?OpenDocument (last accessed 13 November 2024).

² Standing Committee on Science and Research, Thursday, May 2, 2024, https://www.ourcommons.ca/documentviewer/en/44-1/SRSR/meeting-84/evidence#Int-12713558 (last accessed 13 November 2024).

Supplementary Report from a Member of the Bloc Québécois

The Bloc Québécois wants to thank the staff of the Library of Parliament, the clerks, and the interpreters for all the work done as part of this study. We would also like to acknowledge the essential contribution of the witnesses for their enlightening presentations.

This supplementary opinion aims to introduce additional recommendations, which were made both by the witnesses during their testimony and through the submission of briefs. While participation in this study has been the most significant in the history of this committee, we believe that the recommendations presented in the current report do not fully represent the scope of the expectations and concerns expressed by the scientific community.

In this regard, we propose the inclusion of the following recommendations, in addition to those already presented in the committee members' report. Each recommendation is supported by the testimonies and briefs submitted, as detailed in the references provided.

Recommendation 14

That the Government of Canada allocate its research grants in such a manner that respect the demographic weight of each official language community in Quebec, particularly through dedicated funds, with the aim of achieving the concept of institutional completeness.

Supported by the recommendation of Frédéric Lacroix in his brief:

The awarding of research grants should aim to achieve institutional completeness for each official language community in Quebec.

Also supported by the testimony of Ted Hewitt and Alejandro Adem on May 2, 2024, regarding dedicated envelopes in various funding agencies.

Recommendation 15

That the Government of Canada, through the funding agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada and the Canadian Institutes of Health Research, expand funding to a greater number of researchers, with a focus on early-career researchers and those affiliated with universities outside the U15, while supporting an increased diversity of disciplines.

Supported by the recommendation of Olivier Bégin-Caouette in his brief:

Recommendation 1: Increase the pool of funded researchers, particularly those early in their careers and those in universities outside of the U15, through enhanced support for the traditional funding programs of the three research councils.

No current recommendation addresses the issue raised by Vincent Larivière regarding the concentration of funding among researchers, with not all of them being funded. He notably pointed out during the meeting on April 18 that the NSERC's method of funding a significantly higher proportion of researchers than other funding agencies is an effective example.

Recommendation 16

That the Government of Canada, through the funding agencies, namely the Social Sciences and Humanities Research Council, the Natural Sciences and Engineering Research Council of Canada and the Canadian Institutes of Health Research, dedicate a specific fund for small and medium-sized universities and universities located in the regions, and provides grants to maintain the infrastructure already in place as well as funding to compensate the highly qualified personnel.

Supported by the recommendation from UQTR in their report:

Recommendation 3 | That funding councils be mandated to support the development of research across all regions and university towns in Canada. In this regard, they should consult all institutions regarding the parameters, development, or modification of funding programs.

Also supported by Shannon Wagner's recommendation during her intervention on April 11 in committee:

There are ways to expand the system and establish specific programs to support smaller institutions in areas where it is a bit more challenging to break through.

Also supported by the UQAM brief:

Recommendation 2 - That the government significantly increase funding for fundamental research, knowledge mobilization, and social and human sciences research, and provide grants to maintain existing infrastructures and funding to compensate the highly qualified personnel necessary to operate research equipment necessary to operate the research equipment.

Recommendation 17

That the Government of Canada establish a new allocation method and a minimum threshold per institution for the granting of Canada Research Chairs (CRC). That this minimum threshold be proportional to the number of researchers per establishment, to ensure a more equitable distribution of chairs.

Supported by the recommendation from UQTR in its brief:

Recommendation 2 | That the government establish a new allocation method and a minimum threshold per institution for the granting of Canada Research Chairs (CRC). This minimum threshold should be proportional to the number of researchers per institution, to ensure a more equitable distribution of chairs.

Also supported by the UQ network report:

Recommendation 4. That a minimum threshold per higher education institution be established for the granting of Canada Research Chairs based on the number of researchers they employ.

Recommendation 18

That the Government of Canada, through the Canadian Institutes of Health Research, provide greater support for non-medical research, so that the grants awarded are more representative of the disciplinary diversity within the field of health and social services.

Supported by the recommendation from the UQ network in their brief:

Recommendation 3. That the CIHR programs provide greater support for non-medical research so that the grants awarded are more representative of the disciplinary diversity within the health and social services field.

Recommendation 19

That the Government of Canada redirect 10% of payments from the Canada First Research Excellence Fund to create new Canada Research Chairs in small and medium-sized universities.

One of the recommendations from ACCRU in their brief.

Recommendation 20

That the Government of Canada raise the minimum threshold per higher education institution for the granting of Canada Graduate Scholarships at the master's and doctoral level, considering the number of graduate students enrolled.

One of the recommendations from the UQ network presented in their brief.

Recommendation 21

That the Government of Canada allow universities outside the U15 and post-secondary institutions such as colleges, CEGEPs, and CCTTs to lead major projects by facilitating their access to the Canada First Research Excellence Fund.

Supported by the brief from ÉTS submitted to the committee:

<u>Be bold and allow universities outside of the U15 to lead major projects that are beneficial for talent development and retention, as well as for the economy of Canada.</u>

Also supported by the testimony of Dena McMartin on April 18, 2024:

(Regarding access to Canada First Research Excellence Fund). As you mentioned, we do not necessarily have the administrative overhead, the staff, or the capacity to relieve teachers of their workload for a year, which are all necessary elements to meet the requirements. These are substantial grants.