

Memorandum

Office of the Vice-Principal (Research and Innovation)

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TO: Board of Governors
FROM: Professor Martha Crago, Vice-Principal (Research and Innovation)
SUBJECT: Annual Report on Research and Innovation 2019
DATE: April 23, 2020
DOCUMENT #: GD19-53

ACTION REQUIRED: INFORMATION APPROVAL/DECISION

ISSUE & EXPECTED OUTCOME Indicators of McGill's recent research funding performance as well as performance in areas related to innovation and partnership-building between the University and external communities are presented to the Board of Governors for information.

BACKGROUND & RATIONALE The Annual Report on Research and Innovation is a review of McGill's performance in major funding programs and progress in areas related to innovation and partnerships in FY2018. It examines how McGill compares to comparable universities and U15 peers in terms of:

- Amount and sources of sponsored research funding
- Sponsored research funding per faculty member
- Tri-Agency funding
- Fonds de recherche du Québec funding
- Industry sponsored research funding
- Publications
- Royal Society of Canada Fellows and New College Members

ALIGNMENT WITH MISSION AND STRATEGIC PRIORITIES The goal of the report is to inform members of the Board of Governors and the wider McGill community of significant issues related to research funding while outlining how the University's research enterprise is becoming better suited to compete in the future.

The report therefore aims to inform Governors of McGill's progress in its mission to remain one of Canada and the world's best research-intensive universities as well as toward its strategic priority of enhancing and strengthening its engagement with the full range of community partners.

COMPLIANCE WITH UNIVERSITY POLICY The Annual Report on Research and Innovation is an important means for the Vice-Principal (Research and Innovation) to update the Board of Governors on McGill's research successes, opportunities, and challenges. The presentation aligns with best practices to promote transparency and accountability across a major sector of the University's mandate.

	An internal review was conducted by the Office of the Vice-Principal (Research and Innovation), followed by presentations to the senior administration (March 13, 2020) and Senate (April 7, 2020).
COMPLIANCE WITH LEGISLATION/ EXTERNAL REGULATIONS	There are no legislative requirements associated with the Report.
RISK FACTORS	The University's performance in areas related to research and innovation affects its ability to carry out its missions in research, teaching, and learning and has reputational effects.
SUSTAINABILITY CONSIDERATIONS	Sustainability is inherent in all seven of the Research Excellence Themes outlined in the Strategic Research Plan 2019 – 2024 and has also explicitly been incorporated into one of the Themes: <i>Design and create sustainable materials, technologies, landscapes, and communities</i> . The theme highlights research that responds to the challenges of sustaining the life support systems of the planet, advances renewable materials, energy, agricultural, and transportation systems as well as clean technology, in order to develop sound environmental policy.
IMPACT OF DECISION AND NEXT STEPS	N/A
MOTION OR RESOLUTION FOR APPROVAL	N/A
APPENDICES	Appendix A: Annual Report on Research and Innovation 2019 Appendix B: Abridged Version of Annual Report on Research and Innovation 2019 – Slide Deck for Senate and the Board

Report on Research and Innovation 2019

R+I

RESEARCH + INNOVATION



McGill

TABLE OF CONTENTS

Table of Contents	2
Message from Vice-Principal (Research and Innovation)	3
Introduction	4
Rankings	6
Research Funding Performance	7
Tri-Agency Funding	11
Fonds de Recherche du Québec Funding	15
Industry as a Source of Research Funding	17
Publications and Bibliometrics	19
International Collaborations	21
Royal Society of Canada Fellows and College of New Scholars, Artists and Scientists	23
Appendix 1	25

TABLES

Table 1. U6 University Rankings, 2019 – 2020	6
Table 2. U15 Total Research Funding and Faculty Count, FY2018	7
Table 3. Key Bibliometrics for McGill, 2009 to 2018	19
Table 4. U6 Key Bibliometrics, 2014 to 2018	20
Table 5. Metrics by Collaboration for McGill, 2009 to 2018	22
Table 6. Top 10 International Institutions Collaborating with McGill by Number of Co-authored Publications, 2014 to 2018	22

FIGURES

Figure 1. U15 Research Funding per Faculty Member, FY2018	8
Figure 2. U15 Percentage of Total Research Funding from Various Sources, FY2018	9
Figure 3. McGill's Research Funding from Federal and Provincial Sources (in Thousands), FY2014 to FY2018	10
Figure 4. U6 Total Tri-Agency Funding, FY2018	11
Figure 5. McGill's Share of U15 Tri-Agency Funding, FY2014 to FY2018	12
Figure 6. McGill's Tri-Agency Funding Efficiency Index (FEI), FY2014 to FY2018	13
Figure 7. QC4 Total FRQ Funding, FY2018	15
Figure 8. U6 Industry and Non Industry Research Funding (in Thousands, with Percent of Industry Funding), FY2018	17
Figure 9. U6 Industry Funding per Faculty, FY2018	18
Figure 10. Top 10 Collaborating Research Countries by Number of Funded Research Projects, 2008 to 2019	21
Figure 11. Number of New Fellows and College Members Elected for McGill, 2015 to 2019	23
Figure 12. Average Number of New Royal Society of Canada Fellows and College Members per Year, 2015 to 2019	24



MESSAGE FROM DR. MARTHA CRAGO, VICE-PRINCIPAL (RESEARCH AND INNOVATION)

It is with great pleasure that I present the 2019 Annual Report on Research and Innovation at McGill University.

This annual report provides an overview of the research and funding awarded in the 2017/18 (FY2018) fiscal year. Our institution continues to grow and attract talent from across Canada and around the world, who come to join our diverse intellectual community. The strength of this community has helped us earn the highest amount of funding in McGill's history—\$567M.



McGill showed an increase in provincial and federal funding since the previous fiscal year and continues to be strong in CIHR and SSHRC funding. The impact of the research conducted is furthered through commercialization that encourages the transformation of ideas into real-world applications. In FY2018, McGill continued with successes in obtaining patents and the facilitation of startups, among others.

Looking ahead to 2020, we will continue to strive for research excellence, which requires a team effort. I am grateful for the many hardworking researchers at McGill and the committed staff in the research and innovation sector. It is through this outstanding dedication that McGill University remains a world-class, research-intensive institution. I am confident that in reading this report in detail, you will feel the same sense of pride as I do.



INTRODUCTION

The Annual Report on Research and Innovation provides a portrait of McGill's research funding performance, competitiveness relative to our peer universities, effectiveness in research output such as published work and collaborative partnerships with both academic and non-academic institutions, in Canada and internationally.

This report examines McGill's overall standing in major funding programs and progress in areas related to industry and partnerships in FY2018. This time period reflects the most recent and complete data available from various sources, which include:

- **InfoEd Global**, McGill's internal research administration database;
- **Canadian Association of University Business Officers (CAUBO)**, a non-profit organization representing the chief administrative and financial officers of over 100 institutions across Canada;
- **Observatoire des sciences et des technologies (OST)**, an organization dedicated to science, technology, and innovation that maintains a national research funding database for its partners from the Tri-Agency, the three federal research funding agencies;
- **Les Fonds de recherche du Québec (FRQ)**, the Province's three research funding agencies;
- **SciVal**, a bibliometric tool, based on the **Scopus** database, that offers access to research performance metrics of over 10,000 institutions in 230 regions and countries;
- **Statistics Canada**, Canada's national statistics office; and
- **AUTM**, formerly known as the Association of University Technology Managers, a non-profit organization that supports and advances technology transfer.

Certain metrics within this report are benchmarked in comparison to the U15 Group of Canadian Research Universities, a collective of Canada's most research-intensive universities. However, for ease of comparison, we have focused on our standing relative to certain provincial and national institutions.

Nationally, the University of Toronto, the University of British Columbia, l'Université de Montréal, the University of Alberta and McMaster University have been selected as comparator peer institutions as they resemble McGill in size, scope of research and are research intensive universities with a medical/doctoral program. Along with McGill, this group is referred to as the U6 for the purposes of this report.

Provincially, l'Université de Montréal, l'Université Laval, and l'Université de Sherbrooke serve as comparators as they are the only peer institutions with medical schools. Along with McGill, this group is referred to as the QC4 for the purposes of this report.

RANKINGS

University rankings are increasingly used for strategic planning, policy making and as a useful benchmark for both national and international comparison to peer institutions.

TABLE 1. U6 UNIVERSITY RANKINGS, 2019 – 2020

Institution	Maclean’s Medical/ Doctoral 2020 (2019)	Times Higher Education (THE) World University Rankings 2020 (2019)	Quacquarelli Symonds (QS) World University Rankings 2020 (2019)
McGill University	1 (1*)	42 (44)	35 (33)
University of Toronto	2 (1*)	18 (21)	29 (28)
University of British Columbia	3 (3)	34 (37)	51 (47)
McMaster University	4 (4)	72 (77)	140 (146)
University of Alberta	5 (6)	136 (132)	113 (109)
Université de Montréal	10 (10)	85 (90)	137 (149)

Source: Maclean’s, THE, QS *Tied for first in 2019

Nationally, the Maclean’s ranking includes 14 Canadian universities with a medical/doctoral program. McGill has held first place in the national ranking since 2006 except for the 2019 rankings in which McGill was tied for first with University of Toronto.

Internationally, despite differing ranking methodologies, McGill ranked similarly on the THE and the QS. Each of these providers ranks 1000 to 1250 universities worldwide. A more detailed description of each ranking provider’s methodology is presented in Appendix 1.



RESEARCH FUNDING PERFORMANCE

In FY2018, McGill’s total research funding was \$567M. McGill consistently ranks in the top five in Canada and the U15 in total research funding received from various sources, including the federal and provincial governments, non-profit organizations and industry.

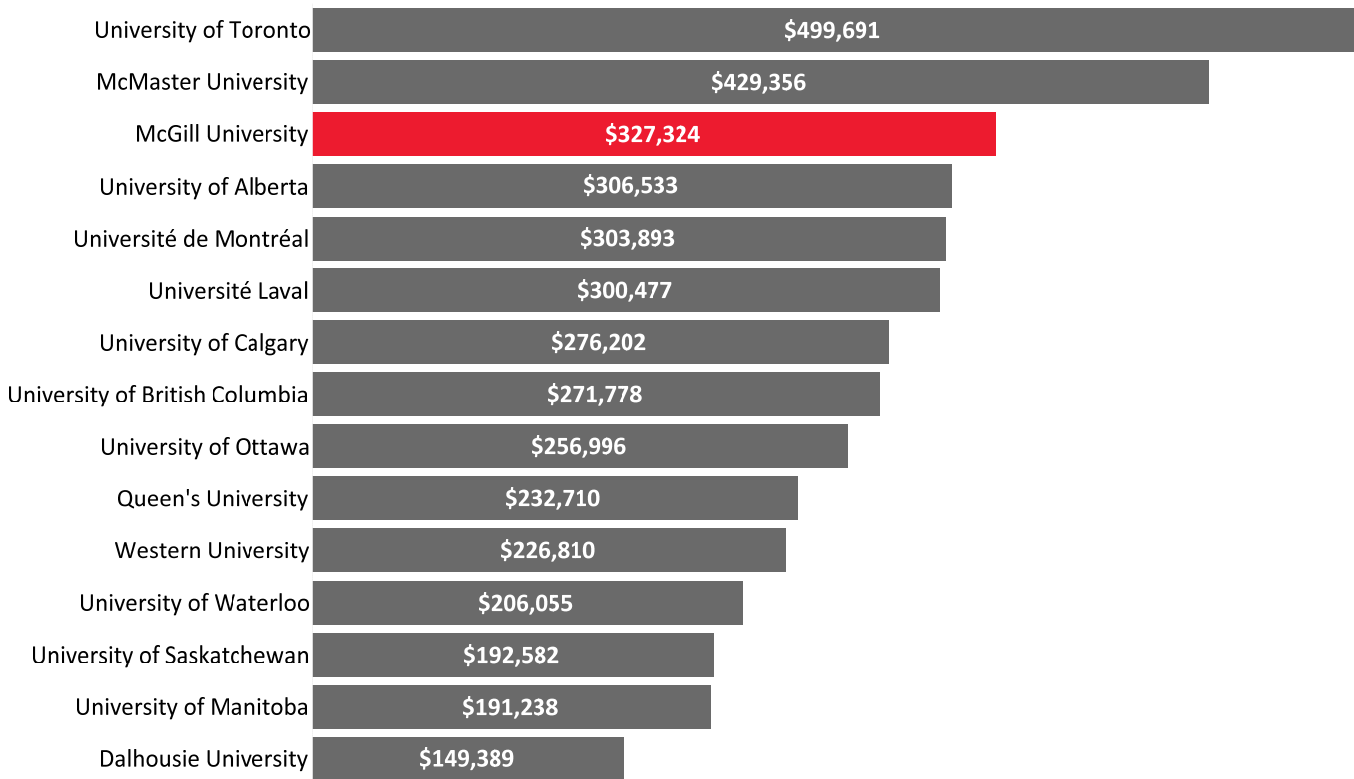
TABLE 2. U15 TOTAL RESEARCH FUNDING AND FACULTY COUNT, FY2018

Institution	Total Research Funding (\$ million)	Faculty Count*
University of Toronto	\$1,111	2,223
University of British Columbia	\$618	2,274
Université de Montréal	\$567	1,866
McGill University	\$567	1,731
University of Alberta	\$494	1,611
University of Calgary	\$422	1,527
Université Laval	\$404	1,344
McMaster University	\$392	912
University of Ottawa	\$315	1,224
Western University	\$261	1,149
University of Waterloo	\$213	1,032
University of Manitoba	\$212	1,107
Queen's University	\$176	756
University of Saskatchewan	\$175	909
Dalhousie University	\$142	945

Source: CAUBO (Totals) and Statistics Canada (Faculty Counts) * Faculty counts include full time, tenure/tenure track academic staff.

In relation to faculty count, McGill is also consistently among the top three most research intensive universities in Canada and the U15 as measured by the total amount of research funding per faculty member (Figure 1).

FIGURE 1. U15 RESEARCH FUNDING PER FACULTY MEMBER, FY2018



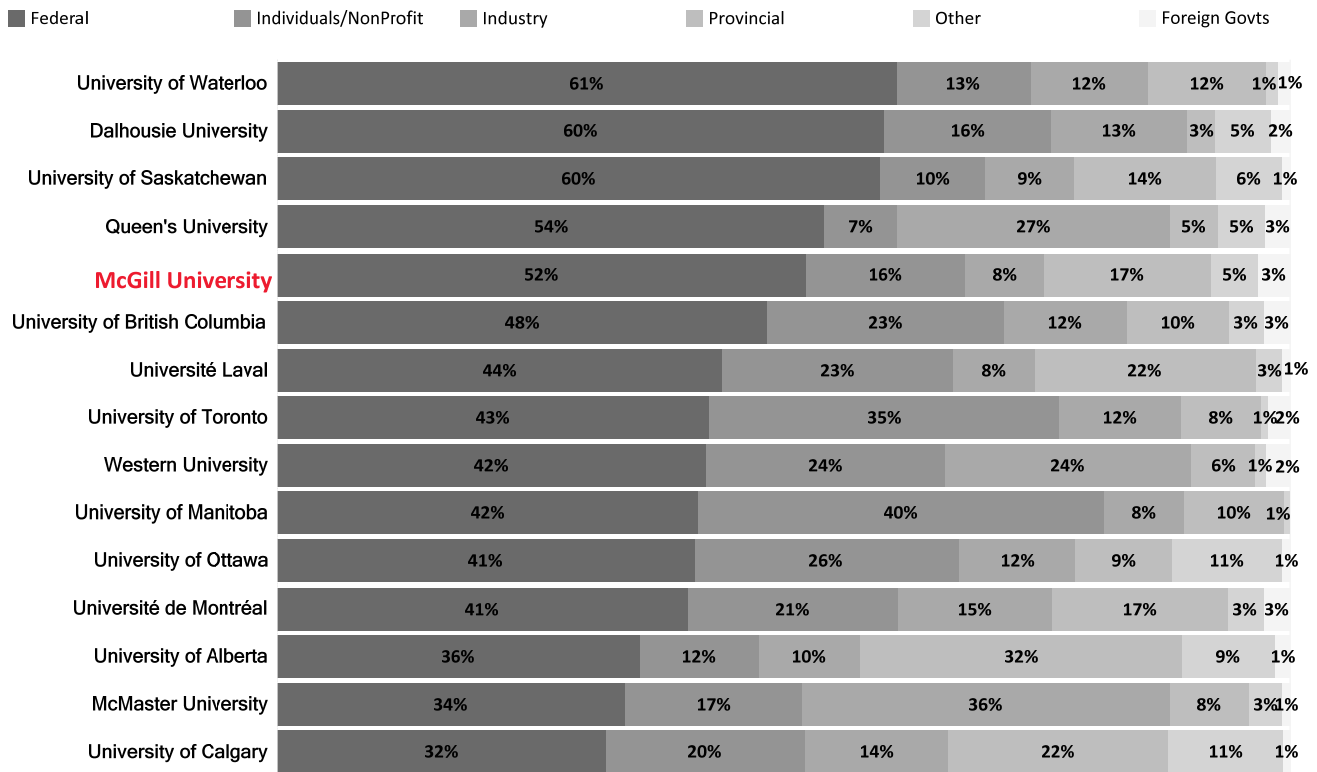
Source: CAUBO (Totals) and Statistics Canada (Faculty Counts)

R+I

RESEARCH FUNDING PERFORMANCE

The percentage of funding from the six main sources, out of the total, is shown in Figure 2, in descending order based on percentage of federal funding. While each of the universities in the U15 receive the largest amount of research funding from federal sources, the percentage differs greatly. Of comparable U6 institutions, McGill's percentage of federal funding is larger, while its percentage of industry funding is lower (see section on Industry funding on page 18).

FIGURE 2. U15 PERCENTAGE OF TOTAL RESEARCH FUNDING FROM VARIOUS SOURCES, FY2018

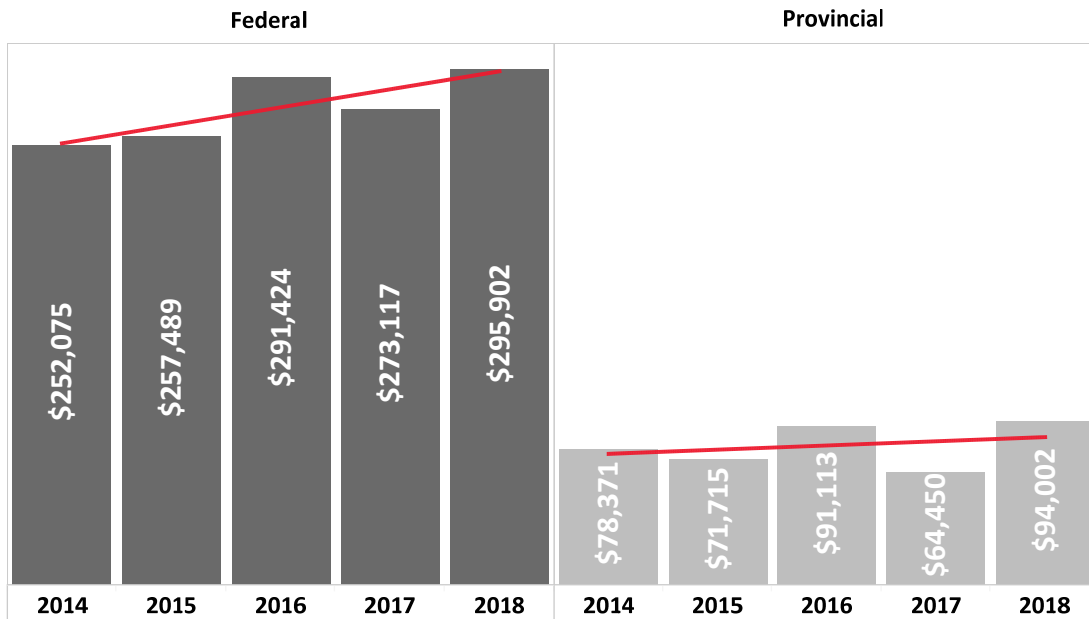


Source: CAUBO *Other includes municipal governments, other provincial governments and miscellaneous.

Together, provincial and federal funding have historically accounted for approximately 70% of McGill's total research funding. FY2018 was no exception, with 69% of McGill's funding from provincial or federal sources.

McGill's federal and provincial funding over the last five years is shown in Figure 3. The red trend line indicates a general increase in federal funding since FY2014. While the provincial funding in FY2018 was its highest in the last five years, there can be fluctuations in annual provincial funding due to intermittent matching competition funds provided by the Provincial government for the Canada Foundation for Innovation (CFI).

FIGURE 3. MCGILL'S RESEARCH FUNDING FROM FEDERAL AND PROVINCIAL SOURCES (IN THOUSANDS), FY2014 TO FY2018



Source: CAUBO

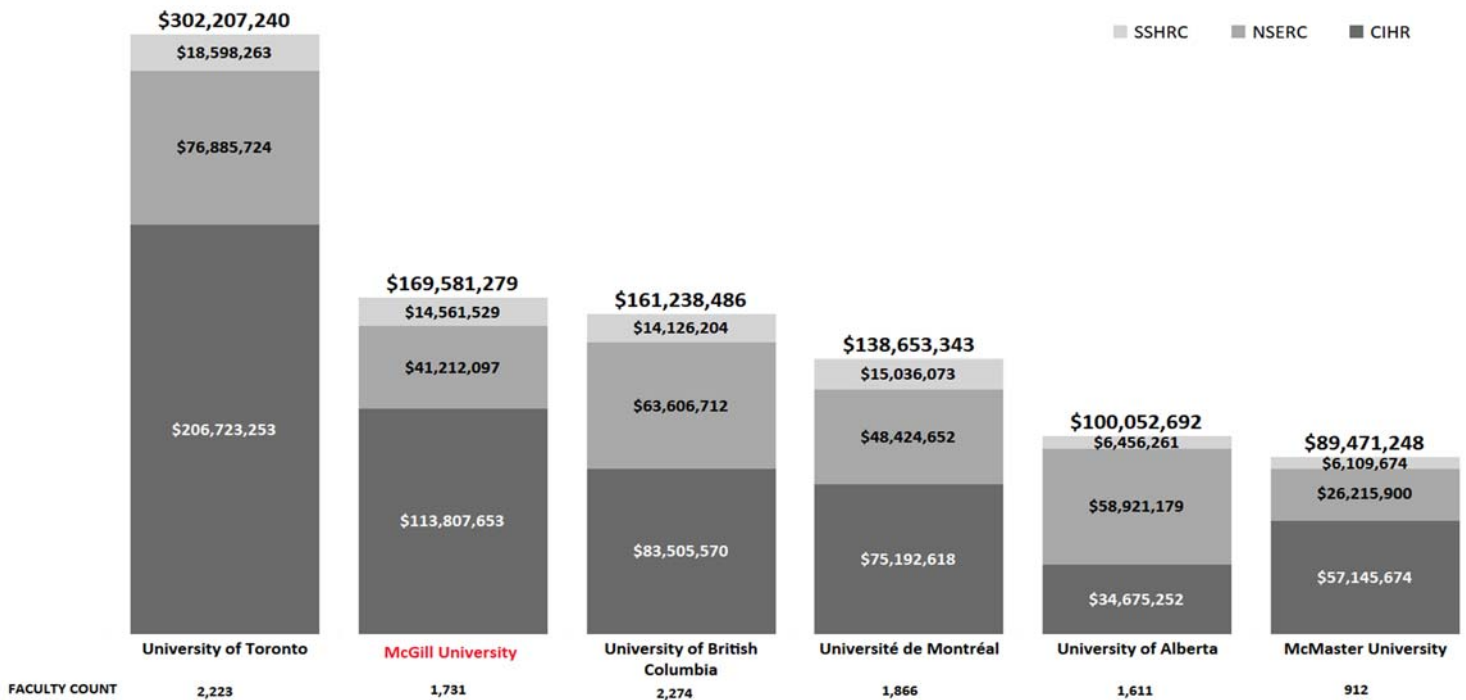
TRI-AGENCY FUNDING

The Tri-Agencies, composed of the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council (NSERC), and the Social Sciences and Humanities Research Council (SSHRC), are the largest source of federal research funding for McGill. In FY2018, McGill received a total of \$169.6M from the Tri-Agencies, representing almost 60% of McGill's total federal research funding.

The three charts presented in this section, taken together, present a complete picture of Tri-Agency funding. In addition to the total funding amounts (Figure 4) and share of U15 funding (Figure 5), the data is also presented in relation to McGill's faculty count through a new metric, Funding Efficiency Index (FEI; Figure 6) within the U15.

Funding from the CIHR accounts for \$113.8M or slightly over two-thirds of the total amount received from the Tri-Agency at McGill. The remaining one-third of Tri-Agency funding is divided between NSERC and SSHRC (Figure 4).

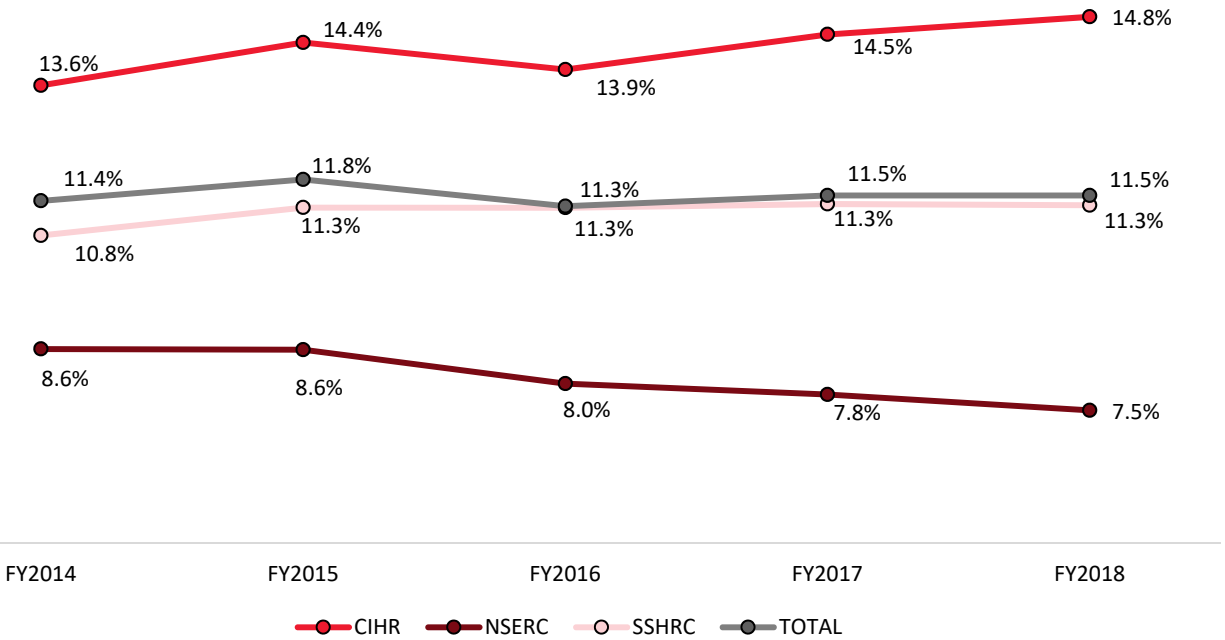
FIGURE 4. U6 TOTAL TRI-AGENCY FUNDING, FY2018



Source: CAUBO. Excludes Canada Research Chairs, scholarships and bursaries.

In FY2018, McGill had the second highest share of U15 Tri-Agency funding at 11.5%, behind only the University of Toronto. Figure 5 shows that McGill's share of the U15 NSERC funding has been gradually decreasing and has dropped from 8.6% in FY2014 to 7.5% in FY2018, while the share of CIHR funding has increased.

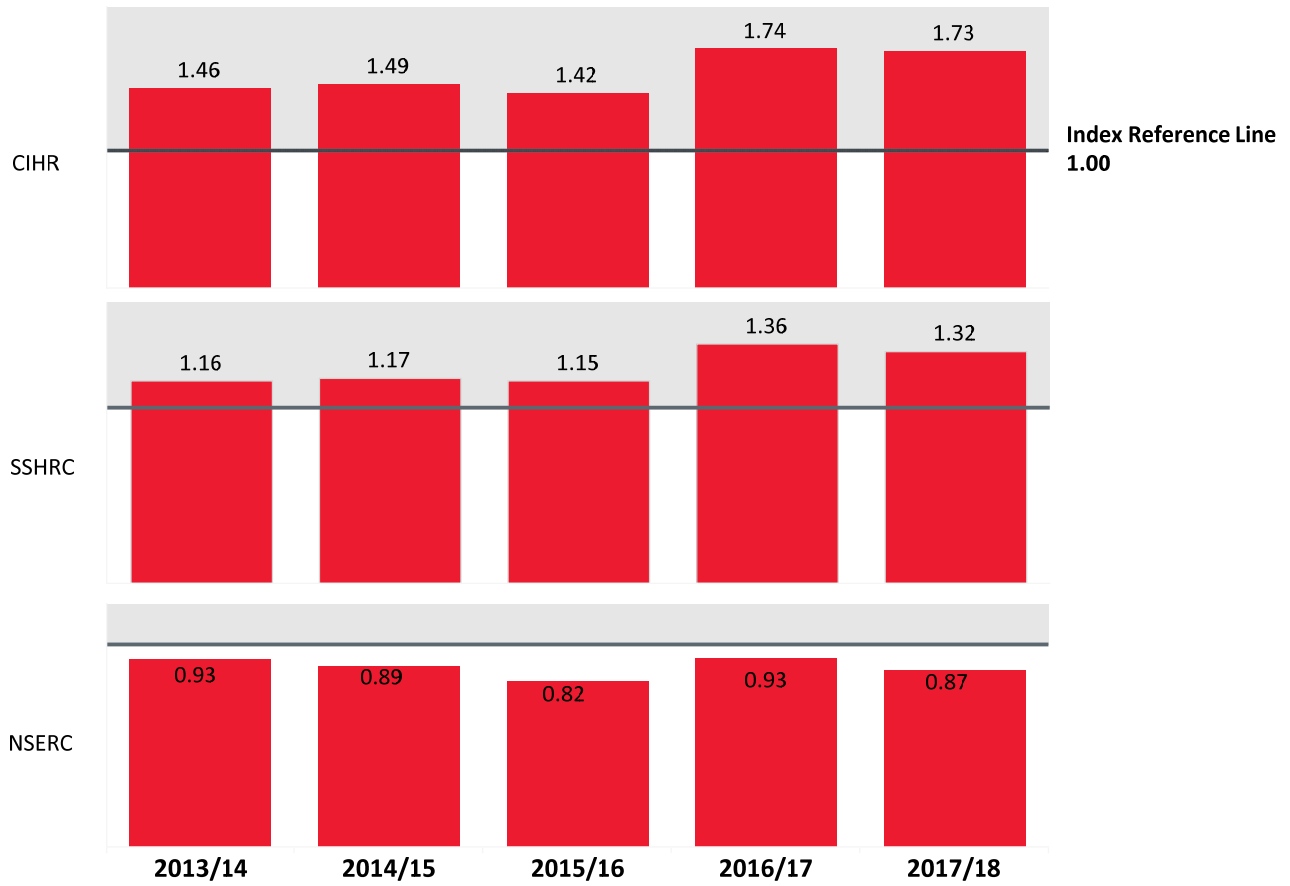
FIGURE 5. MCGILL'S SHARE OF U15 TRI-AGENCY FUNDING, FY2014 TO FY2018



SOURCE: OST

While share of U15 Tri-Agency funding is a useful metric, it is dependent on the size of an institution. Therefore, the FEI was created to compare McGill's share of U15 funding to its size as measured by its share of the U15 faculty count (Figure 6).

FIGURE 6. MCGILL'S TRI-AGENCY FUNDING EFFICIENCY INDEX (FEI), FY2014 TO FY2018



Source: CAUBO and Statistics Canada

An FEI of 1.0, depicted by the gray line, reflects a situation where the share of U15 Tri-Agency funding is proportionate to the share of the U15 faculty count. Figure 6 shows that for CIHR and SSHRC funding, McGill has an index of 1.73 and 1.32 respectively in FY2018, above the gray line. For NSERC, McGill had an index of 0.87 in FY2018 and is below the line, which indicates that McGill is receiving a smaller share of NSERC funding than McGill's faculty count would suggest. That is, McGill's 1731 faculty members (8.6% of the U15 total faculty count) received 7.5% of the NSERC funding to the U15.

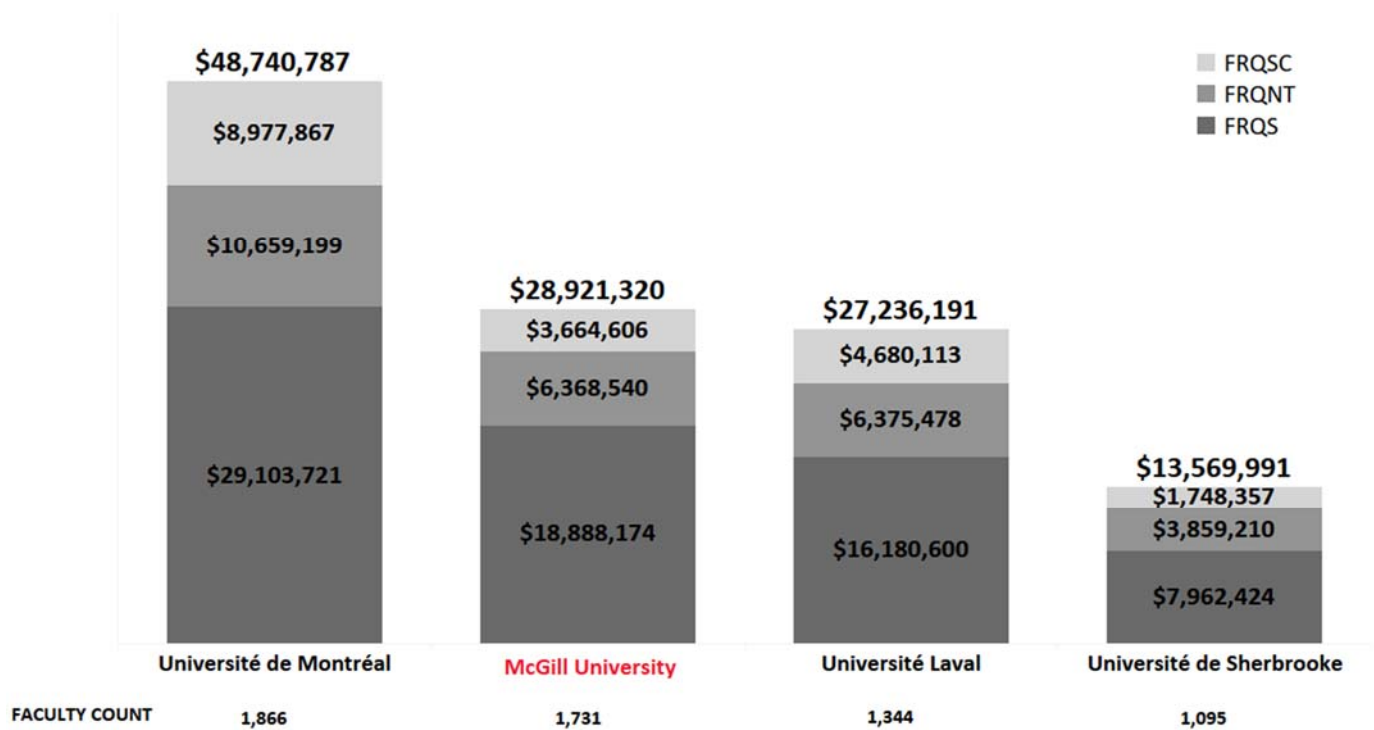
An in-depth analysis into the NSERC landscape is underway to provide more insight and context to McGill's NSERC funding. Funding from NSERC presents an opportunity for growth in research funding for McGill. Over the last three years, McGill has invested resources in strengthening its Office of Innovation and Partnerships to target new research partnership grants, such as the new Alliance Grants program launched by NSERC in December 2019, which merged and replaced five previously different programs.

FONDS DE RECHERCHE DU QUÉBEC FUNDING

In Québec, Tri-Agency funding is mirrored by the Fonds de Recherche du Québec (FRQ), as funding from FRQ represents three funding agencies, Nature et technologies (FRQNT), Société et culture (FRQSC), and Santé (FRQS).

The FRQ was the largest source of provincial research funding for McGill in FY2018. A comparison between FRQ funding for the QC4 is presented in Figure 7.

FIGURE 7. QC4 TOTAL FRQ FUNDING, FY2018



Source: FRQ. Excludes bourses et stages de formation. Fiscal year for FRQ is April 1st to March 31st.

The QC4 universities receive similar percentage of FRQS (60-65%). However, both l'Université de Montréal and l'Université Laval receive a slightly higher percentage of its FRQ funding from FRQSC than McGill (~17% vs 13%).

Among FRQ funding programs, McGill is very successful in two FRQNT programs: Research Support for New Academics (*Établissement de nouveaux chercheurs universitaires*) and the Team Research Project (*Projet de recherche en équipe*), both receiving the largest value of grants in FY2018 in the province.

As of October 2019, McGill was leading or participating in 70 or 75% of all Strategic Clusters (FRQNT, FRQSC) and Thematic Networks (FRQS). Of these 70, McGill is leading four FRQNT Strategic Clusters, four FRQSC Strategic Clusters and five FRQS Thematic Networks.

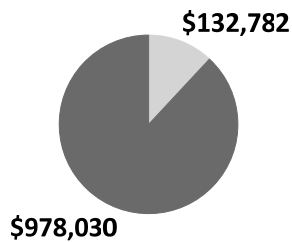
INDUSTRY AS A SOURCE OF RESEARCH FUNDING

In comparison to other institutions, McGill has historically received less of its overall research funding from industry sponsors (Figure 8). In FY2018, McGill received 8% of total research funding from industry.

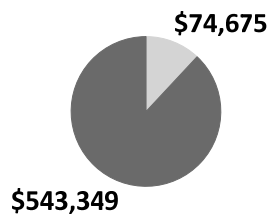
In FY2018, industry sponsors awarded a total of \$44M to McGill¹ in grants, contracts, and clinical trial funding. Clinical trial funding totaled \$4.14M for ongoing clinical trials. The pharmaceutical sector provided the majority of funding for these trials, with some funding coming from granting agencies or other universities.

FIGURE 8. U6 INDUSTRY AND NON INDUSTRY RESEARCH FUNDING (IN THOUSANDS, WITH PERCENT OF INDUSTRY FUNDING), FY2018

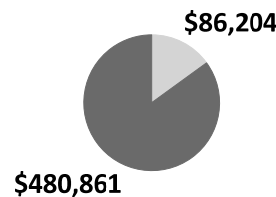
University of Toronto (12%)



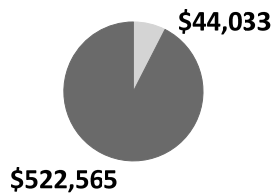
University of British Columbia (12%)



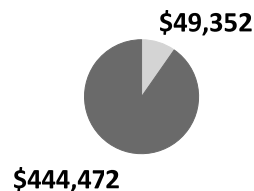
Université de Montréal (15%)



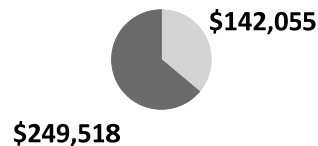
McGill University (8%)



University of Alberta (10%)



McMaster University (36%)

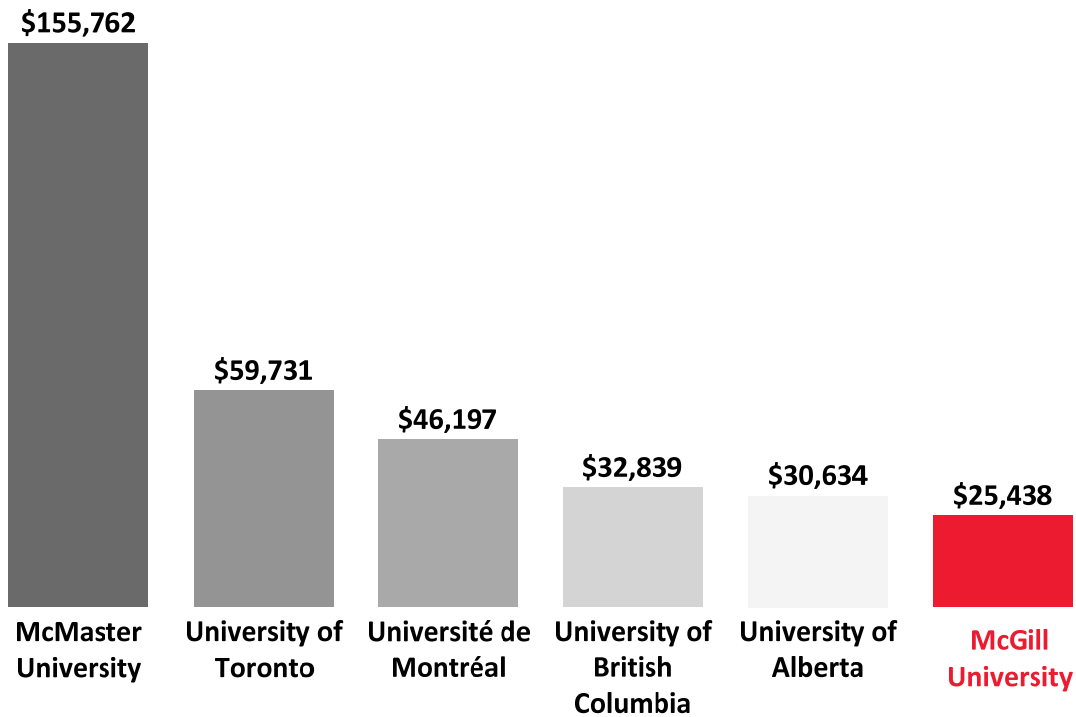


Source: CAUBO, includes industry sponsored donations and grants and contracts.

¹ Excludes industry contributions in-kind to CFI awards.

While McGill is third in the U6 for research funding per faculty, the amount of industry dollars per McGill faculty is lowest (Figure 9) at \$25,438.

FIGURE 9. U6 INDUSTRY FUNDING PER FACULTY, FY2018



Source: CAUBO, includes industry sponsored donations and grants and contracts.

In addition to industry research funding, other measures of industry and partnership activity are reported through AUTM, which conducts an annual survey on Canadian technology licensing and related activity. The detailed report with data from the 2018 calendar year is expected in winter/spring of 2020. Therefore, data from the AUTM 2017 Canadian Licensing Activity Survey is presented in this report (*AUTM 2017 Canadian Licensing Activity Survey*).

In the 2017 calendar year, McGill received \$3M in gross license income. Other key metrics include:

- 16 licenses
- 9 options
- 108 disclosures
- 108 new patent applications
- 8 start-ups

PUBLICATIONS AND BIBLIOMETRICS

The use of bibliometrics in measuring research output is becoming increasingly widespread in evaluating research performance and can assist in decision making when considered with other measures of research performance.

The Elsevier bibliometrics tool SciVal provides data in three levels of bibliometrics—journal, article and author/institutional. Four of the most commonly used *Snowball Metrics* are presented in Table 3, which provides an overview of McGill’s scholarly output and research impact over the last 10 years.

*Snowball Metrics*² are an international standardized set of metrics, chosen by research intensive universities to facilitate institutional benchmarking. These metrics are well established, and consistently applied.

Since 2009, McGill has shown a consistent yearly increase in scholarly output (number of publications). Field-Weighted Citation Impact (FWCI) has also increased, with slight decreases in the last couple of years for which citation data is not yet complete. This metric reflects how the number of citations received by McGill publications compares with the average number of citations received by similar publications. A FWCI of 1.00 would indicate that McGill’s publications have been cited as would be expected based on the global average for similar publications.

TABLE 3. KEY BIBLIOMETRICS FOR MCGILL, 2009 TO 2018

Metric	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Scholarly Output	6193	6465	7001	7700	8063	8229	8442	8311	8689	8786
Field-Weighted Citation Impact	1.71	1.78	1.74	1.86	1.78	1.8	1.93	1.97	1.88	1.77
Publications in Top Journal Percentiles (top 10%) ³	41.5	40.5	40	44	44.3	42.3	43.8	44.1	42.6	38.9

Source: SciVal. Data as of January 15, 2020.

² Snowballmetrics.com

³Number of publications in the top 10% journals by CiteScore.

Among the U6, for these same metrics over a five year period, McGill is third in scholarly output, but has the highest percentage of publications in the top 10% journal percentiles (Table 4).

TABLE 4. U6 KEY BIBLIOMETRICS, 2014 TO 2018

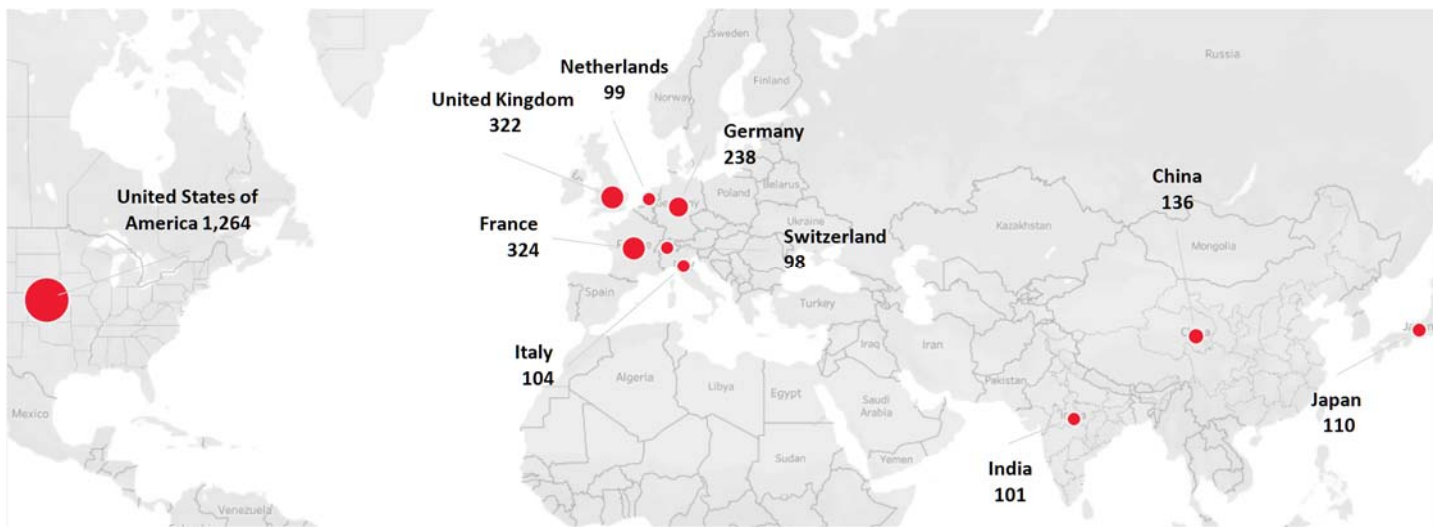
Institution	Scholarly Output	Field-Weighted Citation Impact	Publications in Top 10% Journal Percentiles	Citations per Publication
<i>University of Toronto</i>	87,292	2.06	40.3%	16.2
<i>University of British Columbia</i>	50,976	2.01	40.8%	15.6
McGill University	42,532	1.88	42.3%	15.1
<i>University of Alberta</i>	37,174	1.69	38.9%	12.8
<i>Université de Montréal</i>	33,329	1.91	37.5%	14.8
<i>McMaster University</i>	24,965	2.15	36.2%	15.9

Source: SciVal. Data as of January 15, 2020.

INTERNATIONAL COLLABORATIONS

Research capacity is enhanced through collaborations with researchers around the world as international collaborations can distribute research costs and allow for larger scale projects. Figure 10 shows the 10 top countries that McGill has collaborated with since 2009.

FIGURE 10. TOP 10 COLLABORATING RESEARCH COUNTRIES BY NUMBER OF FUNDED RESEARCH PROJECTS, 2008 TO 2019



Source: InfoEd

McGill has had the highest number of funded collaborations with the US, UK and France. A number of countries have shown an increase in the number of new funded projects over last five years. For example, while not in the top 10 of collaborating countries, the number of funded research collaborations with Australia have increased steadily.

The scientific landscape is increasingly international. For example, the proportion of worldwide publications with international co-authorship (authors from at least two countries) was 23% in 2018, and the European Union, China, United States, India, Japan, and South Korea together produce more than 70% of the worldwide refereed science and engineering publications⁴. These facts highlight the importance of international collaborations.

⁴ 2020 National Science Board Science and Engineering Indicators.

The percentage of international collaborations on publications at McGill has steadily increased over the last 10 years and has averaged 50% of total publications. Table 5 summarizes the boost that international collaborations can have on the field weighted citation impact measure.

TABLE 5. METRICS BY COLLABORATION FOR MCGILL, 2009 TO 2018

Metric	% of Publications	Scholarly Output	Citations	Citations per Publication	Field-Weighted Citation Impact
<i>International collaboration</i>	50.4%	39,275	1,246,580	31.7	2.39
<i>National collaboration</i>	19.6%	15,319	279,602	18.3	1.42
<i>McGill collaboration</i>	21.6%	16,856	268,052	15.9	1.22
<i>Single McGill authorship (no collaboration)</i>	8.4%	6,542	54,320	8.3	1.08

Source: SciVal. Data as of February 7, 2020.

Table 6 provides a list of the institutions with which McGill has had the greatest number of co-authored publications over the last five years. At the top of this list is Harvard University, with over 2000 co-authored publications. Among the institutions listed below, the University of Washington and the University College of London have shown the greatest increase in the number of co-authors with McGill (150% and 62% respectively from 2014 to 2018).

TABLE 6. TOP 10 INTERNATIONAL INSTITUTIONS COLLABORATING WITH MCGILL BY NUMBER OF CO-AUTHORED PUBLICATIONS, 2014 TO 2018

Institution	# Co-authored publications
1 Harvard University (USA)	2169
2 Centre national de la recherche scientifique (France)	1532
3 Stanford University (USA)	1268
4 University of Michigan, Ann Arbor (USA)	1167
5 University College London (United Kingdom)	1138
6 University of Oxford (United Kingdom)	1133
7 Columbia University (USA)	1120
8 University of Pennsylvania (USA)	1117
9 Université Paris-Saclay (France)	1057
10 University of Washington (USA)	1044

Source: SciVal. Data as of January 27, 2020.

ROYAL SOCIETY OF CANADA FELLOWS AND COLLEGE OF NEW SCHOLARS, ARTISTS AND SCIENTISTS

Royal Society of Canada (RSC) Fellows are elected to one of the Society’s three Academies – the Academy of Arts and Humanities; the Academy of Social Sciences; and the Academy of Science.

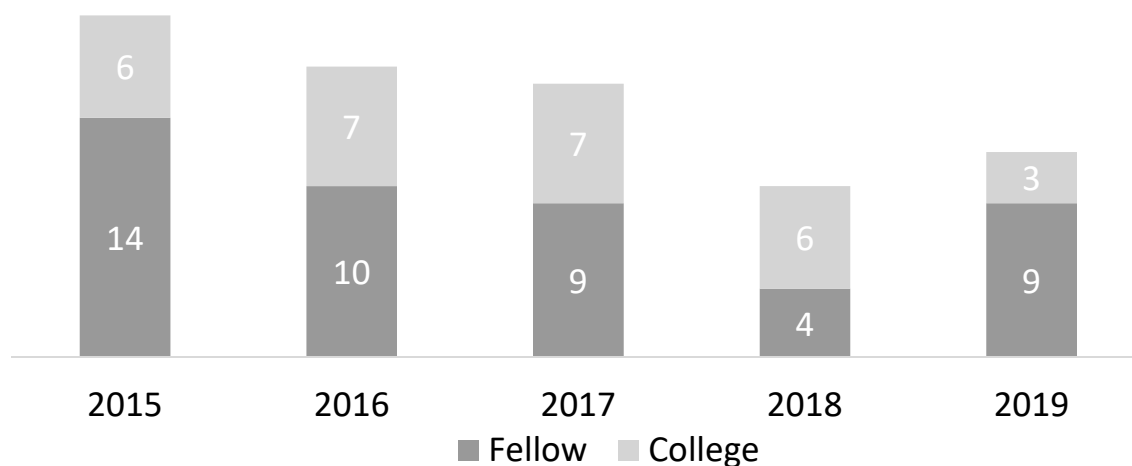
As a complement to the Academies, the RSC established the College of New Scholars, Scientist and Artists in 2014. The College recognizes individuals who have begun demonstrating leading scholarly, research or artistic excellence within 15 years of having completed their post-doctoral program or its equivalent. Members of the College are elected for a period of seven years.

Election to the RSC as either a Fellow or as a College member is a top honour for researchers in Canada. There are currently over 2,000 Fellows and 219 College members overall.

The number of McGill faculty newly elected each year as Fellows or College members is shown in Figure 11. In the last five years:

- There were 46 new Fellows for a total of 192.
- There were 29 new College members for a total of 31.

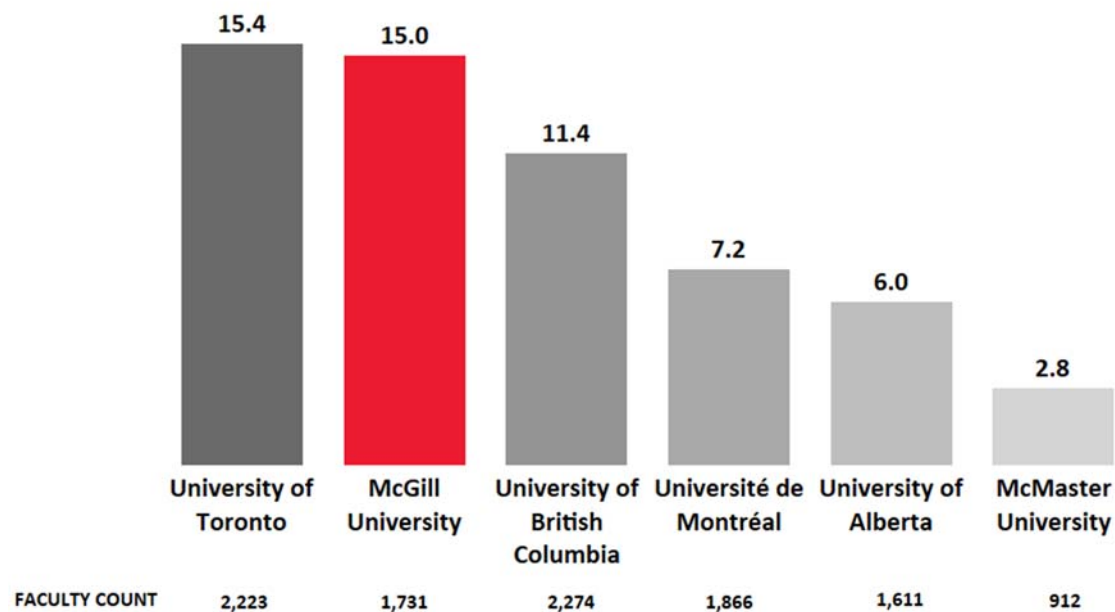
FIGURE 11. NUMBER OF NEW FELLOWS AND COLLEGE MEMBERS ELECTED FOR MCGILL, 2015 TO 2019



Source: Royal Society of Canada

As there are a small number of newly elected members, it is difficult to determine if there is an increase or decrease for McGill over time. In this case, benchmarking against other institutions can provide additional information on McGill’s performance. Figure 12 shows the average number of new Fellows and College members per year for the last five years for the U6. Despite a smaller faculty size, McGill has a similar average to that of Toronto.

FIGURE 12. AVERAGE NUMBER OF NEW ROYAL SOCIETY OF CANADA FELLOWS AND COLLEGE MEMBERS PER YEAR, 2015 TO 2019

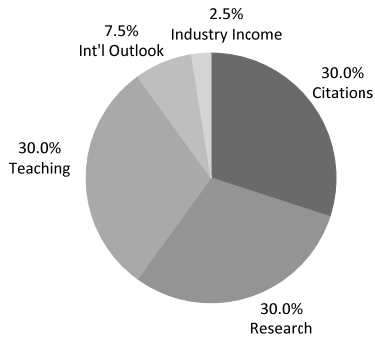


Source: Royal Society of Canada.

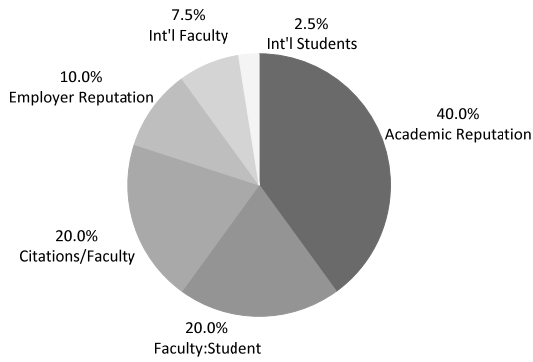
APPENDIX 1

Ranking providers and rank components as a percentage of total ranking score. Link to methodology and description of rank components included in title.

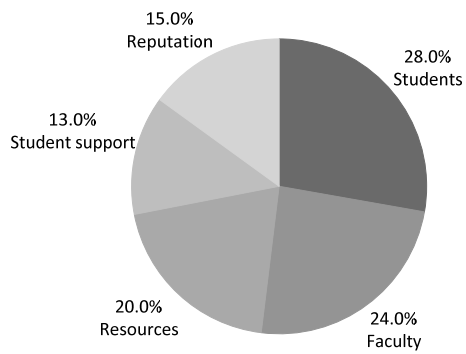
TIMES HIGHER EDUCATION WORLD UNIVERSITY RANKING



QS WORLD UNIVERSITY RANKING



MACLEAN'S UNIVERSITY RANKING



Report on Research and Innovation

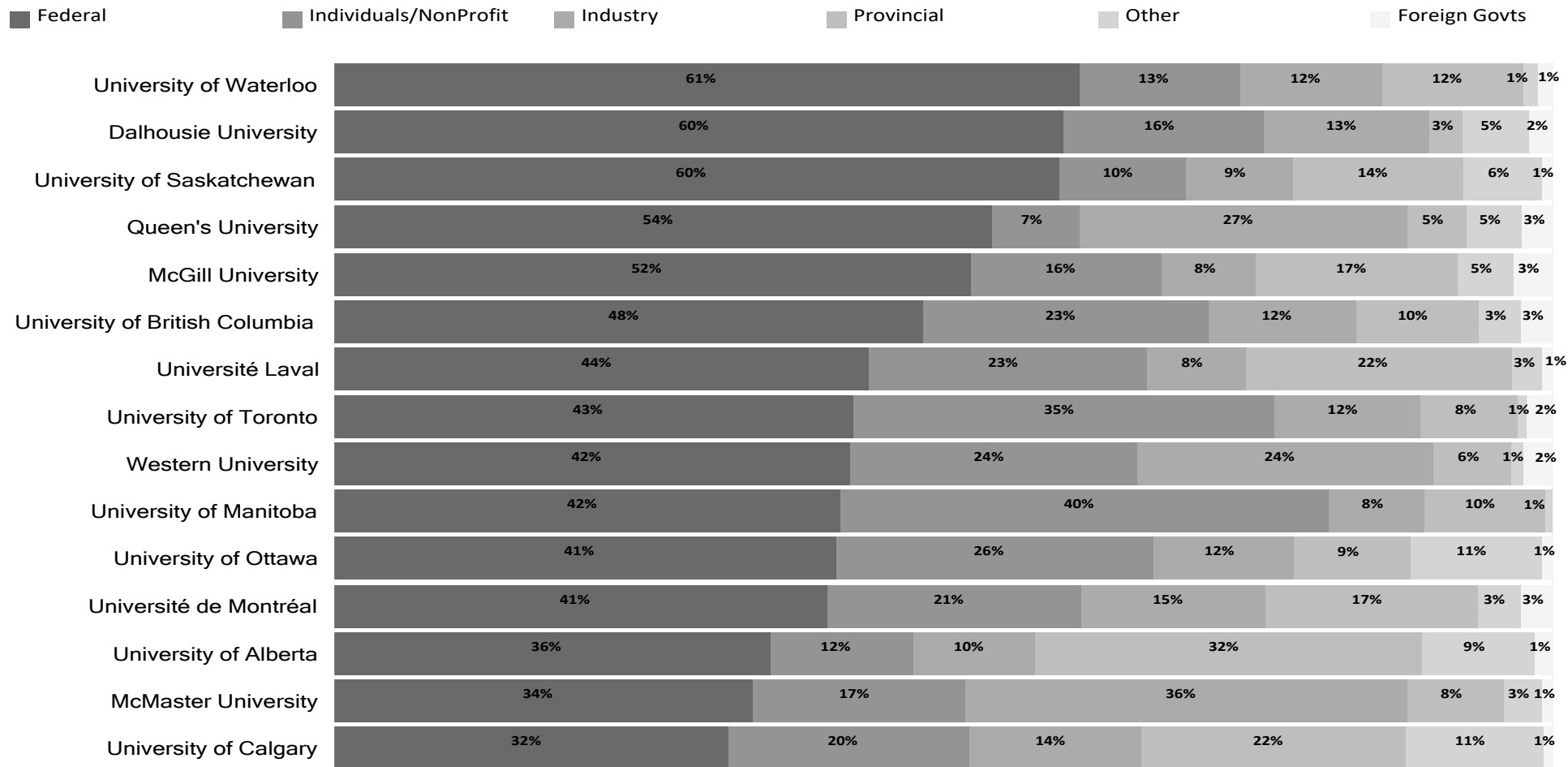
2019

U15 TOTAL RESEARCH FUNDING AND FACULTY COUNT, FY18

	Total Research Funding (\$ million)	Faculty Count*
University of Toronto	\$1,111	2,223
University of British Columbia	\$618	2,274
Université de Montréal	\$567	1,866
McGill University	\$567	1,731
University of Alberta	\$494	1,611
University of Calgary	\$422	1,527
Université Laval	\$404	1,344
McMaster University	\$392	912
University of Ottawa	\$315	1,224
Western University	\$261	1,149
University of Waterloo	\$213	1,032
University of Manitoba	\$212	1,107
Queen's University	\$176	756
University of Saskatchewan	\$175	909
Dalhousie University	\$142	945

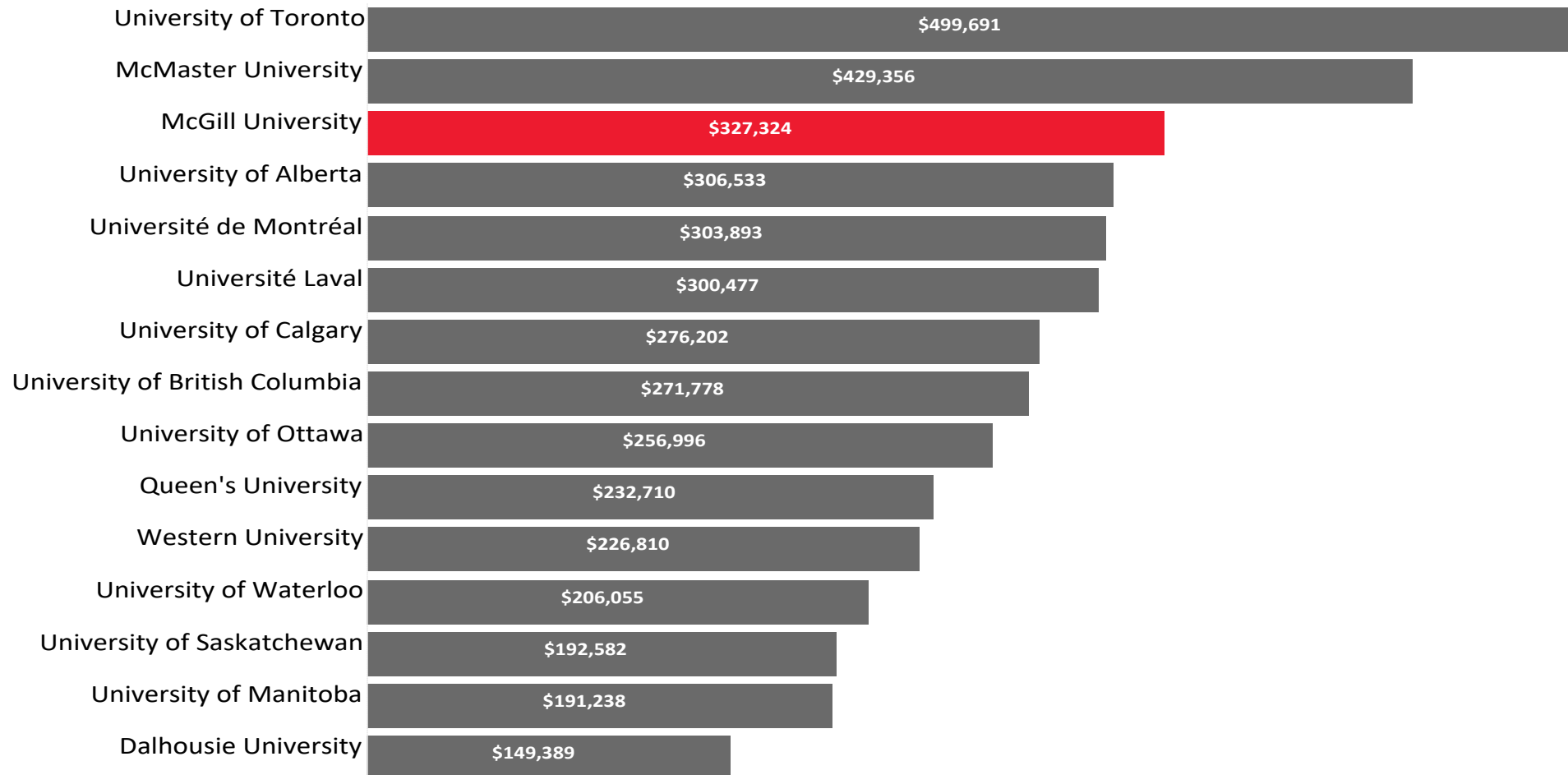
Source: CAUBO (Totals) and Statistics Canada (Faculty Counts) * Faculty counts include full time, tenure/tenure track academic staff.

U15 PERCENTAGE OF TOTAL RESEARCH FUNDING FROM VARIOUS SOURCES, FY2018



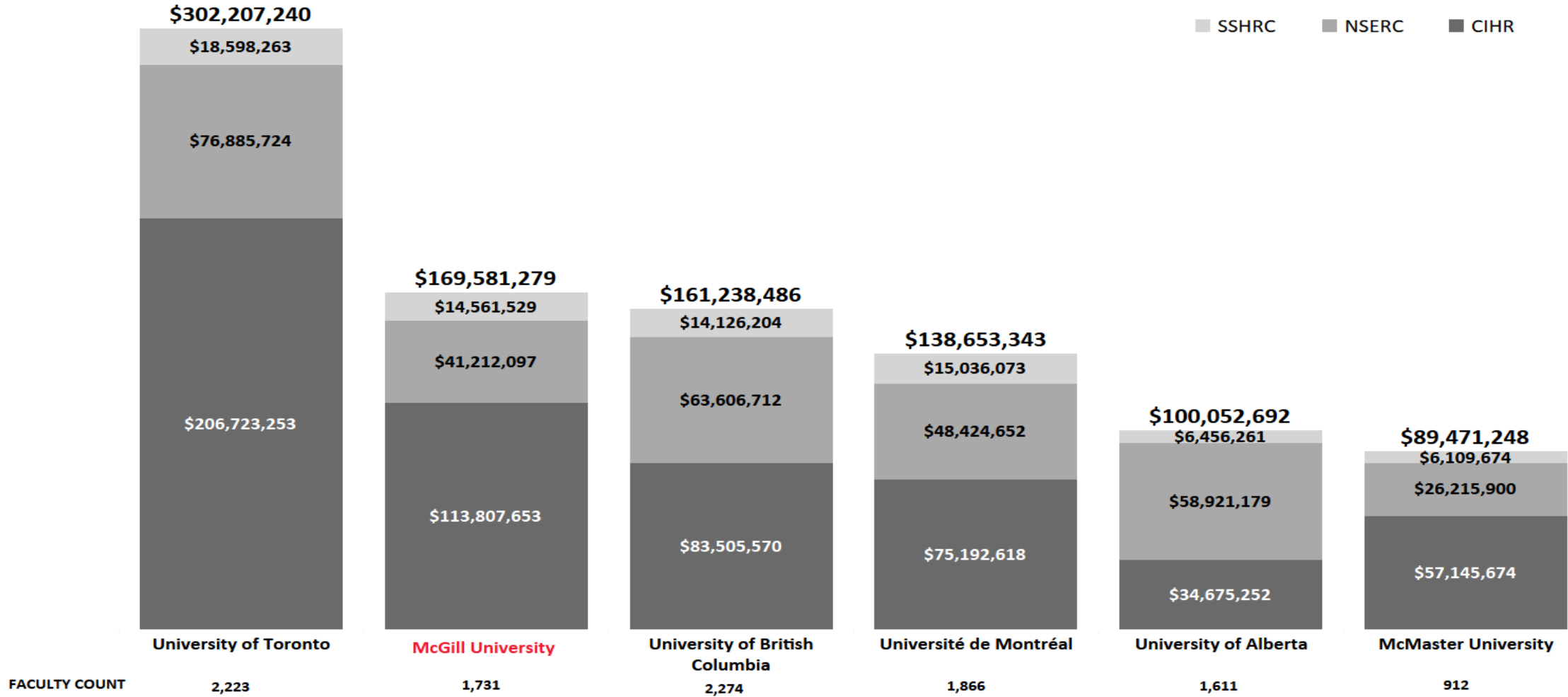
Source: CAUBO *Other includes municipal governments, other provincial governments and miscellaneous.

U15 RESEARCH FUNDING PER FACULTY MEMBER, FY18



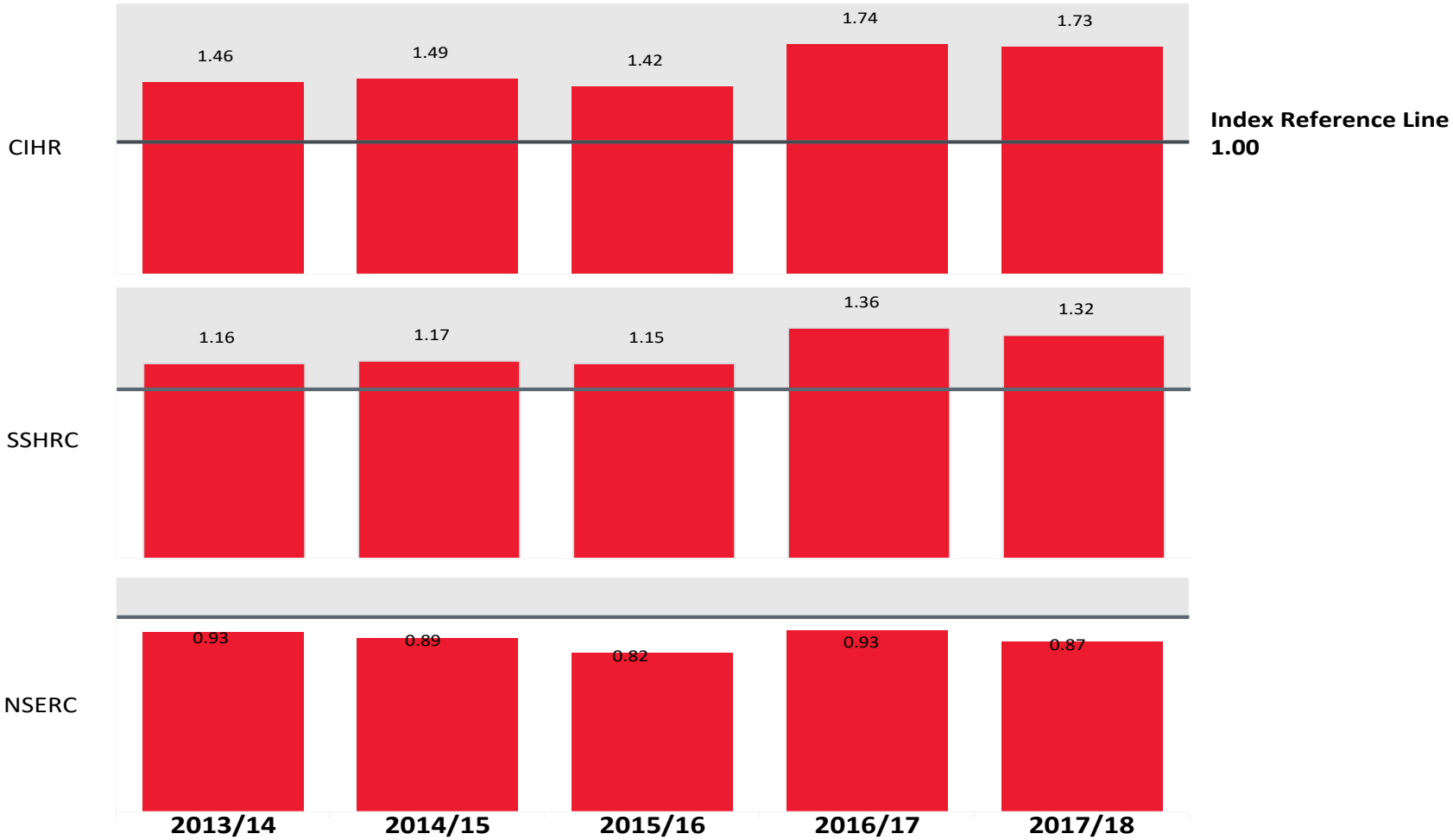
Source: CAUBO (Totals) and Statistics Canada (Faculty Counts)

U6 TOTAL TRI-AGENCY FUNDING, FY18



Source: CAUBO. Excludes Canada Research Chairs, scholarships and bursaries

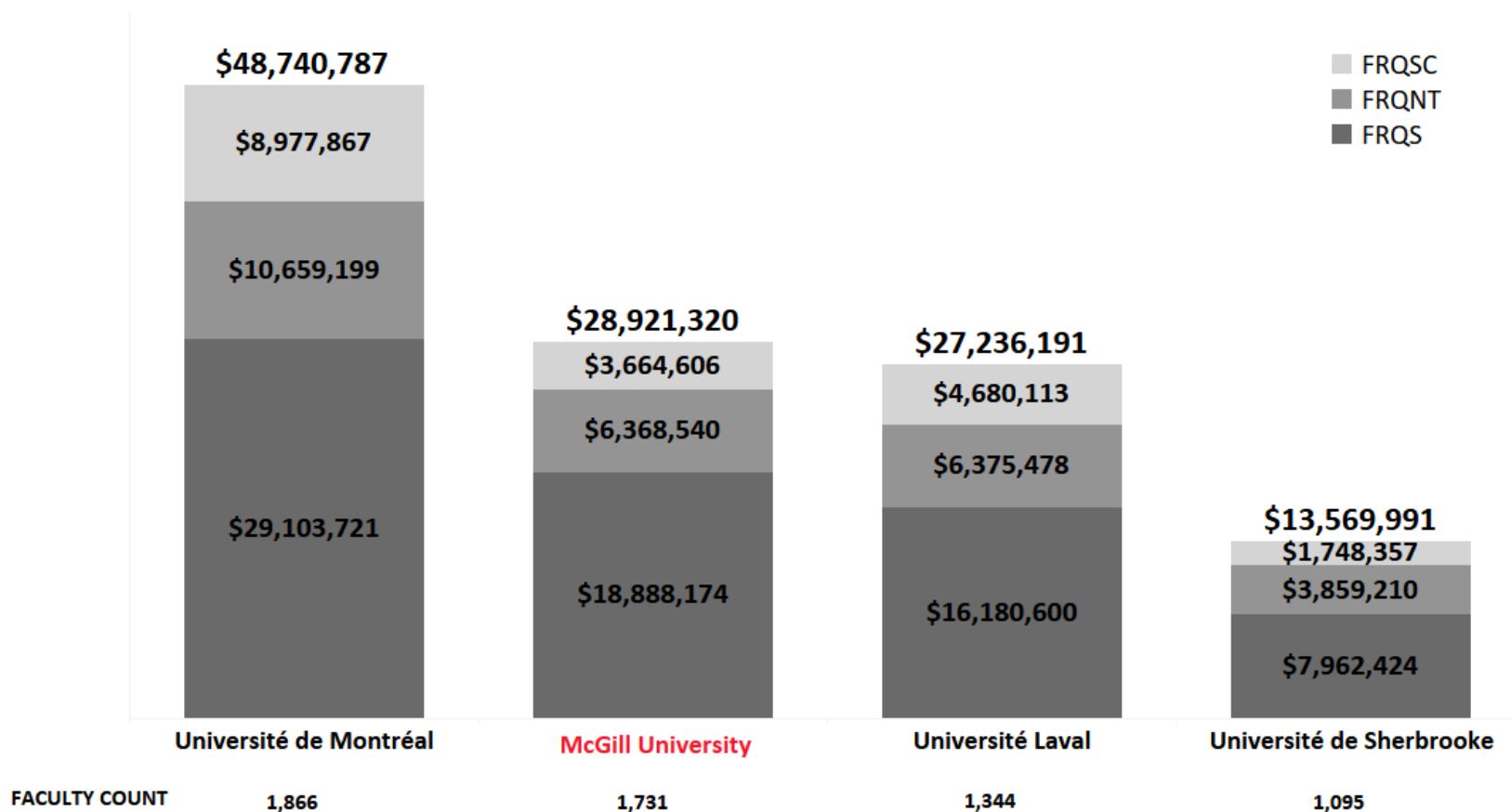
McGILL'S TRI-AGENCY FUNDING EFFICIENCY INDEX, FY14 – FY18



Source: CAUBO and Statistics Canada



QC4 TOTAL FRQ FUNDING, FY18

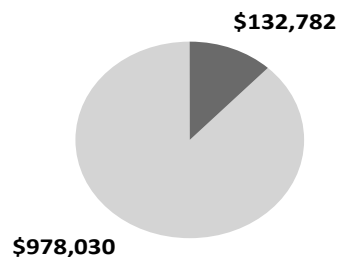


- Among FRQ funding programs, McGill is very successful in two FRQNT programs: Research Support for New Academics (*Établissement de nouveaux chercheurs universitaires*) and the Team Research Project (*Projet de recherche en équipe*), both receiving the largest value of grants in FY2018 in the province.
- As of October 2019, McGill was leading or participating in 70 or 75% of all Strategic Clusters (FRQNT, FRQSC) and Thematic Networks (FRQS). Of these 70, McGill is leading four FRQNT Strategic Clusters, four FRQSC Strategic Clusters and five FRQS Thematic Networks.

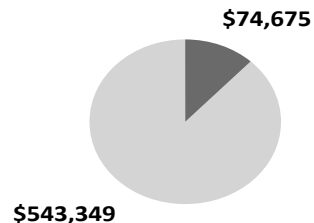
Source: FRQ. Excludes bourses et stages de formation. Fiscal year for FRQ is April 1st to March 31st.

U6 INDUSTRY AND NON INDUSTRY RESEARCH FUNDING (IN THOUSANDS, AND PERCENT OF INDUSTRY FUNDING), FY18

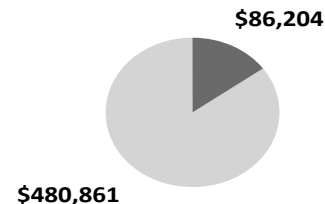
University of Toronto (12%)



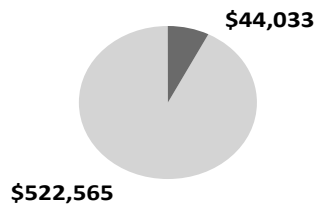
University of British Columbia (12%)



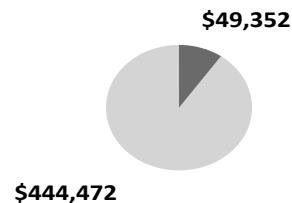
Université de Montréal (15%)



McGill University (8%)



University of Alberta (10%)

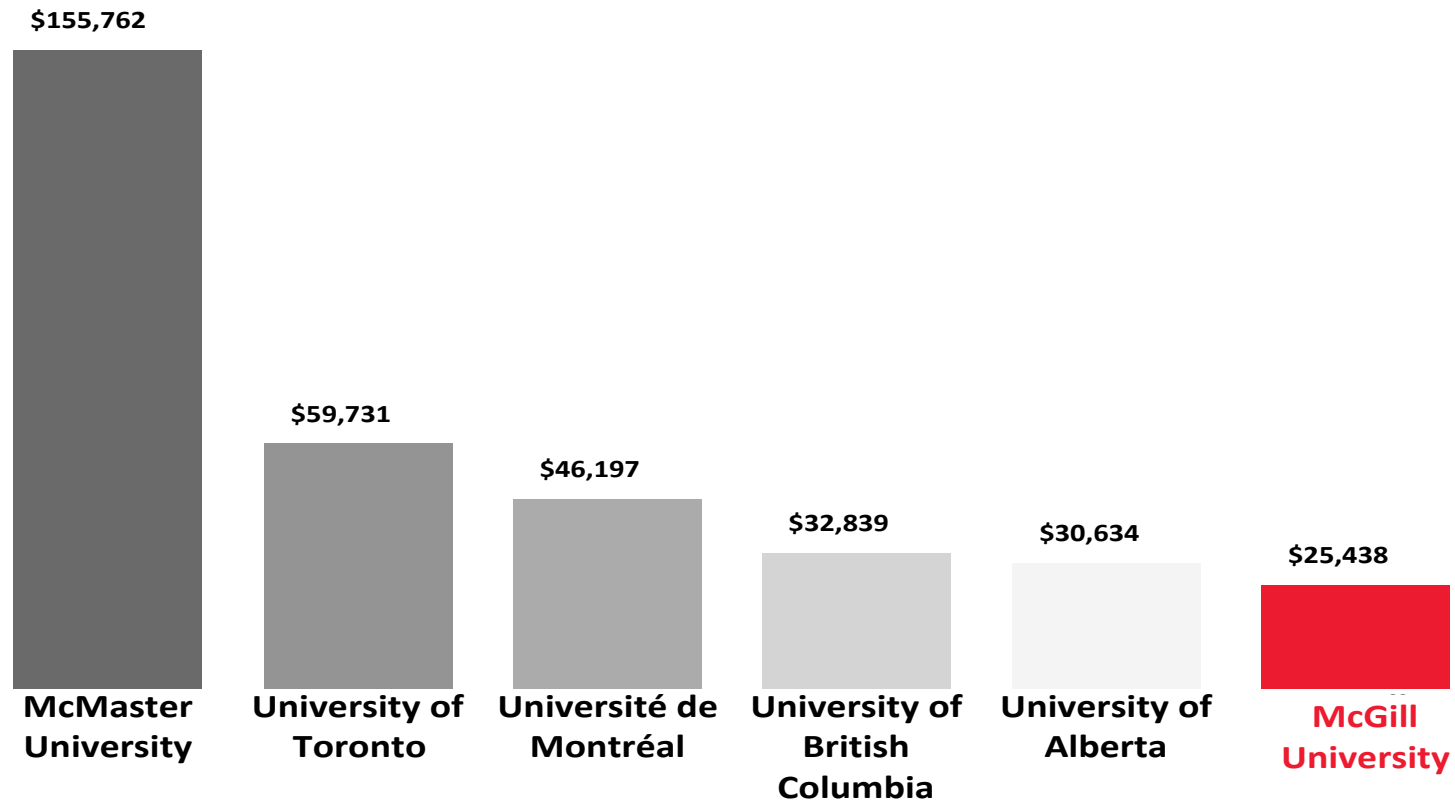


McMaster University (36%)



Source: CAUBO, includes industry sponsored donations and grants and contracts.

U6 INDUSTRY FUNDING PER FACULTY, FY18



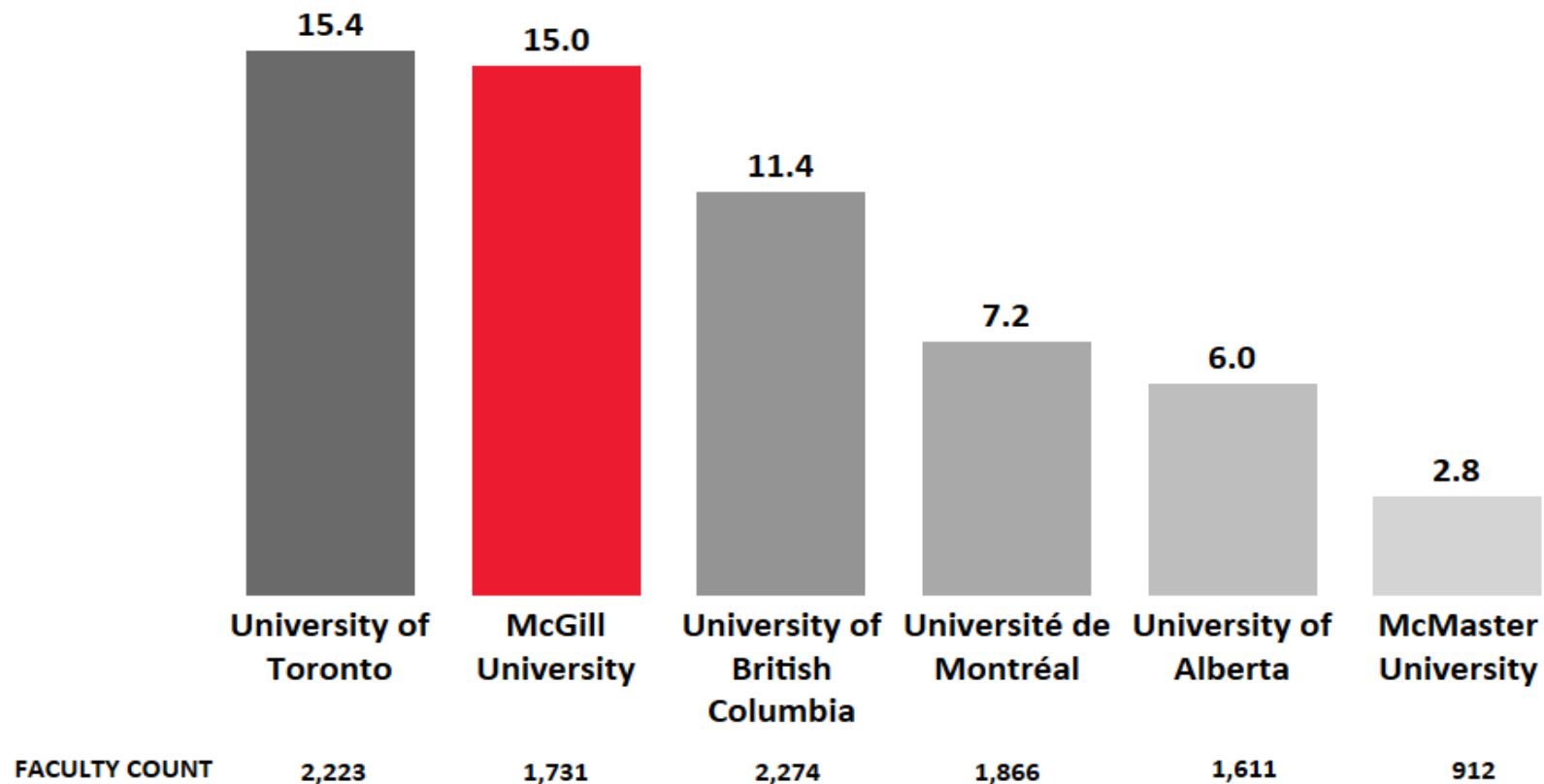
Source: CAUBO, includes industry sponsored donations and grants and contracts.

U6 KEY BIBLIOMETRICS, 2014 – 2018

Institution	Scholarly Output	Field-Weighted Citation Impact	Publications in Top 10% Journal Percentiles	Citations per Publication
<i>University of Toronto</i>	87,292	2.06	40.3%	16.2
<i>University of British Columbia</i>	50,976	2.01	40.8%	15.6
McGill University	42,532	1.88	42.3%	15.1
<i>University of Alberta</i>	37,174	1.69	38.9%	12.8
<i>Université de Montréal</i>	33,329	1.91	37.5%	14.8
<i>McMaster University</i>	24,965	2.15	36.2%	15.9

Source: SciVal. Data as of January 15, 2020.

U6 AVERAGE NUMBER OF NEW ROYAL SOCIETY OF CANADA FELLOWS AND COLLEGE MEMBERS PER YEAR, 2015 – 2019



Source: Royal Society of Canada