



Memorandum

Office of the Vice-Principal (Research and Innovation)

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TO: Senate Steering Committee

FROM: Professor Martha Crago, Vice-Principal (Research and Innovation)

SUBJECT: Annual Report on Research and Innovation 2021

DATE: April 19, 2022

DOCUMENT #: D21-54

ACTION REQUIRED: INFORMATION APPROVAL/DECISION

ISSUE Presentation and discussion on 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.

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 FY2020. 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

PRIOR CONSULTATION Internal Review by the Office of the Vice-Principal (Research and Innovation) and members of the senior administration (March 24, 2022).

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: Design and create sustainable materials, technologies, landscapes, and communities. 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 Submission for information to the Board of Governors (April 21, 2022)

**MOTION OR
RESOLUTION
FOR APPROVAL**

N/A

APPENDICES

- Appendix A: Annual Report on Research and Innovation 2021

R+I

Report on
Research + Innovation
2021



Research and
Innovation

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Message from
Dr. Martha Crago, Vice-Principal [Research + Innovation]



McGill's research community is committed to promoting health, inspiring collaboration, and protecting the planet for future generations.

It is my pleasure to present the 2021 Annual Report on Research and Innovation, which details McGill's research grant successes and rankings in the 2019/2020 fiscal year and highlights prizes awarded and partnerships established in 2021. This report reflects the resourcefulness and excellence of all the people who are driving research and innovation at McGill.

Through two centuries and now throughout two years of an evolving pandemic, McGill's research community has embraced change, forged new collaborations, and accelerated breakthroughs. Our experts are helping to address the many health challenges posed by the pandemic, as well as a host of new social considerations, from the dynamics of employment, to coping with social isolation.

“McGill’s commitments to the pursuit of foundational knowledge and to its translational impact ensures we are equipped to deal with the issues of today and with those beyond the current limits of our imagination.”

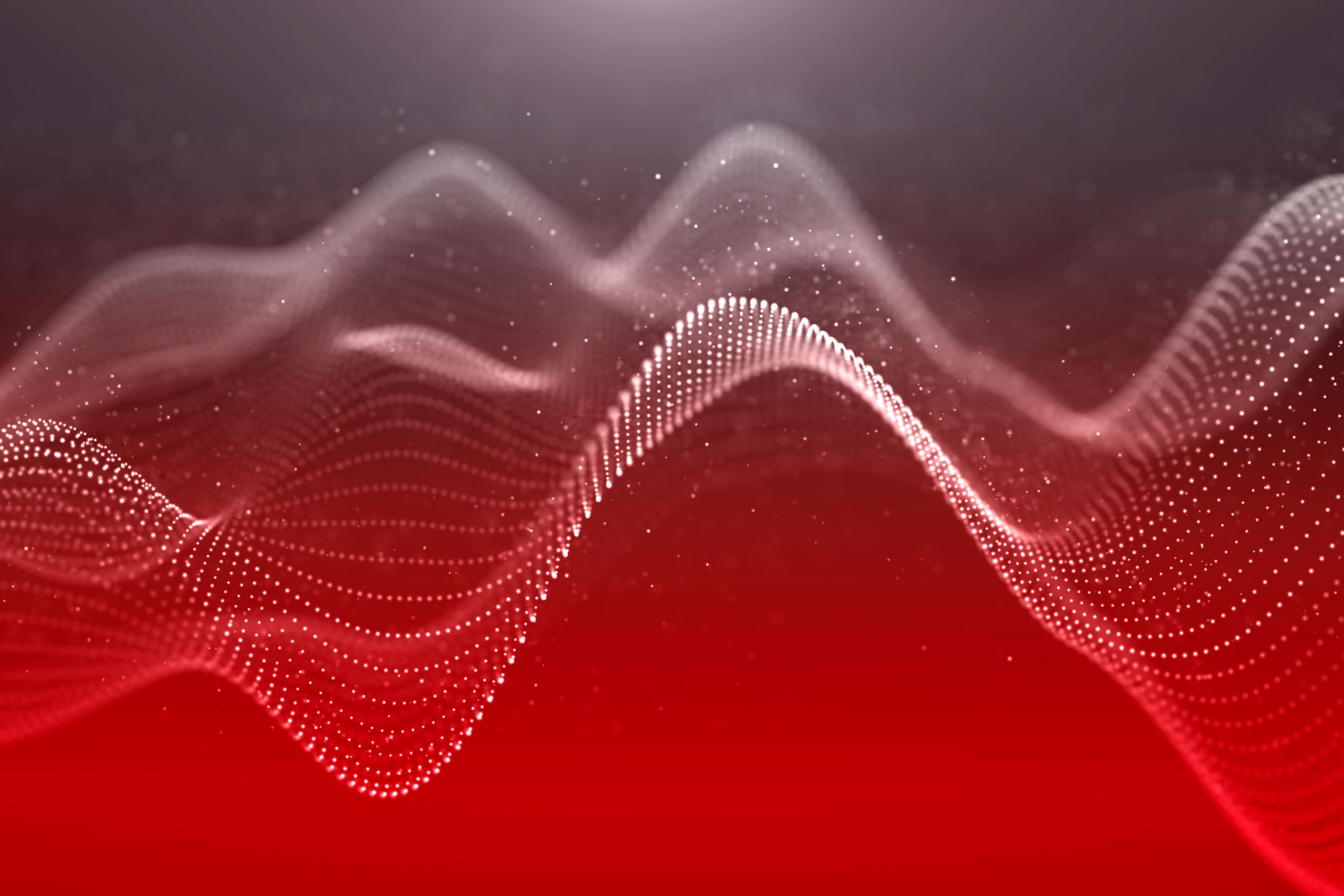
The application of mRNA technology to the development of vaccines is due in part to foundational work conducted here at McGill. Today, a critical mass of scientists continues to pursue new and developing areas of RNA research in labs across our campuses. Among the McGill-led initiatives to understand, track, and treat COVID-19 is the CanCOGeN VirusSeq project. In collaboration with Canadian software company, DNASTack, the project helps researchers and decision makers gain insights about COVID-19 from genomics and other datasets using a cloud-based platform. These efforts will lead Canada out of this pandemic—and help us to manage the next one.

Known for its world-leading research (topping Maclean’s medical-doctoral category for the 17th year in a row), McGill is collaborating to tackle mental illness, which indirectly affects everyone through

their own experience, or that of a family member, friend, or colleague. In 2021, McGill and the Douglas Research Centre together with Germany’s Max Planck Institute of Psychiatry formed the International Collaborative Initiative in Adversity and Mental Health. This is the first international effort devoted to understanding how early-life adversity can increase the risk of psychiatric disorders and how we may better prevent and treat them.

McGill’s commitments to the pursuit of foundational knowledge and to its translational impact ensures we are equipped to deal with the issues of today and with those beyond the current limits of our imagination. Through these pages, I invite you to learn more about McGill’s award-winning and aspirational research.

Dr. Martha Crago
Vice-Principal, Research and Innovation



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 FY2020. This period reflects the most recent and complete data available from various sources including:

- **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. For other metrics, we have focused on our standing relative to a smaller number of 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 research intensity with a medical/doctoral program. Together 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.

2021: Year in Review

COVID-19 Research Continues

Genome Canada launched the Canadian VirusSeq Data Portal to track the evolving COVID-19 pandemic across Canada.

The Data Portal is an open-source and open-access data portal for all Canadian SARS-CoV-2 sequences and associated non-personal contextual data. It enables real-time data sharing and brings together SARS-CoV-2 genome sequences that were used to detect, diagnose, and anticipate the spread of new variants. The development was led by researchers at McGill in collaboration with CanCOGeN, an initiative launched by Genome Canada and funded by Innovation, Science and Economic Development Canada to establish a coordinated pan-Canadian, cross-agency network for large-scale SARS-CoV-2 and human host sequencing.

The university continued to house the COVID-19 Immunity Task Force (CITF), which was established in April 2020 with funding from the Government of Canada. The CITF's Secretariat is housed at McGill's School of Population and Global Health and is co-chaired by Dr. Catherine Hankins with Dr. Timothy Evans as Executive Director. Since then, the CITF has funded 112 projects nationwide, with nine led by researchers at McGill and the Research Institute of McGill University Hospital Centre (RI-MUHC).

The Coronavirus Variants Rapid Response Network (CoVaRR-Net), funded by the Canadian Institutes of Health Research, was established to coordinate and consolidate research efforts across the country to rapidly detect, monitor and assess newly emerging variants and provide rapid guidance for policymakers.

CoVaRR-Net is run by a group of scientists, including McGill researchers, and is structured by eight scientific pillars. One of two pillars led by McGill, the Viral Genomics and Sequencing pillar, deals with surveilling and screening for variants and involves analyzing and characterizing samples of the virus from infected individuals as well as ensuring those samples are correctly labelled and quality controlled before being stored in

biobanks. Another pillar led by McGill, the Silico Modelling and Computational Biology pillar, is responsible for mining sequencing data collected from across the country to find patterns –such as where a variant is emerging and whether it is increasing in frequency—and using that information to advise the relevant authorities about the level of risk posed by a given variant.

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.

INSTITUTION	MACLEAN'S MEDICAL/ DOCTORAL Canadian University Rankings 2022 (2021)	QUACQUARELLI SYMONDS (QS) World University Rankings 2022 (2021)	TIMES HIGHER EDUCATION (THE) World University Rankings 2022 (2021)
McGill University	1 (1)	27* (31*)	44 (40)
University of Toronto	2 (2)	26 (25*)	18 (18)
University of British Columbia	3 (3)	46 (45)	37 (34)
McMaster University	4 (4)	140 (144)	80* (69)
University of Alberta	6 (6)	126 (119)	125 (131*)
Université de Montréal	9* (11*)	111 (118)	88* (73*)

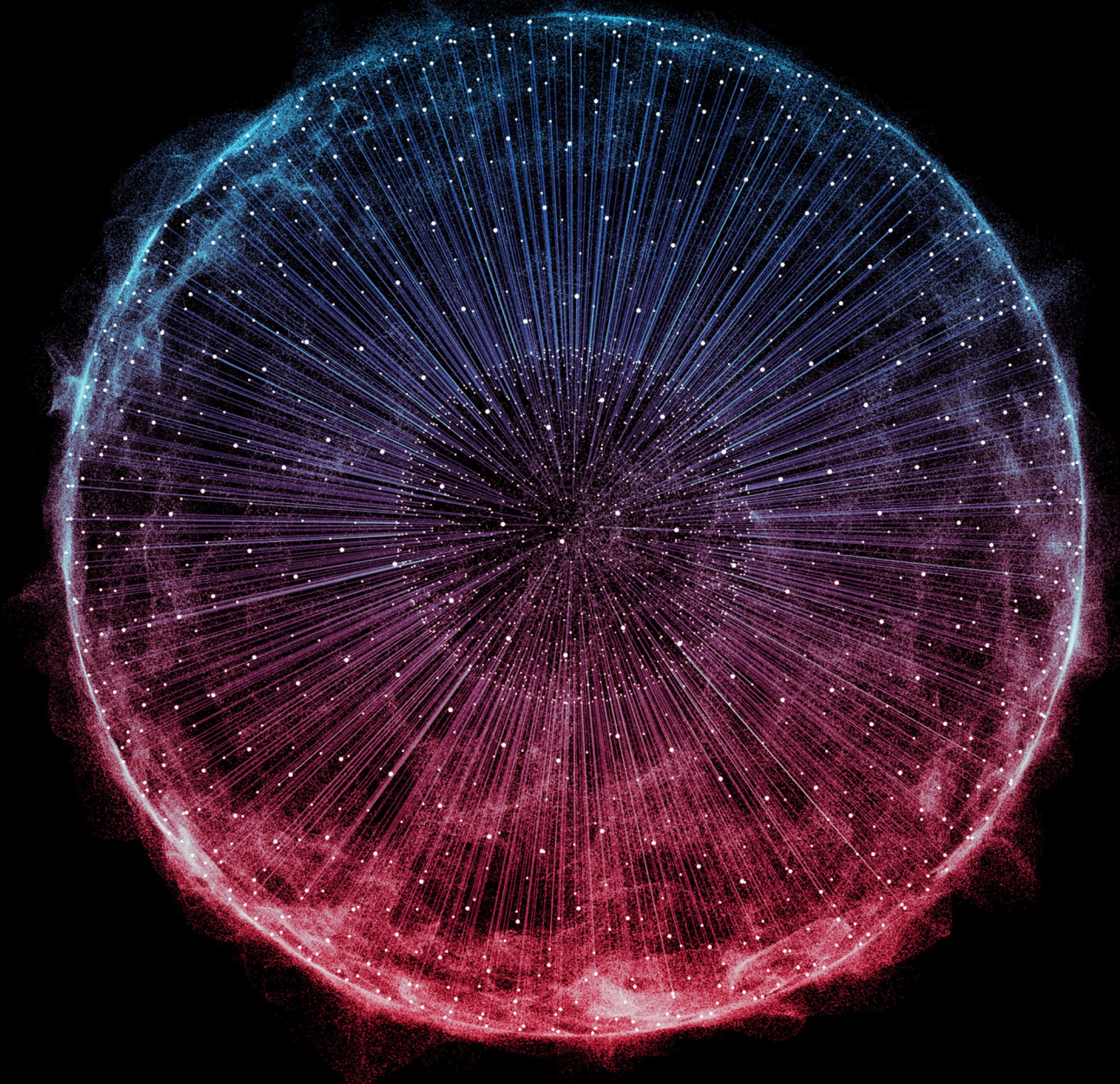
TABLE 1: U6 UNIVERSITY RANKINGS, 2022 (2021)

Source: Maclean's, QS, THE.

* indicates a tie with another institution.

Nationally, McGill has consistently ranked number one for many years in the Maclean's Best Medical Doctoral University rankings, which includes 14 Canadian universities with a medical/doctoral program.

Internationally, despite differing ranking methodologies, McGill's rank improved in the QS but fell slightly in the THE in 2022. The rankings providers have significantly different methodologies for ranking institutions, making a comparison between the two difficult.



Research Funding Performance

McGill's total research funding in FY2020 was \$628.6M.

The key categories of funding are presented in Figure 1.

Federal funding is the largest source of research funding for McGill followed by funding from individuals/not-for-profits and the provincial government. Federal funding includes the Tri-Agencies, Health Canada, the Canada Foundation for Innovation, Canada Research Chairs and the Research Support Fund, among other types of funding. The "Other" funding category includes municipal and other provinces.

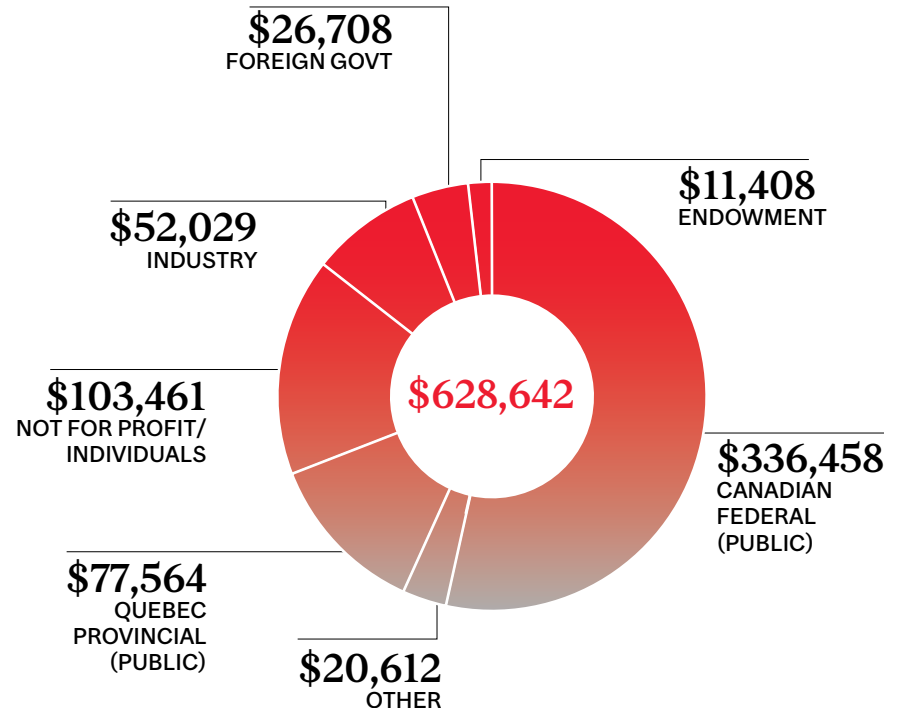


FIGURE 1: CATEGORIES OF RESEARCH FUNDING AND AMOUNT (\$000'S), FY2020

Source: CAUBO

While the most obvious increases in funding over the last five years came from federal sources, funding in most of the other top categories have also shown an increased trend since FY2016 (Figure 2).

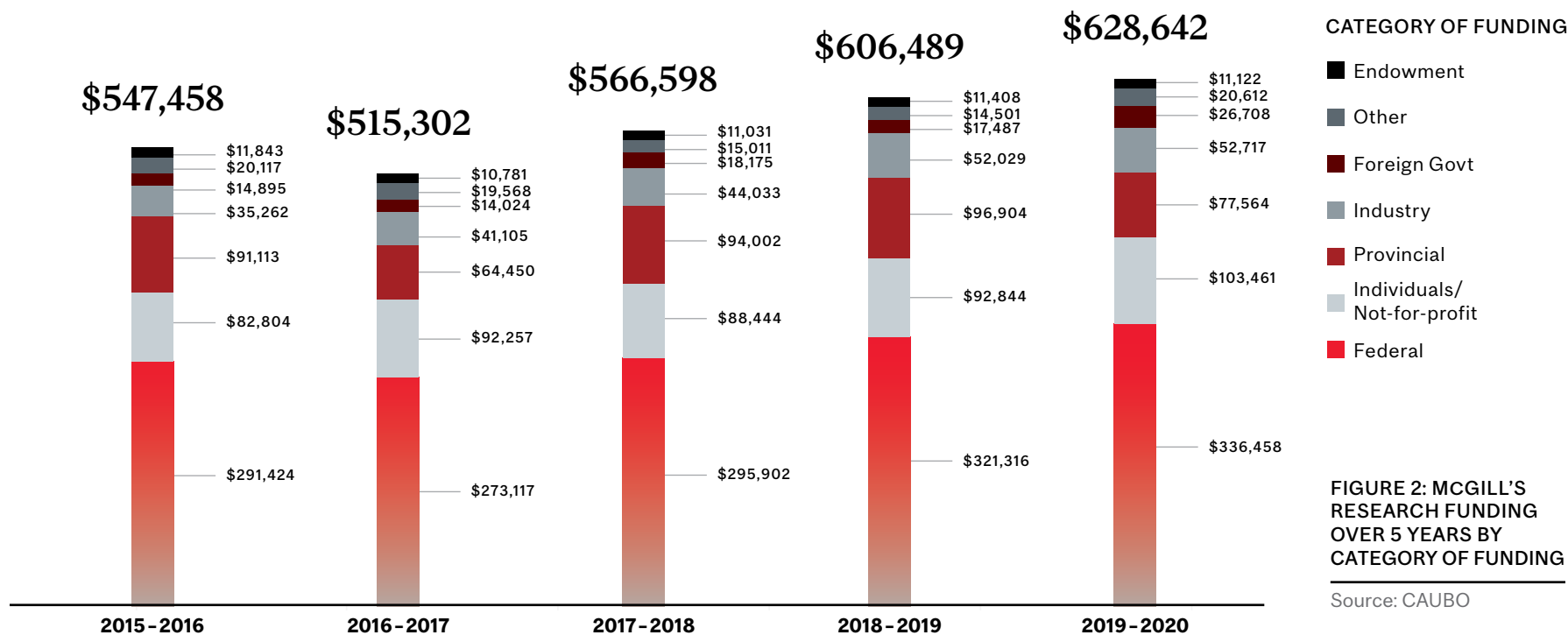


FIGURE 2: MCGILL'S RESEARCH FUNDING OVER 5 YEARS BY CATEGORY OF FUNDING

Source: CAUBO

INSTITUTION	TOTAL RESEARCH FUNDING (IN 1000'S)	FACULTY COUNT*
University of Toronto	\$1,234,092	2,280
University of British Columbia	\$652,637	2,346
McGill University	\$628,642	1,791
Université de Montréal	\$613,474	1,884
University of Calgary	\$457,296	1,503
University of Alberta	\$446,013	1,575
Université Laval	\$426,628	1,362
University of Ottawa	\$383,063	1,227
McMaster University	\$353,530	855
Western University	\$229,823	1,107
Queen's University	\$228,092	819
University of Saskatchewan	\$223,32	903
University of Waterloo	\$211,213	1,122
University of Manitoba	\$192,152	1,116
Dalhousie University	\$166,29	921

TABLE 2: U15 TOTAL RESEARCH FUNDING AND FACULTY COUNT, FY2020

* Faculty counts include full time, tenure / tenure track academic staff.

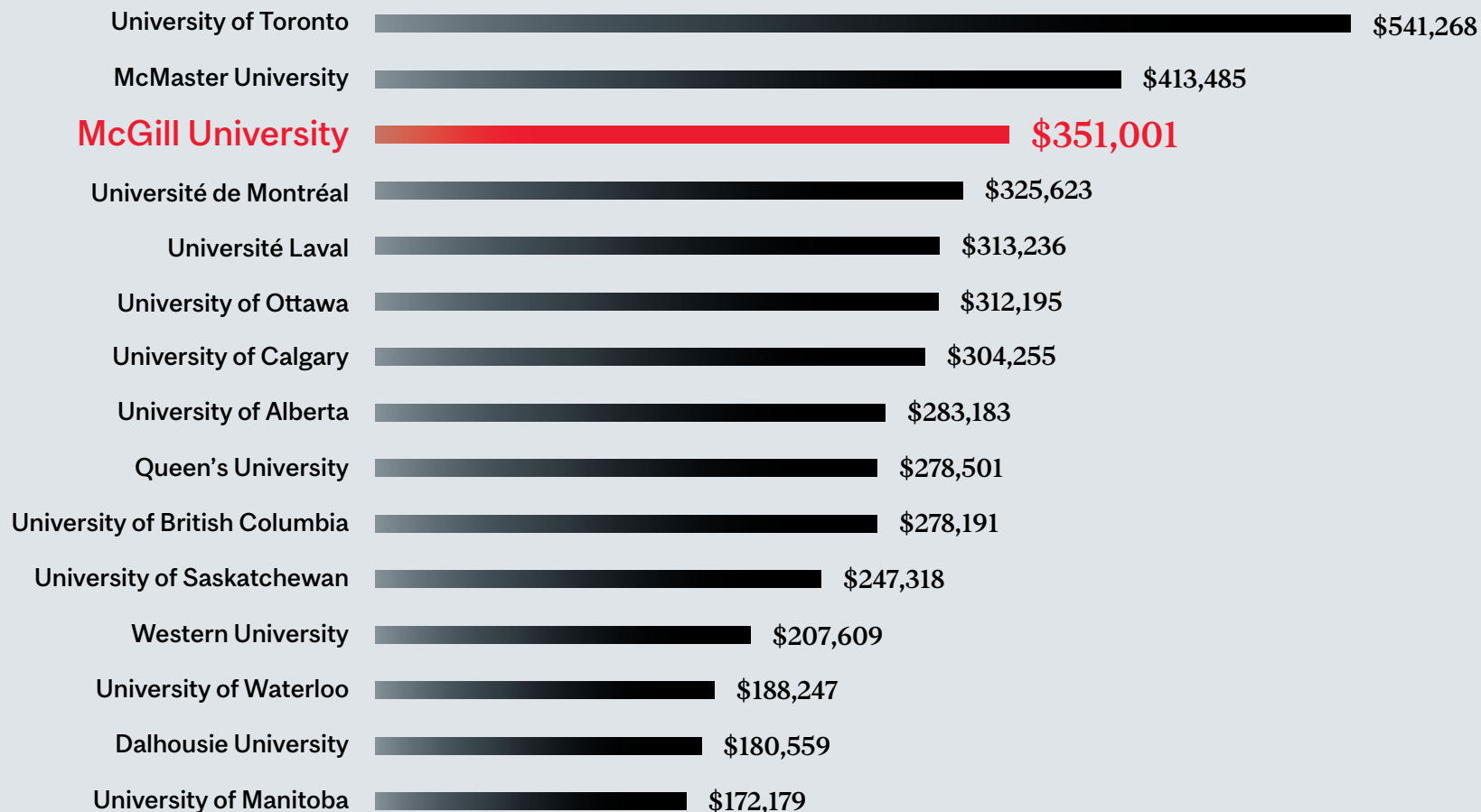
Source: CAUBO (Totals) and Statistics Canada (Faculty Counts)

Table 2 provides an overview of the total research funding for all U15 universities in FY2020 along with each institution's faculty counts. The total research funding divided by the faculty count provides a measure of research intensity for an institution.

McGill has historically been among the top three most research-intensive universities in Canada as measured by the total amount of research funding per faculty member; FY2020 was no exception, as shown in Figure 3 (on following page).

FIGURE 3: U15 RESEARCH FUNDING PER FACULTY MEMBER, FY2020

Source: CAUBO (totals) and Statistics Canada (faculty counts)



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 sources of federal research funding for McGill.

In FY2020, McGill received a total of \$178M from the Tri-Agencies, representing a little over half (52%) of McGill's total federal research funding. The data presented in this section, taken together, present a complete picture of McGill's Tri-Agency funding.

In addition to the total funding amounts within the U15 (Table 3) and U6 (Figure 4), as well as share of U15 funding (Figure 5), the data is also presented in relation to McGill's faculty count through the Funding Efficiency Index (FEI; Figure 6).

INSTITUTION	TOTAL TRI-AGENCY FUNDING	Share of U15
University of Toronto	\$333,298,658	20.3%
University of British Columbia	\$180,321,981	11.0%
McGill University	\$178,344,080	10.9%
Université de Montréal	\$137,188,152	8.4%
University of Alberta	\$110,726,418	6.7%
Université Laval	\$99,996,968	6.1%
University of Calgary	\$93,875,191	5.7%
McMaster University	\$85,514,683	5.2%
University of Ottawa	\$74,915,497	4.6%
University of Waterloo	\$74,784,557	4.6%
Western University	\$69,768,400	4.3%
University of Saskatchewan	\$59,115,519	3.6%
Dalhousie University	\$52,273,992	3.2%
Queen's University	\$49,624,511	3.0%
University of Manitoba	\$41,846,016	2.5%
Total	\$1,641,594,622	100.0%

TABLE 3: TOTAL AMOUNT OF TRI-AGENCY FUNDING AND PERCENT SHARE OF FUNDING FOR U15 IN FY2020

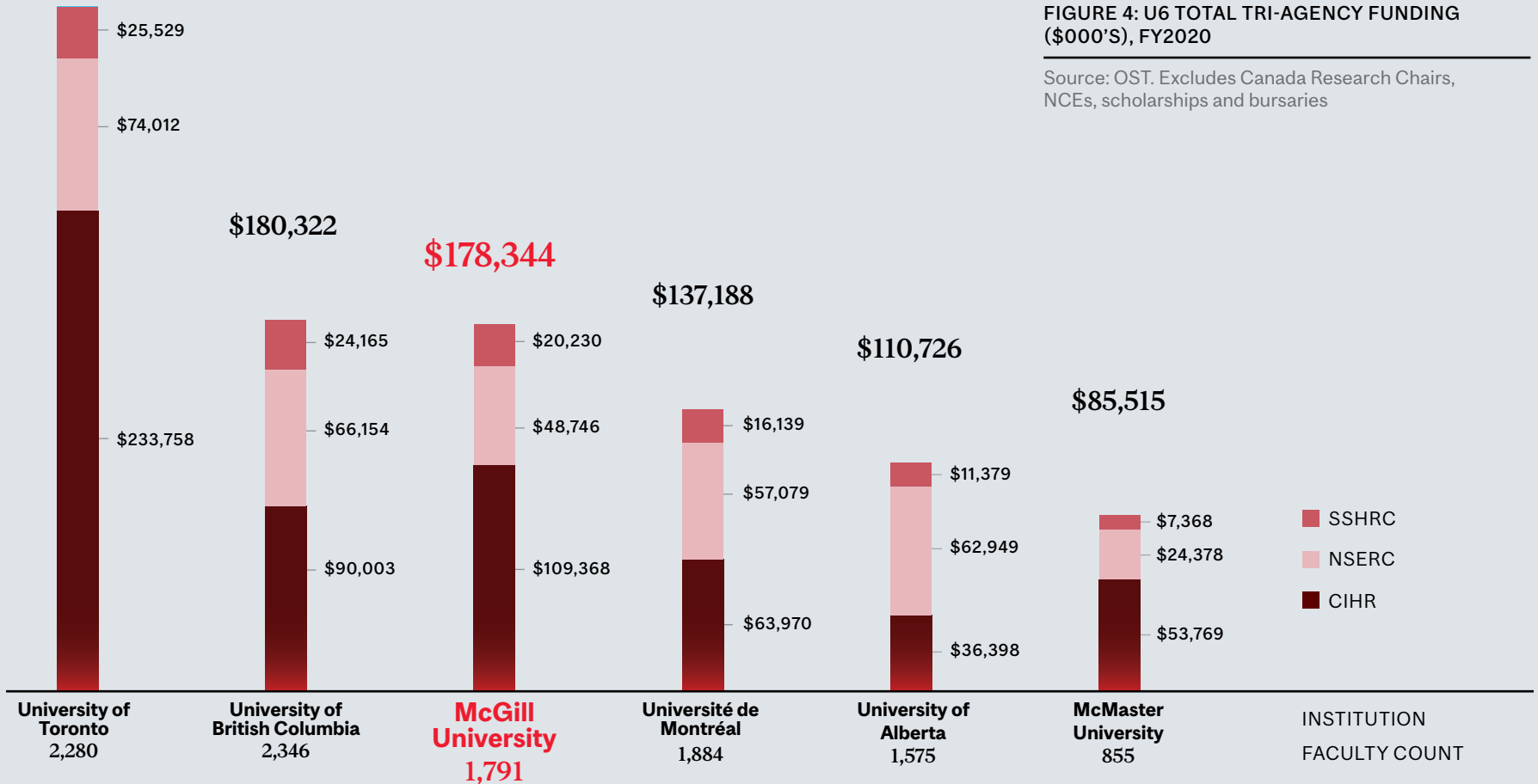
Source: OST

Of note, together, the University of Toronto, McGill and the University of British Columbia received 42% of all Tri-Agency funding allotted to the U15 (Table 4). In previous years, McGill had placed second in total Tri-Agency funding behind only the University of Toronto. However, this year, McGill's total Tri-Agency funding places it in third place behind both University of Toronto and the University of British Columbia. A more detailed breakdown of funding by each Tri-Agency for the U6 is shown in Figure 4 (on the following page).

\$333,299

FIGURE 4: U6 TOTAL TRI-AGENCY FUNDING (\$'000'S), FY2020

Source: OST. Excludes Canada Research Chairs, NCEs, scholarships and bursaries



While McGill obtained more funding from CIHR than University of British Columbia (UBC) (\$109M vs \$90M), UBC obtained more NSERC and SSHRC funding. In addition, McGill's CIHR funding has decreased by approximately \$4M from FY2019.

While McGill's total amount of Tri-Agency funding increased since FY2019, the decrease in CIHR funding has contributed to a drop in McGill's share of the U15 Tri-Agency funding (Figure 5).

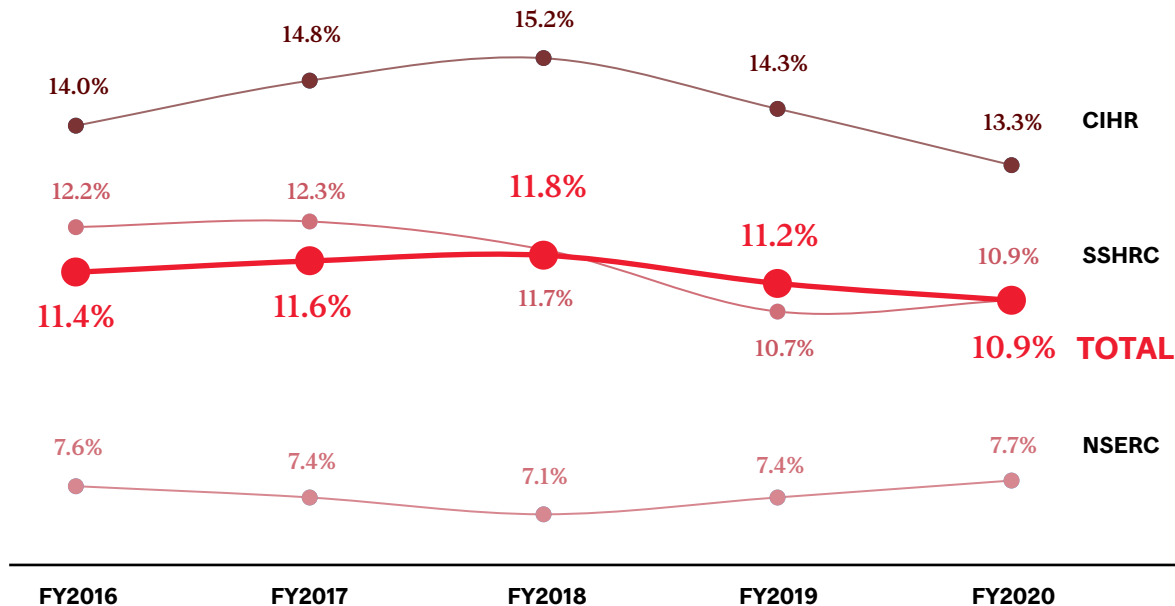


FIGURE 5: MCGILL'S SHARE OF U15 TRI-AGENCY FUNDING, FY2016 TO FY2020

Source: OST

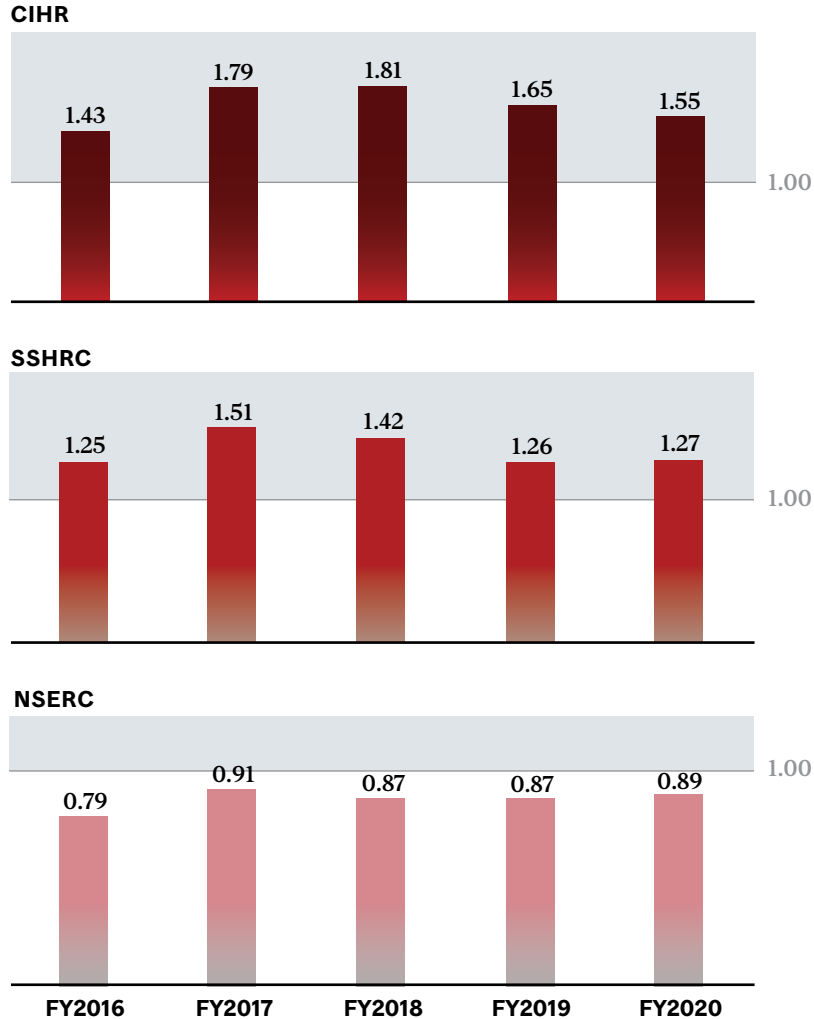


FIGURE 6: MCGILL'S TRI-AGENCY FUNDING EFFICIENCY INDEX (FEI), FY2016 TO FY2020

Source: OST and Statistics Canada

McGill's shares of both NSERC and SSHRC funding in the U15 increased from FY2019, while its share of CIHR funding decreased. However, regardless of this drop in share of U15 CIHR funding, it is important to note that McGill still secured a larger than expected amount of CIHR funding in FY2020 relative to its faculty size. This is illustrated in Figure 6 by the Funding Efficiency Index (FEI).

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 1.55 and 1.27 respectively in FY2020, above the gray line. For NSERC, McGill had an index of 0.89 in FY2020 and is below the line, which indicates that McGill's share, relative to all the universities in the U15 (McGill excluded), is smaller.

Fonds de recherche du Québec Funding

In Quebec, 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).

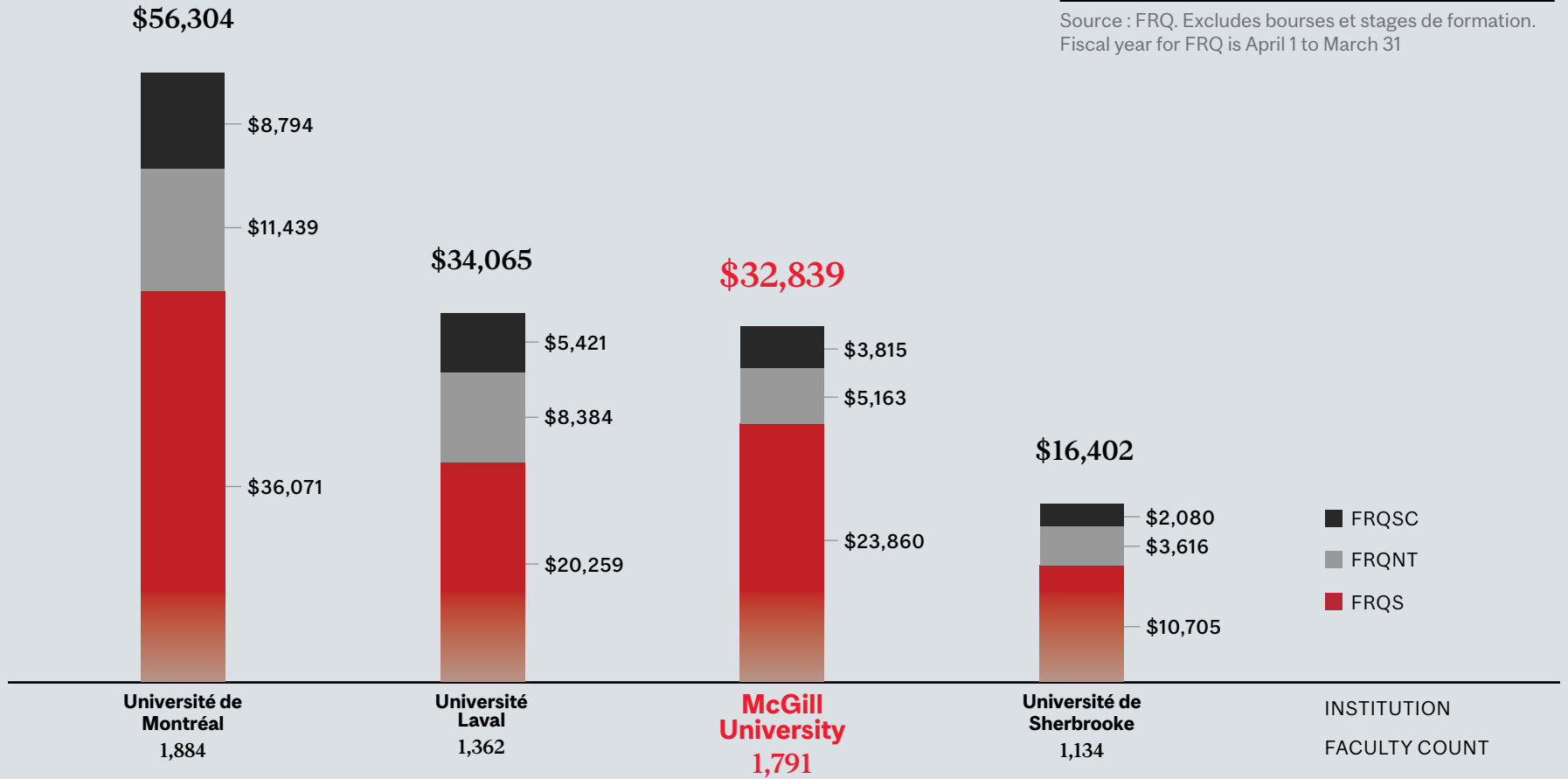
The distribution of FRQ funding across the three agencies tends to mirror the University's Tri-Agency funding; FRQS composes the majority of FRQ funding, as CIHR comprises the majority of Tri-Agency funding.

FRQ has historically been the largest source of provincial research funding for McGill. This tradition continued in FY2020, where McGill received the

third largest total amount of FRQ research funding in the province, a slight dip from FY2019 where McGill was second in the province. A comparison between FRQ funding for the QC4 is presented in Figure 7 and shows that while other Quebec universities had an increase in FRQ funding from FY2019, McGill's funding remained relatively unchanged.

FIGURE 7: QC4 TOTAL FRQ FUNDING (\$000'S), FY2020

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



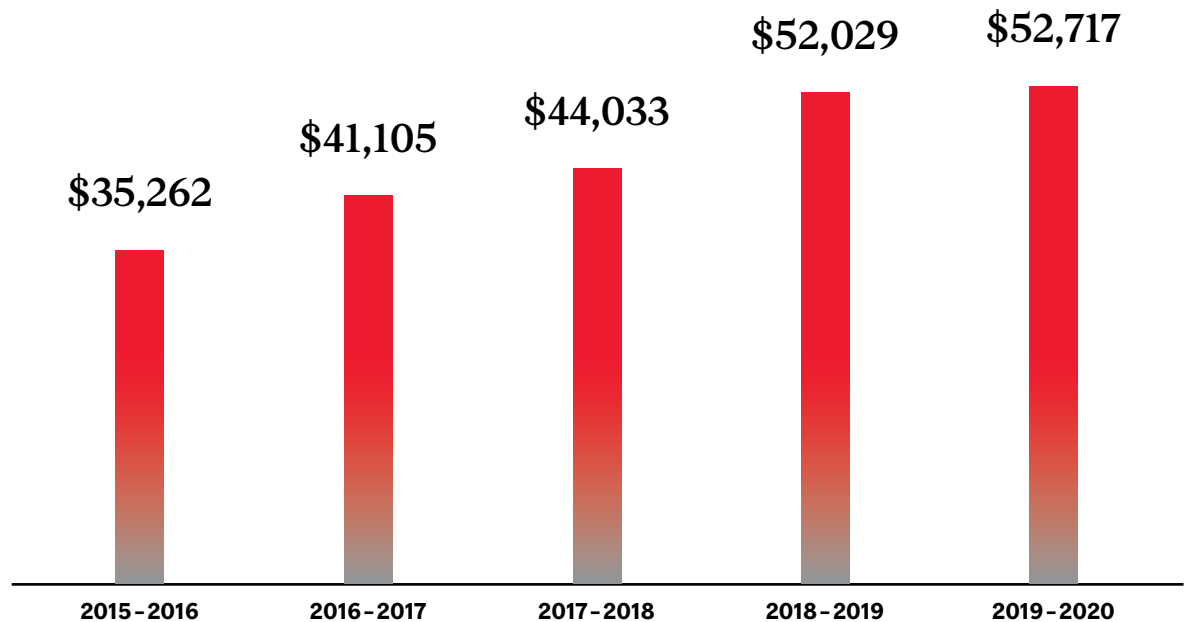
Industry-sponsored Research Funding

In FY2020, industry sponsors awarded a total of \$52.7M to McGill in grants, contracts, and clinical trial funding.

There has been a steady increase over the last five years in industry sponsored research funding (Figure 8), an upward trend that demonstrates McGill's commitment to strengthening its innovation and partnership agenda, one of the key objectives in the University's Strategic Research Plan.

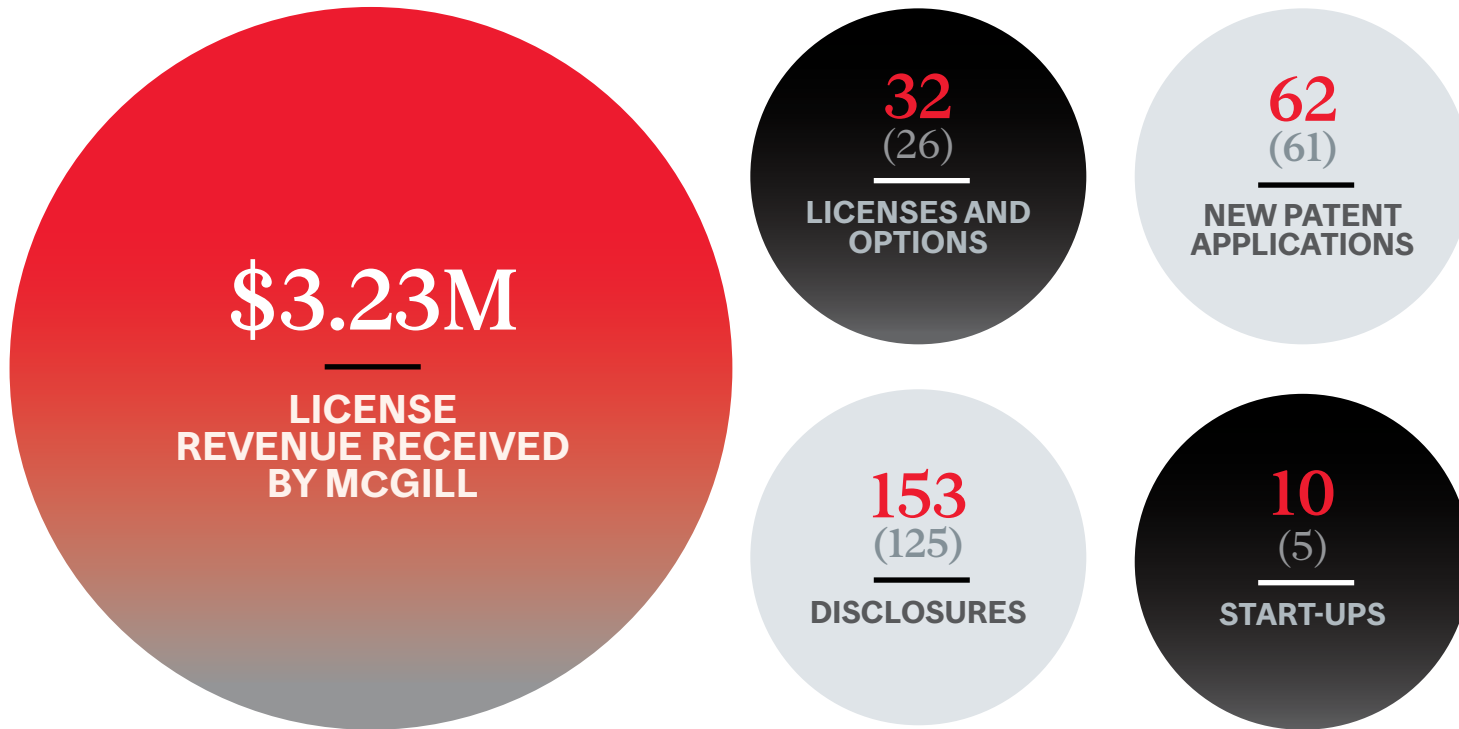
FIGURE 8: MCGILL'S INDUSTRY-SPONSORED RESEARCH FUNDING OVER FIVE YEARS (\$000'S), FY2020

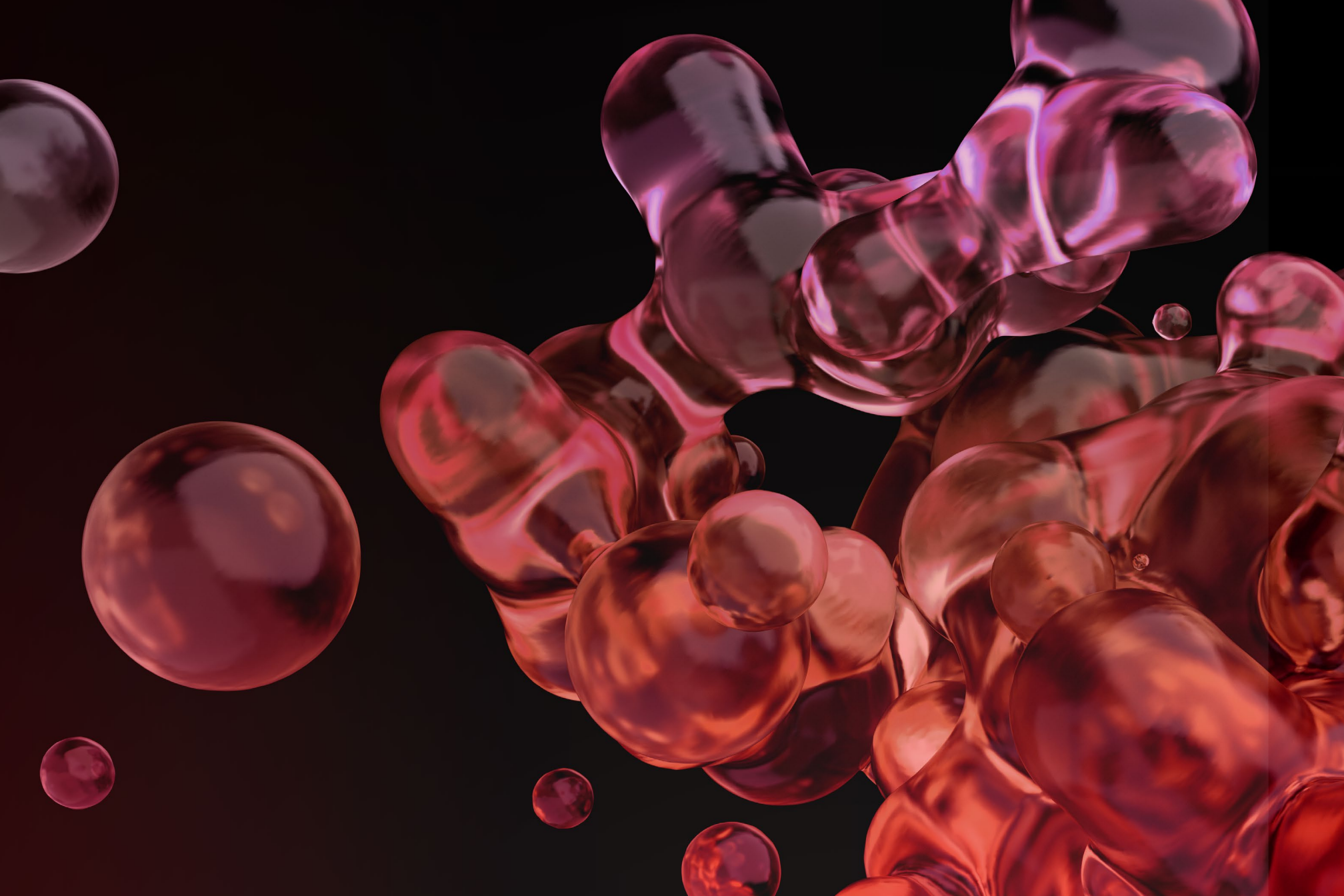
Source: CAUBO, includes industry sponsored donations and grants and contracts.



¹Excludes industry contributions in-kind to CFI awards.

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. In the 2020 calendar year, McGill received \$3.23M in license revenue. This and other key, non-cumulative metrics related to technology transfer are included below (numbers in brackets are from 2019):





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 United Nations Sustainable Development Goals

In the last few years, additional bibliometrics related to the United Nations Sustainable Development Goals (SDGs) have become more commonly reported. The UN SDGs are a set of 17 goals designed to challenge the global community to build a better world, by the year 2030. SciVal contains bibliometric data for 16 of the 17 goals, based on search queries built by

SciVal (Elsevier). This SDG bibliometric data is used as part of the Times Higher Education (THE) Impact Rankings. McGill's contributions to each of the SDGs are shown in Figure 9 (on the following page). By far, the greatest number of publications are for SDG 3, Good Health and Well-Being.



FIGURE 9: SCHOLARLY OUTPUT FOR MCGILL FOR EACH SDG, FY2016 TO FY2020

Source: SciVal. Data as of January 31, 2022

General Bibliometrics

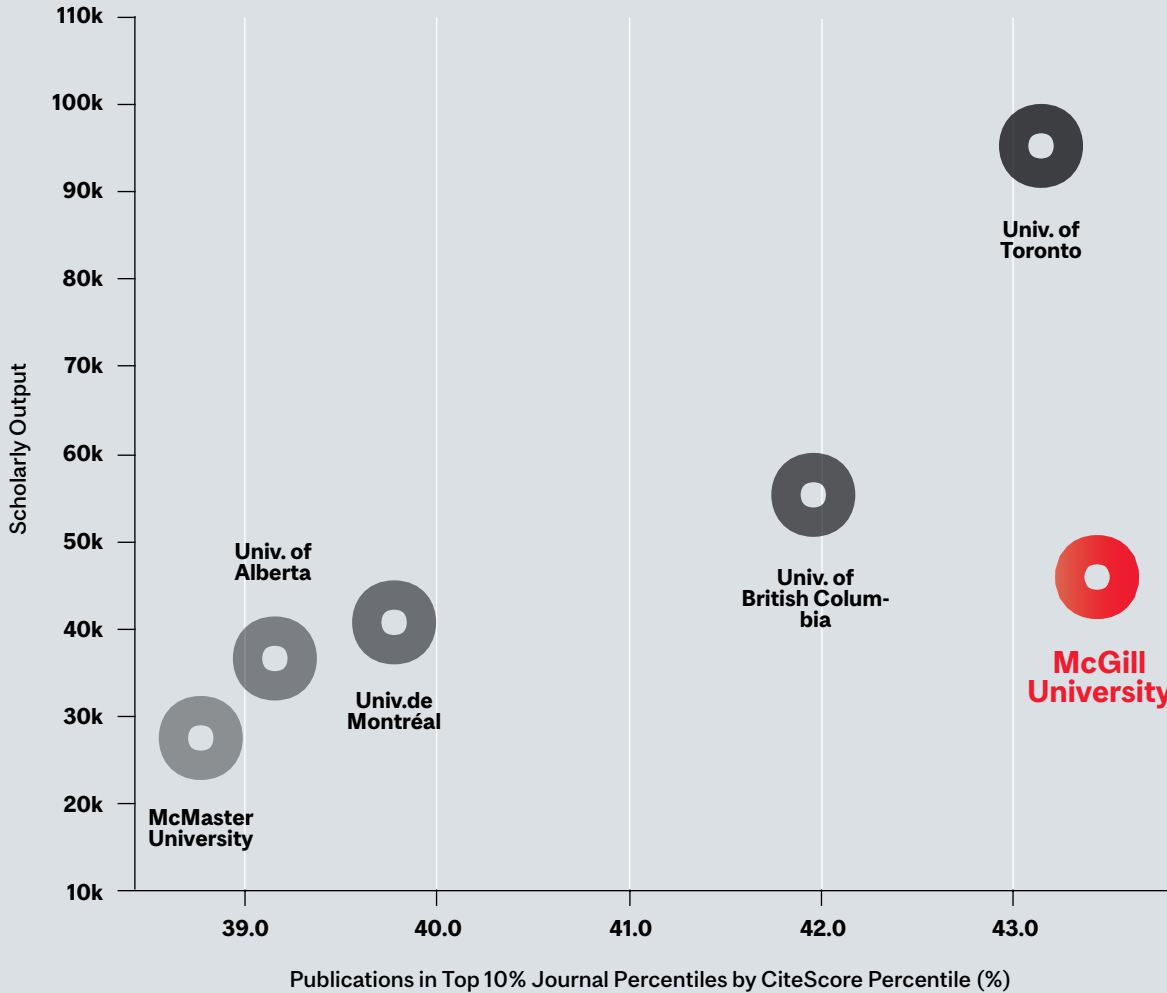
Table 4 provides an overview of McGill’s scholarly output and research impact over the last 10 years. Since 2011, McGill has shown a consistent yearly increase in scholarly output (number of publications). Field-Weighted Citation Impact (FWCI) has also increased, with slight decreases in the last couple of years for which citation data is not yet complete; the FWCI is a time

dependent metric. It 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 indicates that publications have been cited as would be expected based on the global average for similar publications. McGill’s FWCI has consistently been well over 1.00.

TABLE 4: KEY BIBLIOMETRICS FOR MCGILL, 2011 TO 2020

METRIC	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
SCHOLARLY OUTPUT	7117	7839	8191	8381	8654	8636	9008	9160	9265	9681
FIELD-WEIGHTED CITATION IMPACT	1.75	1.88	1.79	1.83	1.95	1.96	1.85	1.86	1.81	1.56
PUBLICATIONS IN TOP 10% SCOPUS SOURCES (%)	41.3	41.6	44.4	41.7	44.9	45.6	46.3	41.8	42.8	41.1

Source: SciVal. Data as of January 22, 2021



Among the U6, McGill is third in scholarly output, but has the highest percentage of publications in the top 10% journal percentiles at 43.4%, followed closely by the University of Toronto at 43.1% (Figure 10).

FIGURE 10: SCHOLARLY OUTPUT AND PERCENT OF PUBLICATIONS IN TOP JOURNAL PERCENTILES FOR THE U6

Size of bubble reflects scholarly output, 2016 to 2020

Source: SciVal. Data as of January 30, 2022

Table 5 provides a list of the international 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 2400 co-authored publications. The top 10 institutions collaborating with McGill come from three countries: the United States, France and the United Kingdom.

TABLE 5: TOP 10 INTERNATIONAL INSTITUTIONS COLLABORATING WITH MCGILL BY NUMBER OF CO-AUTHORED PUBLICATIONS, 2016 TO 2020

RANK	INSTITUTION	COUNTRY	CO-AUTHORED PUBLICATIONS
1	Harvard University	United States	2428
2	CNRS	France	1930
3	Université de Paris	France	1297
4	University of Michigan, Ann Arbor	United States	1286
5	University College London	United Kingdom	1260
6	University of Pennsylvania	United States	1236
7	Stanford University	United States	1210
8	University of Washington	United States	1185
9	University of Oxford	United Kingdom	1171
10	Columbia University	United States	1140

Source: SciVal. Data as of January 4, 2022

International Partnerships

Research is truly a global effort, as highlighted by the recent pandemic.

The University's Strategic Research Plan has identified the key objective of stewarding research trajectories towards collaborative, large-scale initiatives, and international partnerships to further capitalize on our strengths for innovative research. Two strategic collaborations with international partners in 2021 are highlighted below.

McGill-Technical University of Munich MOU

Technical University of Munich (TUM) and McGill signed a Memorandum of Understanding (MOU) to facilitate research collaborations between the two institutions. TUM is one of the highest ranked schools in the European Union (EU) and counts 17 Nobel laureates among its researchers and alumni. The move comes as Canada and Germany looks back on 50 years of scientific and technological cooperation, which began in 1971. Since that time, the two nations have been vigorous and active partners in over 500 research projects.

McGill-Douglas-Max Planck Institute of Psychiatry International Collaborative Initiative

The McGill-Douglas-Max Planck Institute of Psychiatry International Collaborative Initiative in Adversity and Mental Health is the first international effort devoted to understanding the biology behind how early-life adversity can increase the risk of psychiatric disorders over the course of an individual's life.

This initiative, made possible in part through funding from Canada First Excellence Research Fund, brings together top talent from the Douglas Research Centre and Germany's Max Planck Institute of Psychiatry to investigate the biological causes of mental illness and improve prevention and treatment options available to the public. It will offer an important platform for scientists to conduct joint research and training, and share unique resources, including big data sets and facilities for conducting research with animal and human populations.

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, Artists and Scientists 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 over 200 College Members. In 2021, 12 McGill faculty became Fellows, Members of the College or received an award/medal. In addition to the RSC, McGill faculty have been successful in obtaining many other awards and honours in the 2021 calendar year, as highlighted in the next section.

RSC MEDALS

- **MCLAUGHLIN MEDAL**
ALAN EVANS
Dept. of Neurology and Neurosurgery
- **SIR JOHN WILLIAM DAWSON MEDAL**
CATHERINE POTVIN
Department of Biology

RSC FELLOWS

- FRÉDÉRIC CHARBONNEAU
Dép. des littératures de langue française, de traduction et de création
- ANDREW HENDRY
Department of Biology
- GREG MATLASHEWSKI
Department of Microbiology and Immunology
- DIETLIND STOLLE
Department of Political Science
- GUSTAVO TURECKI
Department of Psychiatry
- GEORGE WEISZ
Dept. of Social Studies of Medicine
- KARIM ZAGHIB
Dept. of Mining and Materials Engineering (former faculty at McGill)

RSC COLLEGE MEMBERS

- ROWAN BARRETT
Department of Biology
- DARYL HAGGARD
Department of Physics
- ANNA WEINBERG
Department of Psychology



Awards and Prizes in 2021

In 2021, researchers at McGill received numerous awards and prizes. A few of these are highlighted below.

JANUARY

MACLEAN'S, THE POWER LIST

CINDY BLACKSTOCK (School of Social Work), was named one of the nation's 50 most influential people according to Maclean's Magazine. The annual list is comprised of those Canadians, "who are breaking ground, leading the debate and shaping how we think and live." Calling Blackstock, "a relentless champion for Indigenous children's rights," Maclean's ranked her 27th on the most-influential list.

[\[More »\]](#)

MARCH

SUFFRAGE SCIENCE AWARD, ENGINEERING AND PHYSICAL SCIENCES

VALÉRIE ORSAT (Department of Bio-resource Engineering) was named one of 12 recipients of an Engineering and Physical Sciences Suffrage Science award, announced on International Women's Day. Founded by the MRC London Institute of Medical Sciences (LMS) ten years ago, the Suffrage Science awards celebrate women in science for their outstanding scientific research, communication work, and support of women in STEM. [\[More »\]](#)

MAY

NATIONAL ORDER OF QUEBEC

Quebec Premier François Legault, announced the appointment of 43 individuals to the National Order of Quebec, including MORAG PARK (Gerald Bronfman Department of Oncology), who was appointed Chevalière. Park was nominated by Maryse Lassonde, President of the Quebec Superior Council of Education with the support of the Quebec Breast Cancer Foundation (QBCF), with the additional support of McGill's Faculty of Medicine and Health Sciences. [\[More »\]](#)

JUNE

MCGILL PRIZE FOR OUTSTANDING EMERGING RESEARCHERS

Since 2013, Principal and Vice-Chancellor Suzanne Fortier has honoured 21 of McGill's most talented and accomplished early-career researchers with the prestigious Prize for Outstanding Emerging Researchers. In June, three up-and-coming research stars – JONATHAN AFILALO (Department of Medicine), AGUS SASMITO (Department of Mining and Materials) and ANNA WEINBERG (Department of Psychology) joined their ranks. [\[More »\]](#)

SHAW PRIZE IN ASTRONOMY

Victoria Kaspi (Department of Physics), won the 2021 Shaw Prize in Astronomy. The prize salutes researchers who achieved significant breakthroughs in academic and scientific research or

applications, and whose work has resulted in a positive and profound impact on mankind. [\[More »\]](#)

NOVEMBER

NSERC JOHN C. POLANYI AWARD

HANADI SLEIMAN (Department of Chemistry) is the 2021 recipient of the Natural Sciences and Engineering Research Council of Canada (NSERC) John C. Polanyi Award. Sleiman and the Sleiman Group created a unique class of DNA nanostructures for precision drug delivery. [\[More »\]](#)

DECEMBER

CANADIAN ASSOCIATION OF PHYSICISTS MEDALS

SIMON CARON-HUOT (Department of Physics) is the winner of the Canadian

Association of Physicists (CAP) Herzberg Medal, which recognizes significant achievements for early-career researchers. The CAP-TRIUMF Vogt Medal, which recognizes and encourages significant experimental or theoretical contributions to subatomic physics, goes to SANGYON JEON (Department of Physics). ROBERT BRANDENBERGER (Department of Physics) is recognized with the CAP Medal for Lifetime Achievement in Physics. [\[More »\]](#)

“Through two centuries and now throughout two years of an evolving pandemic, McGill’s research community has embraced change, forged new collaborations, and accelerated breakthroughs.”

Dr. Martha Crago, Vice-Principal [Research + Innovation]



McGill

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Innovation

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