

Memorandum

Office of the Vice-President (Research and Innovation)

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TO: Board of Governors
FROM: Professor Martha Crago, Vice-President (Research and Innovation)
SUBJECT: Annual Report on Research and Innovation 2023
DATE: April 25, 2024
DOCUMENT #: GD23-60

ACTION REQUIRED: INFORMATION APPROVAL/DECISION

ISSUE & EXPECTED OUTCOME 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 FY2022. 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

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-President (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-President (Research and Innovation), followed by presentations to the senior administration and Senate (April 18, 2024).
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 2023

Report *on* Research + Innovation 2023



McGill

Research and
Innovation

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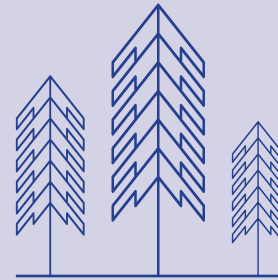
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LAND
ACKNOWLEDGEMENT



McGill University is located on land, which has long served as a site of meeting and exchange among Indigenous peoples, including the Haudenosaunee and Anishinaabeg nations. McGill honours, recognizes, and respects these nations as the traditional stewards of the lands and waters on which the university stands today.



Message
from
Martha Crago,
Vice-President,
Research and
Innovation



It is with great pleasure that I share the accomplishments of McGill's research community in the 2023 Annual Report on Research and Innovation,

which features compelling stories about the remarkable achievements, groundbreaking discoveries, and transformative collaborations led by our academic community. Equally fascinating are the stories behind the numbers, as they relate to research funding and our efforts to bring new ideas and technologies to market.

From international networks of biomedical and health sciences research to innovative projects in advanced renewable materials, energy, agricultural, and transportation systems, we continue to amplify our research impact by pursuing the goals at the heart of our Strategic Research Plan (2018-2025).

Among the top 30 universities in the QS world university rankings, McGill was also lauded by the QS for advancing the United Nations Sustainable Development Goals. In Canadian rankings, McGill has consistently come out on top, rated Canada's best medical doctoral university by Maclean's Magazine for nineteen years running. The strength of the university's reputation for excellence is recognized at home and abroad.

This report proves that research partnerships and collaboration are the building blocks of McGill's DNA. In 2023, McGill received a landmark research investment—the largest in McGill's history—from the Canada First Research Excellence Fund for DNA to RNA (D2R): An Inclusive Canadian Approach to Genomic-based RNA Therapeutics. D2R is focused on groundbreaking research

in genomic-based RNA therapeutics, with an approach including underserved groups. The \$165 million investment by the Government of Canada was bolstered by another \$188 million from industry, academic, government, community, and non-profit partners on four continents.

Expanding the university's international partnerships, including in genomic medicine, is a priority of mine and of McGill's researchers. Genomic research holds incredible promise in the battle against a wide range of diseases, including cancer. Many challenges remain, particularly in translating discoveries into effective therapies.

It is through collaborative approaches that progress will be made. In this field, McGill is working together with some truly incredible partners, including with Kyoto University and the Institutes Pasteur.

“

It is through collaborative approaches that progress will be made.

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McGill’s commitment to fostering excellence in research remains unwavering as it continues to promote a culture of discovery, collaboration, and equity.

”

And we have an important relationship with Japan’s RIKEN Center for Integrated Medical Sciences.

Here in Montreal, the Victor Phillip Dahdaleh Institute of Genomic Medicine is also leading breakthrough research aimed at developing novel diagnostic tools, targeted treatments, and new pharmaceuticals, as well as vaccines, and the data-sharing policy tools and frameworks to implement these innovations.

Since my appointment as Vice-President, Research and Innovation, in 2017, I have been honoured to work in service of our dedicated researchers. As I prepare to conclude my mandate as Vice-President at the end of June, I warmly thank every member of our research community at McGill and affiliated hospitals and research institutes, the dedicated staff in Research and Innovation, as well as the donors and

funding partners whose collaboration allows us to strive for excellence.

As I reflect on the accomplishments of the previous year—and over the previous seven years— I am reminded of the crucial role that McGill plays in supporting and nurturing the research ecosystem in Quebec, in Canada and abroad. McGill’s commitment to fostering excellence in research remains unwavering as it continues to promote a culture of discovery, collaboration, and equity.

Martha Crago

Vice-President, Research and Innovation

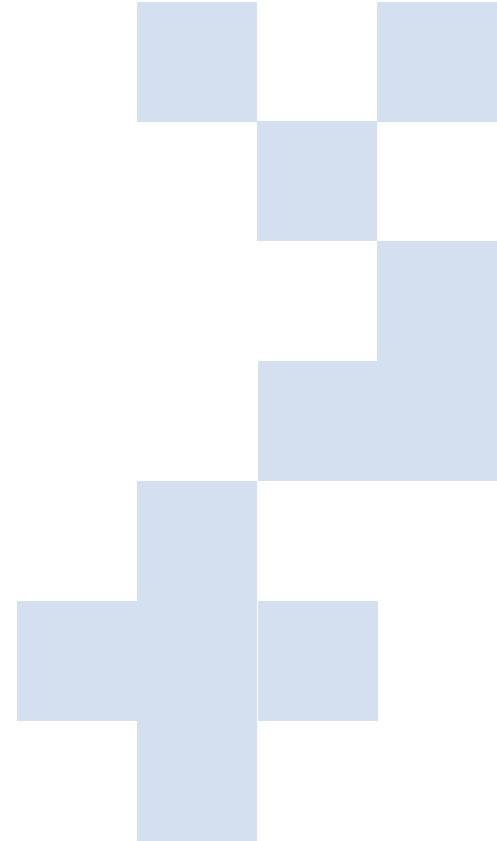


Year
in
Review

RESEARCH
IMPACT



McGill consistently ranks among the best research-intensive universities in Canada and the world, including topping Maclean's best medical doctoral university category for 19 years running. Funding from a variety of sources, including federal, provincial, not-for-profit, industry, and municipal grants, powers McGill's vision to be the premier research-intensive university in Canada.





\$699M

**TOTAL RESEARCH
FUNDING**

[CAUBO, FY2022]



#1

**MEDICAL
DOCTORAL
UNIVERSITY**

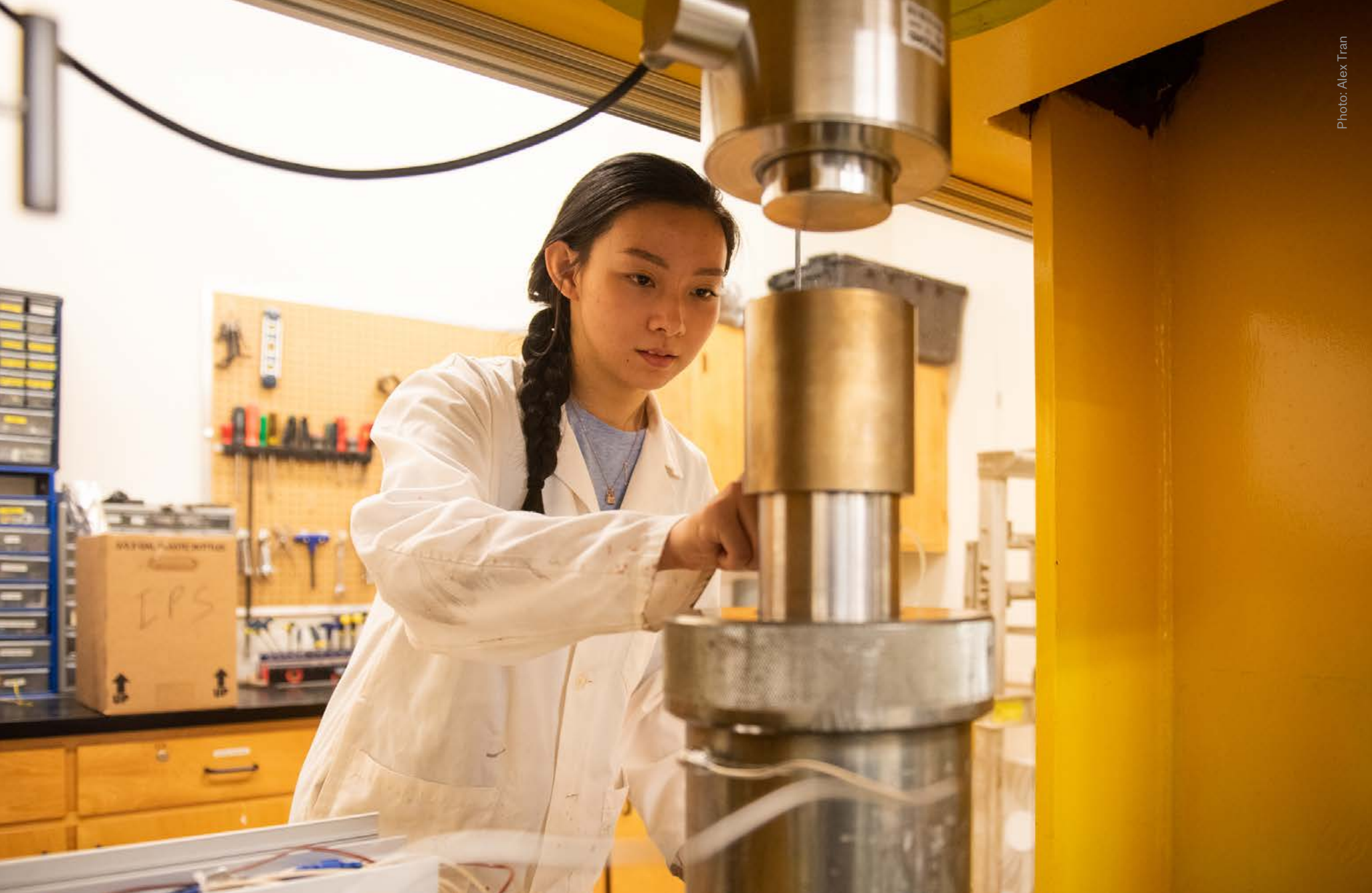
Maclean's Magazine
University Rankings, 2024



QS World University Rankings, 2024



Times Higher Ed World University Ranking 2024



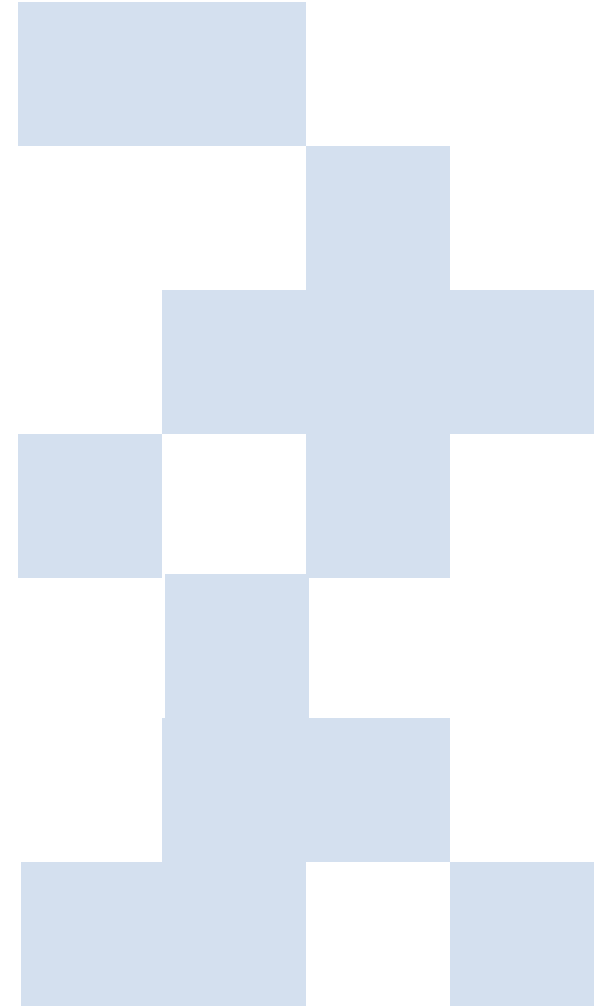


FUNDING HIGHLIGHTS + PARTNERED RESEARCH

MAJOR GRANTS + AWARDS

**\$353 MILLION FROM THE CANADA FIRST RESEARCH EXCELLENCE FUND
AND PARTNERS**

The initiative will develop breakthrough RNA treatments for a wide spectrum of diseases, such as those caused by emerging viruses that threaten our society with pandemics, rare genetic disorders that are incurable or prohibitively expensive to treat, and cancer, which is the number one cause of death in Canada.

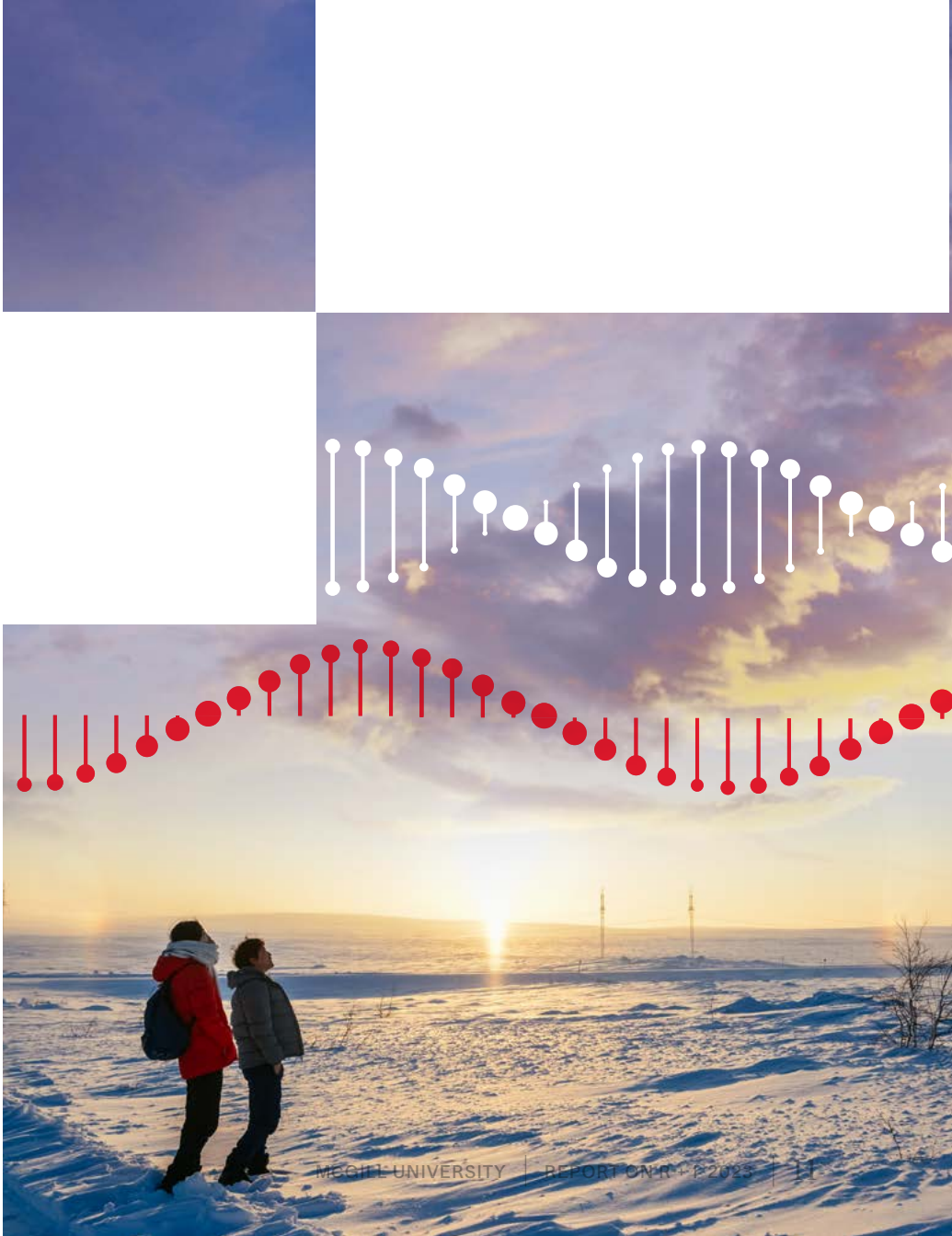


In April 2023, McGill University was proud to announce an investment of \$165 million in research from the federal government through the Canada First Research Excellence Fund (CFREF) to pursue its world leading initiative, **DNA to RNA: An Inclusive Canadian Approach to Genomic-Based RNA Therapeutics (D2R).**

The goal of D2R is to develop an internationally leading program of excellence and innovation in the discovery and development of genome-guided, RNA-based precision medicines and associated computational tools, along with a clinical accelerator to ensure application of our discoveries for all Canadians and for the world.

The D2R initiative continues to grow in personnel and research capacity, and to deepen the involvement of its 50+ partners –including 32 corporate partners, who have matched public funding for the project, bringing the total investment in this dynamic research to \$353 million.

D2R is working collaboratively with underserved and equity-seeking populations, including Canada’s Indigenous populations, to ensure RNA therapeutics are made widely available and in a manner that is inclusive and beneficial to all Canadians.





Canadian academic partnering institutions include the University of Ottawa, the University of British Columbia (UBC), McMaster University and l'Université de Sherbrooke. International partners include the Riken Institute, Les Instituts Pasteur, Université de Bordeaux, Kyoto University and Oxford University.

[Read more >](#)

“

What makes D2R so unique is that we not only want to make breakthroughs that are medically innovative, but equitable as well. Medical innovations often go to the wealthiest people first, but that's not necessarily who needs them the most. That's why we will combat inequity by including, from the outset, populations that have been historically excluded from medical research.

”

Amélie Quesnel-Vallée

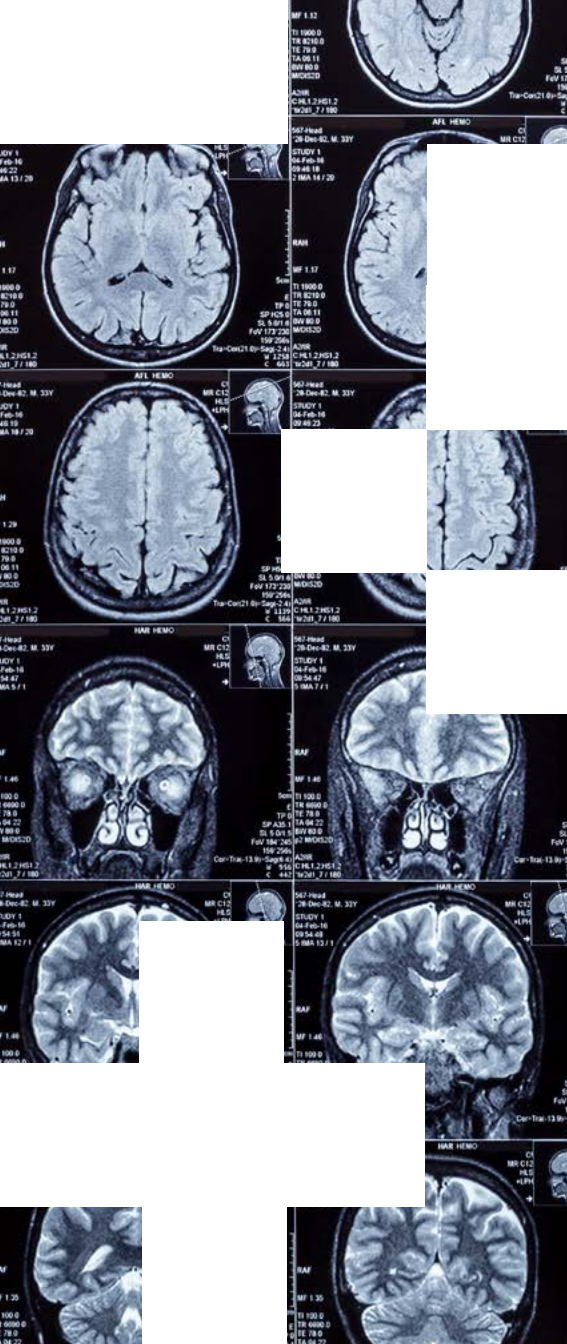
Professor of Sociology

Co-Scientific Director, D2R

Canada Research Chair in Policies and Health Inequalities

Director, McGill Observatory on Health and Social Services Reforms

Inaugural Chair, Department of Equity, Ethics and Policy



CANADA FOUNDATION FOR INNOVATION (CFI) INNOVATION FUND (IF) COMPETITION FUNDS EIGHT MCGILL-LED PROJECTS

The CFI-IF provides continued investments in research infrastructure.

In the 2023 IF competition, McGill was awarded \$107.1 million as the lead institution on eight projects, including funding from the CFI, the Government of Quebec, and in-kind contributions.

Among the funded projects is the **McGill Translational Platform in Autism Research (MTPAR)**. One in 66 Canadians and 1-2% of children worldwide are diagnosed with an autism spectrum disorder (ASD), yet little is known about why outcomes in children and adults are so variable. This project, awarded \$27.1 million in funding from the CFI IF, is led by Guy Rouleau, Professor of Neurology and Neurosurgery and Director of the Montreal Neurological Institute-Hospital. This funding will help researchers to advance understanding of the underlying mechanisms of ASDs and to develop biomarkers for early diagnosis.

Also funded in this round is the project, **Nucleic Acids for Precision Medicine**, led by Professor of Chemistry and Canada Research Chair in DNA Nanoscience, Hanadi Sleiman. With \$7.2 million in funding from the CFI IF, Sleiman's research group will acquire innovative equipment to develop therapeutics for precision cancer therapy.



©Sylvie Li Shoot Studio

Despite a rising global demand for this class of novel drugs, there are barriers preventing their widespread adoption and production. With this equipment, ten collaborators and 13 users – who represent some of the most innovative groups in nucleic acids chemistry, biology, and medicine—will work together to accelerate Canada’s emergence as a dynamic region for nucleic acid therapeutics discovery research and translate much-needed tangible novel cancer therapeutics and vaccines to the clinic.

McGill is a partner on an additional seven projects with other Canadian universities, with those projects totalling \$183.7 million. Combined, McGill is leading or partnering on 15 projects, or 15 per cent of all funded projects.

“

This funding supports transformative research programs that will make a positive impact on society. For example, by developing new preventative strategies and therapies for cancer.

”

Hanadi Sleiman

FIRST-OF-ITS-KIND PAN-CANADIAN GENOME LIBRARY

The Canadian Institutes of Health Research (CIHR) invested \$15 million in a first-of-its-kind genome library to make genomic research data more sustainable, secure, and equitable.

McGill is playing a leading role in establishing the **Pan-Canadian Genome Library**, which will allow for easier sharing of genomic data across the country, and aid in the development of a national strategy to capture, store and access Canadian data in an equitable, secure, and sustainable manner. The funding builds on investments from the Government of Canada's Drugs for Rare Diseases Strategy. The effort is a collaboration with CGEn HostSeq, the Digital Research Alliance of Canada, Care for Rare, Terry Fox Research Institute (Marathon of Hope), and Genome Canada (All for One).

[Read more >](#)





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“

Over the last two decades, billions have been invested in genomics in Canada and the potential impact on medicine for the country is immense. The Genome Library aims to realize this potential by organizing and sharing inclusive genomic data efficiently and ethically to support research and the clinical care of people across Canada.

”

Guillaume Bourque
Professor of Human Genetics
Director, Bioinformatics
at the McGill Genome Centre





Photo: Andre Renard, Dunlap Institute of Astronomy & Astrophysics, U of Toronto/CHIME

WITH NSERC ALLIANCE GRANT FUNDING, TELESCOPE SURVEYS THE STARS

In 2023, the Natural Sciences and Engineering Research Council of Canada (NSERC) awarded the CFI-funded Canadian Hydrogen Intensity-Mapping Experiment (CHIME) \$3.5 million in operating funds to be distributed over five years.

CHIME is a radio telescope that has transformed the field of transient astrophysics, discovering over 4,000 fast radio bursts (FRBs). CHIME has become an important part of the global effort to study radio pulsars—rapidly rotating, highly magnetized

neutron stars—and fast radio bursts, an effort that is led by McGill’s Professor of Physics, Vicky Kaspi, principal investigator of the CHIME Fast Radio Burst Project.

This five-year grant allows for continued operation of CHIME, so that it can accomplish multiple forefront science goals, and continue to engage the Canadian astrophysical community and researchers from around the globe.

INTERNATIONAL PARTNERSHIP: NEW GLOBAL CLIMATE CENTER ON AI AND BIODIVERSITY CHANGE

The accelerated loss of biodiversity due to climate change is a pressing issue facing the scientific community, which is currently lacking adequate data and tools to protect ecosystems under threat. In 2023, \$5 million was awarded by the National Science Foundation to researchers at Ohio State, the University of Pittsburgh, and the Massachusetts Institute of Technology to establish the Global Climate Center on AI and Biodiversity Change (ABC), to help provide solutions and to meet the challenges posed by the biodiversity crisis. Awarded a \$3.75 million grant through the NSERC Alliance program, McGill is participating in the Centre's research as a member of the Canadian team, which unites researchers from McGill, the University of British Columbia (UBC), and the University of Guelph.

[Read more >](#)

RESEARCH AND INNOVATION CHAIR IN ANIMAL WELFARE AND ARTIFICIAL INTELLIGENCE (WELL-E)

In 2023, McGill and the Université du Québec à Montréal (UQAM) announced the creation of a five-year, \$5 million Research and Innovation Chair in Animal Welfare and Artificial Intelligence (WELL-E), funded by a grant from NSERC Alliance and PROMPT, a fiduciary of the Quebec Ministry of Economy, Innovation and Energy. Led by McGill's Professor Elsa Vasseur (Department of Animal Science), and UQAM's Professor Abdoulaye Baniré Diallo (Department of Computer Science), the project relies on the use of artificial intelligence (AI) and Internet of Things (IoT) in pursuit of improved cow welfare and longevity. This first-of-its-kind project involves a broad consortium of industry stakeholders from Canada and will create a digital living lab. Industrial partners include Novalait, Dairy Farmers of Canada (DFC), Dairy Farmers of Ontario (DFO), Les Producteurs de Lait du Québec (PLQ), and Lactanet.

[Read more >](#)



THREE FRQS DUAL CHAIRS IN ARTIFICIAL INTELLIGENCE AND HEALTH

The rapid development and deployment of artificial intelligence demands that the best and brightest minds work together to train the next generation of research leaders.

In 2023, the Fonds de Recherche du Québec Santé (FRQS) announced \$4.5 million for three Dual Chairs in Artificial Intelligence and Health/Digital Health and Life Sciences, all three of which were awarded to teams co-directed by McGill researchers. The program brings together researchers with complementary expertise in AI, data sciences and life sciences to address issues and challenges impacting the health of Canadians and the efficiency and effectiveness of the healthcare system.

Professor of Neurology and Neurosurgery and Director of the Centre for Research in Neuroscience (RI-MUHC), Keith Murai, and McGill Professor of Computer Science, Kaleem Siddiqi, will co-direct the Dual AI Chair, **Cracking the nanoscopic structural code of the brain: Artificial intelligence and computer vision approaches for brain health**, which promises to advance understanding of Alzheimer's and other neurodegenerative diseases.

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The fact that McGill researchers are co-directing all three FRQS Dual AI Chairs is truly impressive, and a testament to the expansive expertise and collaborative spirit of our AI, data sciences, and life sciences research communities.

”

Martha Crago

Vice-President, Research and Innovation

McGill Associate Professor of Medical Physics, John Kildea, and Associate Professor in the Department of Computer Engineering and Software Engineering at Polytechnique Montréal, Amal Zouaq, will co-direct the Dual AI Chair, **Smart data for smart cancer care** – a research program that combines expertise in natural language processing, semantic web technologies, and patient-centered data to create knowledge bases in oncology. With the goals of reducing risk and making cancer treatment safer and more effective, Kildea and Zouaq are collaborating to build an AI solution that will combine, consolidate, and exploit unstructured health data.

Mathieu Blanchette, Associate Professor in McGill’s School of Computer Science will co-direct the Dual AI Chair, **Développement d’approches en intelligence artificielle pour élucider les codes de régulation des ARN et exploiter leur potentiel thérapeutique**, with Éric Lécuyer of the Montréal Clinical Research Institute (IRCM). This program aims to tap into the potential of AI to facilitate discoveries in RNA biology and therapeutics.

[Read more >](#)

MCGILL AND MODERNA EXPAND RESEARCH COLLABORATIONS

McGill and Moderna, a biotechnology company pioneering messenger RNA (mRNA) therapeutics and vaccines, have been enhancing their collaborations in various research areas, including in lipid nanoparticles (LNPs).

LNPs are critical components in mRNA medicines such as vaccines, as they are the primary delivery method of mRNA strands to the target cells

In 2023, McGill signed agreements with Moderna for two innovative research projects:

Julia Burnier, Assistant Professor (Departments of Oncology and Pathology), and Scientist in the Cancer Research Program at the Research Institute of the McGill University Health Centre (RI-MUHC), is investigating ways to enhance the cell-specific delivery of cargo like mRNA. Extracellular vesicles

(EVs) are naturally occurring nanoparticles that are released by virtually all cells and can deliver cargo to specific cells. Burnier's research aims to develop a cell delivery system using microfluidics that emulates the activity of EVs, which could help optimize delivery to targeted recipient cells. This offers the possibility of developing therapies beyond vaccines, such as in precision oncology and other illnesses.

David Juncker, Professor and Chair (Department of Biomedical Engineering) is undertaking a study to characterize LNPs so that their specific size

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McGill has a rich pool of talent and internationally recognized research facilities dedicated to mRNA and nanoparticle sciences research, but in the global effort to develop novel therapies, collaboration between academia and industry is critical.

”

Martha Crago
Vice-President, Research and Innovation

and payload distribution may be better understood. Standard techniques cannot simultaneously quantify the size and payload of individual LNPs. Often only averages are measured, masking individual variation and the relationship between size and payload. Using a new technique developed by Juncker’s lab, the team will measure the size and payload of thousands of individual LNPs and verify how many LNPs carry a payload such as mRNAs for vaccines. The results will guide the optimization of LNP manufacturing and could be used for quality control for the manufacture of mRNA-based vaccines and therapeutics.

McGill researchers are also contributing to Moderna’s mRNA Access program, which aims to accelerate the development of new vaccines and medicines using mRNA technology for emerging and neglected infectious diseases.



The Office of Innovation and Partnerships (I+P) is committed to ensuring that McGill's research has an impact on society through partnerships with industry, as well as by bringing novel inventions to commercial reality.

In 2022, the most recent year of official reporting, new patent applications increased by 18 per cent, and the number of new start-up companies based on research reached an all time high of 15.

The announcement of the landmark \$165 million CFREF grant for McGill's ambitious D2R initiative marked a milestone for the industry partnerships

team of I+P, who successfully arranged for 32 corporate partners to participate in the comprehensive plan to leverage McGill's unique strengths in RNA research and discovery. These partners agreed to match public funding for the project, bringing the total to be invested in this dynamic research to \$353 million.

FONDS D'INNOVATION FUND



MCGILL INNOVATION FUND SUCCESS STORIES

Through activities such as the McGill Innovation Fund (MIF), I+P is fostering an entrepreneurial mindset at McGill, providing funding and coaching to inventors and startup companies.

Several MIF teams were successful in leveraging their award into securing funding from other sources, including the Program to Support Organizations, managed by the Quebec Ministry of Economy, Innovation and Energy.



Altiro Energy recently secured \$250,000 in private financing

for their alternative energy solution. This comes in addition to deals with Hydro Québec and Box One, marking a successful year for the team.

DendroTEK, began commercial sales of their cell-culture enhancement technology, and hit their initial sales target of \$20,000, several months ahead of schedule.



HisTurn, a company devoted to addressing the detection and treatment of male infertility, was awarded \$233,000

to accelerate the commercialization of its offering. The team is in talks with major North American fertility clinic operators to reach that goal.



Capcyte received \$116,000 in funding from several sources, which it will use to examine the feasibility of utilizing their surface enhancing technology on Polytetrafluoroethylene (PTFE)-coated vascular implants.

SPINOFFS

Sportlogiq combines machine-learning and state-of-the-art imaging software to provide sports teams with enhanced analytics. They were recently selected as the official supplier of enhanced analytic services to the new Professional Women's Hockey League. The company already has numerous agreements with NHL teams and many other professional sports teams.

To help feed the pipeline of future spinoff companies, I+P has signed strategic agreements with local venture studios, who will be offered early access to promising technologies for development.

McGill signed a deal with **BX Ventures**, a venture studio firm with a focus on cleantech solutions. The company recently opened a Montreal office, and has already helped launch FeX, an energy firm based on technology developed McGill's Professor Jeffrey Bergthorson (Department of Mechanical Engineering).

A similar agreement was concluded with **Innovobot**, a boutique investment firm that specializes in human-machine interface, robotics, artificial intelligence, the Internet of Things, and advanced materials. Innovobot is involved with many McGill spinoffs, notably **CarbiCrete** and **Independent Robotics**. **CarbiCrete**, a producer of carbon-negative concrete, announced the launch of retail sales of its concrete masonry units through partner Patio Drummond, and that it would soon launch sales in Ontario.

Independent Robotics, which fabricates autonomous marine robots, recently announced it had secured \$2 million in federal funding from the Canada's Ocean Supercluster for the development of an autonomous system for the aquaculture industry.

INNOVATION IN ACTION

In 2023, I+P and Communications and External Relations jointly organized the **Future Charged Symposium** that brought together federal, provincial and industry leaders at McGill to discuss the pivotal role Quebec must play in the transition to a renewable-energy-based economy. Aviation giant **Airbus** also came to McGill for the day-long symposium that showcased the potential for synergy between the two organizations.

Future-Charged: *The Renewable Energy Revolution*





People who propel research forward and exemplify excellence

CANADA EXCELLENCE RESEARCH CHAIRS

Among the most prestigious global research programs, Canada Excellence Research Chairs (CERC) are valued at either \$4 or \$8 million over eight years to support internationally renowned researchers and their teams, and to establish ambitious research programs at Canadian universities. The CERC program is a Tri-Agency initiative of the Social Sciences and Humanities Research Council (SSHRC), the Natural Sciences and Engineering Research Council (NSERC) and the Canadian Institutes of Health Research (CIHR).

In 2023, the results of the latest CERC competition were announced, with three world-renowned

researchers joining McGill, one of only five institutions awarded three of these prestigious chairs for \$8 million each.

PIONEERING RESEARCH IN LUNG DEGENERATION, BRAIN HEALTH AND TRANSIENT ASTROPHYSICS

Darcy Wagner joins the Faculty of Medicine and Health Sciences as the **Canada Excellence Research Chair in Lung Regenerative Medicine**. Her research is pushing boundaries by developing synthetic therapies for acute and chronic lung disease, which are the third and fourth leading causes of death in the world. Wagner aims to leverage recent advances in different disciplines such as biomaterials, stem cell biology, and

© Pieter Van Dokkum



advanced biomanufacturing. Her program will develop new manufacturing techniques based on 3D bioprinting approaches to improve the precision at which lung tissue can be generated.

As **Canada Excellence Research Chair in Metabolism and the Brain**, Professor Dana Small joins the Faculty of Medicine and Health Sciences and plans to develop a paradigm-shifting approach to combat the obesity and diabetes pandemics. Small brings new capacity to research at McGill and synergy with its world-class neuroscience and metabolism research and training programs to benefit the University, Quebec, and Canada.

“

McGill has always been a leader in the neuroscience of motivated behaviour. The neuroimaging environment here is also, in my opinion, unparalleled in the world both in terms of infrastructure and local expertise.

”

Dana Small
Canada Excellence Research Chair
in Metabolism and the Brain



© Kirsten van Santen

“

With this CERC award, I aim to uncover some of the most extreme events in the Universe, by watching how the sky changes on timescales of millisecond or less — hundreds of times faster than the blink of an eye.

”

Jason Hessels
Canada Excellence Research Chair
in Transient Astrophysics

Professor Jason Hessels joins the Faculty of Science as the **Canada Excellence Research Chair in Transient Astrophysics**. The emerging field of transient astrophysics provides a new dimension for understanding the grand story of how galaxies, stars, planets and, eventually, life are formed. Hessels' appointment also marks a return to McGill, where he received his PhD.

CANADA RESEARCH CHAIRS

The Canada Research Chairs (CRCs) program enables Canadian universities to nominate outstanding and exceptional emerging researchers in areas that will further the institutions' strategic research plan. McGill has 177 allocated CRCs in two levels (Tier 1 and Tier 2) which are renewable once. The CRCs are associated with one of the three federal research granting agencies: CIHR, NSERC, and SSHRC.

In 2023, 11 new and renewed McGill CRCs were announced, for a total of \$8.6 million. McGill's CRCs are focused on solving of the most critical issues facing society.

“

McGill's new and renewed Canada Research Chairs are exceptional leaders in their fields, whose dedication to research and commitment to mentoring the next cohort is much deserving of these significant appointments.

”

Christopher Manfredi
Provost and
Vice-President(Academic)



MCGILL'S NEW AND RENEWED CRC HOLDERS (SPRING 2023)

Samira Abbasgholizadeh Rahimi, Canada Research Chair in Advanced Digital Primary Health Care, CIHR, Tier 2

Simon Caron-Huot, Canada Research Chair in High-Energy Physics, NSERC, Tier 2 Renewal

Anja Geitmann, Canada Research Chair in Biomechanics of Plant Development, NSERC, Tier 1 Renewal

Yue Li, Canada Research Chair in Machine Learning for Genomics and Health Care, CIHR, Tier 2

Mylene Riva, Canada Research Chair in Housing, Community and Health, CIHR, Tier 2 Renewal

Hamed Shateri Najafabadi, Canada Research Chair in Systems Biology of Gene Regulation, CIHR, Tier 2 Renewal

Thomas Soehl, Canada Research Chair in International Migration, SSHRC, Tier 2 Renewal

Jennifer Sunday, Canada Research Chair in Global Change Ecology, NSERC, Tier 2

Aliki Thomas, Canada Research Chair in Education, Practice and Policy for Evidence-Based Health Care, CIHR, Tier 2

Rhian Touyz, Canada Research Chair in Cardiovascular Medicine, CIHR, Tier 1

Yu Xia, Canada Research Chair in Computational and Systems Biology, NSERC, Tier 1 Renewal



MCGILL'S PRIZES +
AWARDS WINNERS



128 prizes and honours were awarded to McGill researchers in 2023, in recognition of their outstanding achievements in scholarship, research and teaching.

Fifteen McGill researchers were made Fellows of the Royal Society of Canada — more than at any other university in Canada — and four new Members were inducted into the New College of Scholars, Artists, and Scientists.

Congratulations to all our award-winning faculty!

PRIZES + AWARDS HIGHLIGHTS

AI RESEARCHER OF THE YEAR *WOMEN IN AI*

Samira Abbasgholizadeh-Rahimi,
Department of Family Medicine,
Faculty of Medicine and Health Sciences
*/ Département de médecine familiale,
Faculté de médecine et des sciences de
la santé*

ARTHUR B. MCDONALD FELLOWSHIP NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL OF CANADA

Nicolas Cowan, Department of Physics,
Faculty of Science */ Département de
physique, Faculté des sciences*

ARTS LIFETIME ACHIEVEMENT AWARD ARTS RESEARCHERS AND TEACHERS SOCIETY

Claudia Mitchell, Department of Integrated
Studies in Education, Faculty of Education
*/ Département d'études intégrées en
sciences de l'éducation, Faculté des sciences
de l'éducation*

CANADA'S WALK OF FAME

Brenda Milner, Department of Psychology,
Faculty of Science; Department of
Neurology and Neurosurgery, Faculty of
Medicine and Health Sciences */
Département de psychologie, Faculté des
sciences; Département de neurologie et
neurochirurgie, Faculté de médecine et des
sciences de la santé*

CANADIAN MEDICAL HALL OF FAME MEMBERS

Catherine Hankins, Department of
Epidemiology, Biostatistics and
Occupational Health, Faculty of Medicine
and Health Sciences */ Département
d'épidémiologie, biostatistique et santé
au travail, Faculté de médecine et des
sciences de la santé*

Thomas Roddick, Department of
Medicine, Faculty of Medicine and Health
Sciences */ Département de médecine,
Faculté de médecine et des sciences de
la santé*

COMPAGNE
CONSEIL DES ARTS ET DES LETTRES
DU QUÉBEC

Ranee Lee, Department of Music
Performance, Schulich School of Music /
*Département d'interprétation, École de
musique Schulich*

**JUNO AWARD CLASSICAL ALBUM OF
THE YEAR (SMALL ENSEMBLE)**
CANADIAN ACADEMY OF RECORDING
ARTS AND SCIENCES

Elinor Frey, Department of Music
Performance, Schulich School of Music /
*Département d'interprétation,
École de musique Schulich*

**LIFETIME ACHIEVEMENT AWARD
– RESEARCH**
CANADIAN IMAGE PROCESSING AND
PATTERN RECOGNITION SOCIETY

Inna Sharf, Department of Mechanical
Engineering, Faculty of Engineering /
*Département de génie mécanique,
Faculté de génie*

LIVING LEGEND AWARD
INTERNATIONAL UNION OF
NUTRITIONAL SCIENCES

Harriett Kuhnlein, School of Human
Nutrition, Faculty of Agricultural and
Environmental Sciences / *École de
nutrition humaine, Faculté des sciences
de l'agriculture et de l'environnement*

**MÉDAILLE DE L'ASSEMBLÉE
NATIONALE**
GOUVERNEMENT DU QUÉBEC

Samuel Benaroya, Department
of Medicine, Faculty of Medicine and
Health Sciences / *Département
de médecine, Faculté de médecine et
des sciences de la santé*

ORDER OF CANADA MEMBER
GOVERNOR GENERAL OF CANADA

Daniel Weinstock, Faculty of Law /
Faculté de droit

**CHEVALIER - ORDRE NATIONAL
DU QUÉBEC**

GOUVERNEMENT DU QUÉBEC

Howard Bergman, Department of Family
Medicine, Faculty of Medicine and Health
Sciences / *Département de médecine
familiale, Faculté de médecine et des
sciences de la santé*

**PRESIDENT'S PRIZE FOR
OUTSTANDING EMERGING
RESEARCHERS**
MCGILL UNIVERSITY

Ignacio Cofone, Faculty of Law /
Faculté de droit

Daniela Quail, Department of Physiology,
Faculty of Medicine and Health Sciences
/ *Département de physiologie, Faculté
de médecine et des sciences de la santé*

Jennifer Ronholm, Department of
Food Science and Agricultural Chemistry,
Faculty of Agricultural and Environmental
Sciences / *Département de science
alimentaire et agrochimie,
Faculté des sciences de l'agriculture
et de l'environnement*

ROYAL SOCIETY LONDON FELLOW

Hanadi Sleiman, Department
of Chemistry, Faculty of Science /
*Département de chimie, Faculté
des sciences*

**WORLD'S CHILDREN'S PRIZE
FOR THE RIGHTS OF THE CHILD**

WORLD'S CHILDREN'S PRIZE
FOUNDATION

Cindy Blackstock, School of Social Work,
Faculty of Arts / *École de service social,
Faculté des arts*

A YEAR OF
DISCOVERIES:
RESEARCH NEWS
HIGHLIGHTS



MADE-TO-ORDER DIAGNOSTIC TESTS

McGill researchers, led by David Juncker, Professor and Chair (Department of Biomedical Engineering) have made a breakthrough in diagnostic technology, inventing a ‘lab on a chip’ that can be 3D-printed in just 30 minutes.

The chip has the potential to make on-the-spot testing widely accessible. The results were published in the journal *Advanced Materials*.

The McGill team developed capillaric chips that act as miniature laboratories. Unlike other computer microprocessors, these chips are single-use and require no external power source – a simple paper strip suffices. They function through capillary action – the very phenomena by which a spilled liquid on the kitchen table spontaneously wicks into the paper towel used to wipe it up.

[Read more >](#)

+ Professor David Juncker with the newly-developed capillary chip.
Photo courtesy of Prof. Juncker





© Vincent LaFrance

UNLOCKING THE IMPACT OF EARLY-LIFE ADVERSITY ON BRAIN FUNCTION

A team of scientists, led by researchers from McGill, have found evidence that exposure to childhood adversity is associated with an altered ability to process stressful challenges and other emotional material. These effects might diminish the ability to cope with threatening events, increasing the risk for psychiatric disorders later in life.

The results highlight the need to protect children from trauma. If trauma does occur, help should be provided early, potentially decreasing the development of long-lasting effects.

“

By integrating the results from 83 previous brain imaging studies, we were able to provide what is arguably the clearest evidence to date that adults who have been exposed to early life trauma have different brain responses to psychological challenges.

”

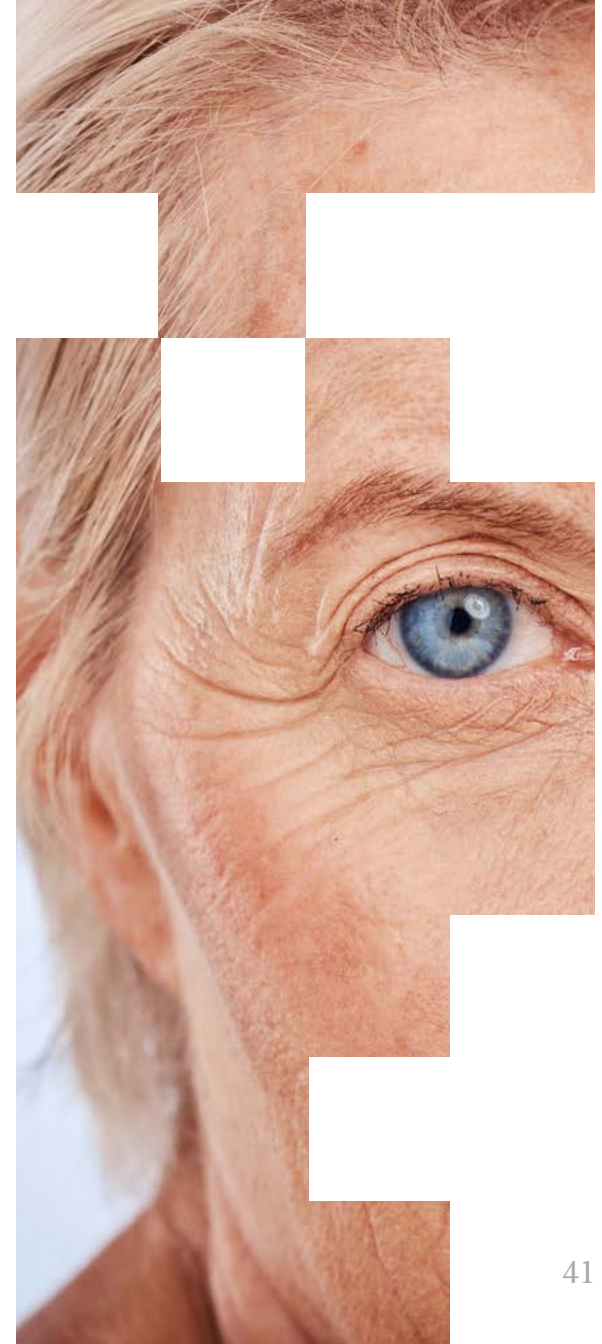
Marco Leyton
Professor of Psychiatry

THE STOMACH BUG THAT MAY RAISE YOUR RISK OF ALZHEIMER'S DISEASE

A common stomach bacteria found in two thirds of the world population may be linked to a higher risk of Alzheimer's disease, new McGill-led research suggests. The study, published in *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, investigated whether a clinically apparent *Helicobacter pylori* (*H. pylori*) infection increased the risk of Alzheimer's disease in people aged 50 and older. The prevalent infection can trigger indigestion, gastritis, ulcers, and even stomach cancer.

A team of McGill researchers analyzed health data of over 4 million people in the United Kingdom aged 50 and above between 1988 and 2019. They found that people with symptomatic *H. pylori* infection had an 11% higher risk of developing Alzheimer's disease, the most common type of dementia. While the cause of Alzheimer's disease is multifaceted, the findings build upon a growing body of evidence on the potential role of infections, particularly *H. pylori*, in its development. The study opens avenues for future research, particularly exploring whether eradicating this bacterium could effectively prevent Alzheimer's disease in some people.

[Read more >](#)





BREAKING DOWN BARRIERS FOR BLACK SCHOLARS

Reports show Black scholars face more barriers as they move up the research career ladder.

In Canada, an advisory committee was created in 2021 to recommend ways to break down existing barriers for Black scholars and to ensure equitable access to federal research funding and training programs.

McGill Assistant Professor Wendell Nii Laryea Adjetey (Department of History and Classical Studies) co-chaired the committee, which in 2023 released its report and recommendations.

Some of the recommendations include providing dedicated support for Black scholars and students, eliminating systemic biases in merit review, and strengthening research hubs in Black communities.

[Read more >](#)



+ Professor Wendell Nii Laryea Adjetey speaks at the Global Centre for Pluralism in February 2023. © Patrick Boyle



“

After four centuries of enslavement and quasi-freedom in the lands that became Canada, Black people barely have a toehold in Canadian society. The advisory committee tried to shine light on the many anti-Black inequities in the Canadian academy, while prescribing recommendations to redress these injustices.

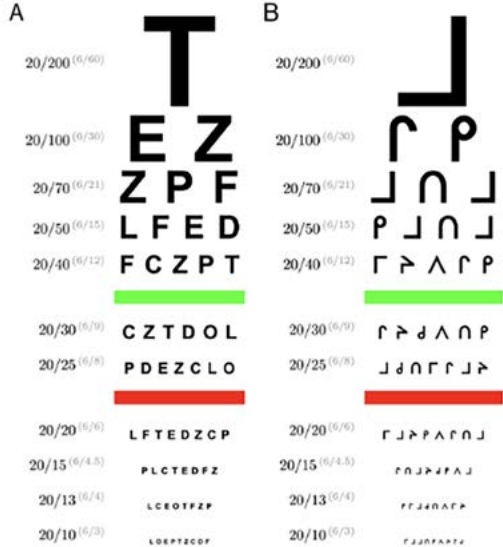
”

Wendell Nii Laryea Adjetey
Professor, Department of
History and Classical Studies

THE FIRST KNOWN VISUAL ACUITY CHART IN INUKTITUT, CREE, AND OJIBWE

A majority of Nunavik Inuit report Inuktitut as their first language. In their work in Puvirnituk, McGill Assistant Professor Christian El-Hadad (Department of Pediatric Surgery) and his colleague Shaan Bhambra, a recent graduate of McGill’s medical school, noticed that many patients either read only, or mainly, Inuktitut. This made visual acuity testing using the standard Latin alphabet chart difficult for some patients.

El-Hadad and Bhambra developed the first known visual acuity charts in Canadian Aboriginal syllabics, an alphabet used in Inuktitut, Cree, and Ojibwe. From a sample of patients at the McGill University Health Centre who read Inuktitut and English, the doctors found that most patients received an equal or better score using the Inuktitut chart compared to the standard Latin alphabet chart.

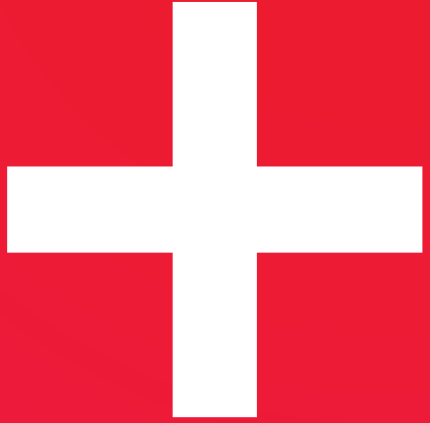


© Bhambra et al (2023) Development and validation of the first Canadian Aboriginal syllabics visual acuity chart, Can J Ophthalmol

“ This visual acuity chart was important to develop to expand care for Indigenous Canadians in their native languages, and to demonstrate that visual acuity measurements using a patient’s native alphabet can provide equal or improved visual acuity results,

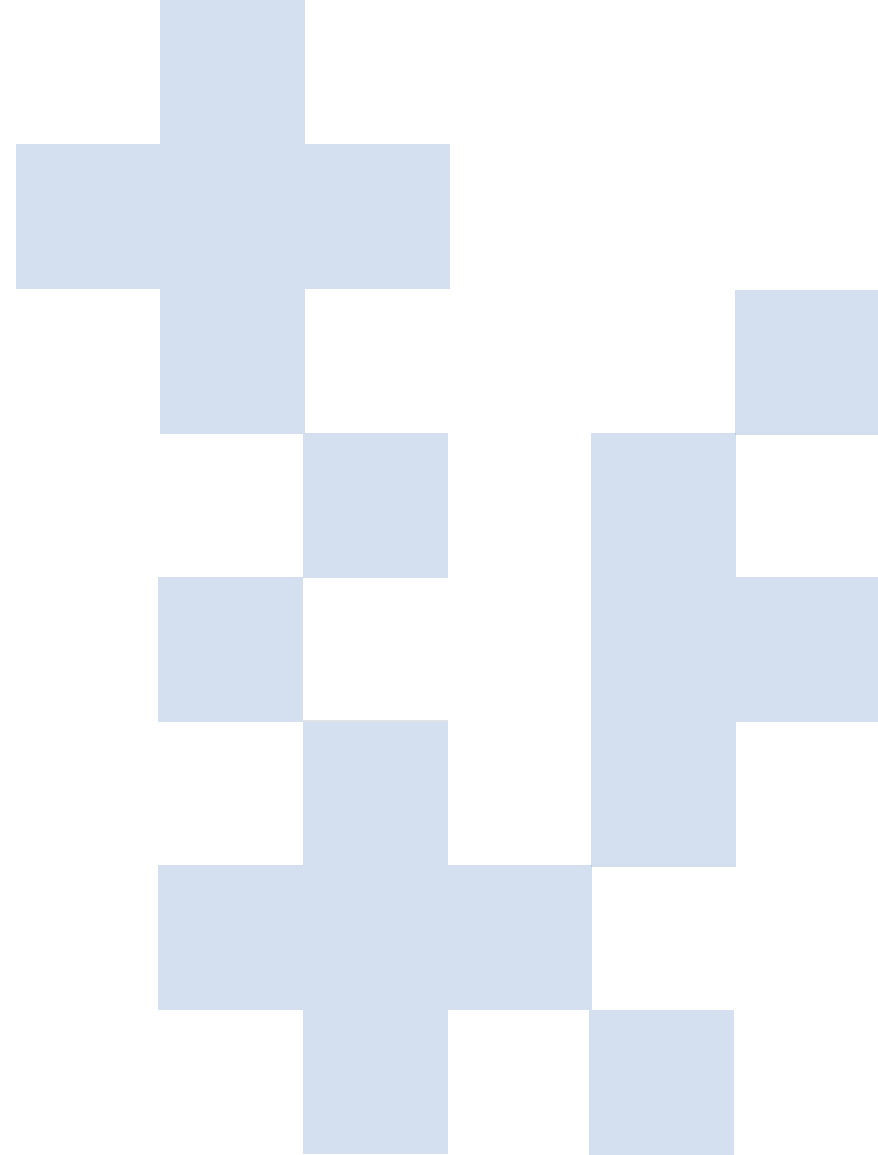
” Shaan Bhambra, MD





Research
Impact
Chartered

*Research Impact Charted highlights
McGill's standing in the rankings,
funding performance, innovation and
partnership metrics, and bibliometrics.*



DATA SOURCES

- **Canadian Association of University Business Officers (CAUBO)**, a non-profit organization representing the chief administrative and financial officers of over 100 institutions across Canada. Data for fiscal year 2022.
- **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. Data for fiscal year 2022.
- **Les Fonds de recherche du Québec (FRQ)**, the Province's three research funding agencies. Data for fiscal years 2022 and 2023.
- **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. Data for calendar years 2018-2023.
- **Statistics Canada**, Canada's national statistics office.
- **AUTM**, a non-profit organization that supports and advances technology transfer. Data for calendar year 2022.

Certain metrics within this report are benchmarked in comparison to the U15 Group of Canadian Research Universities. For other metrics, 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, referred to as the U6 along with McGill 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, referred to as the QC4 along with McGill for the purposes of this report.



RANKINGS

TABLE 1: U6 UNIVERSITY RANKINGS

Source: QS, THE, MacLean's. * Denotes a tied ranking.

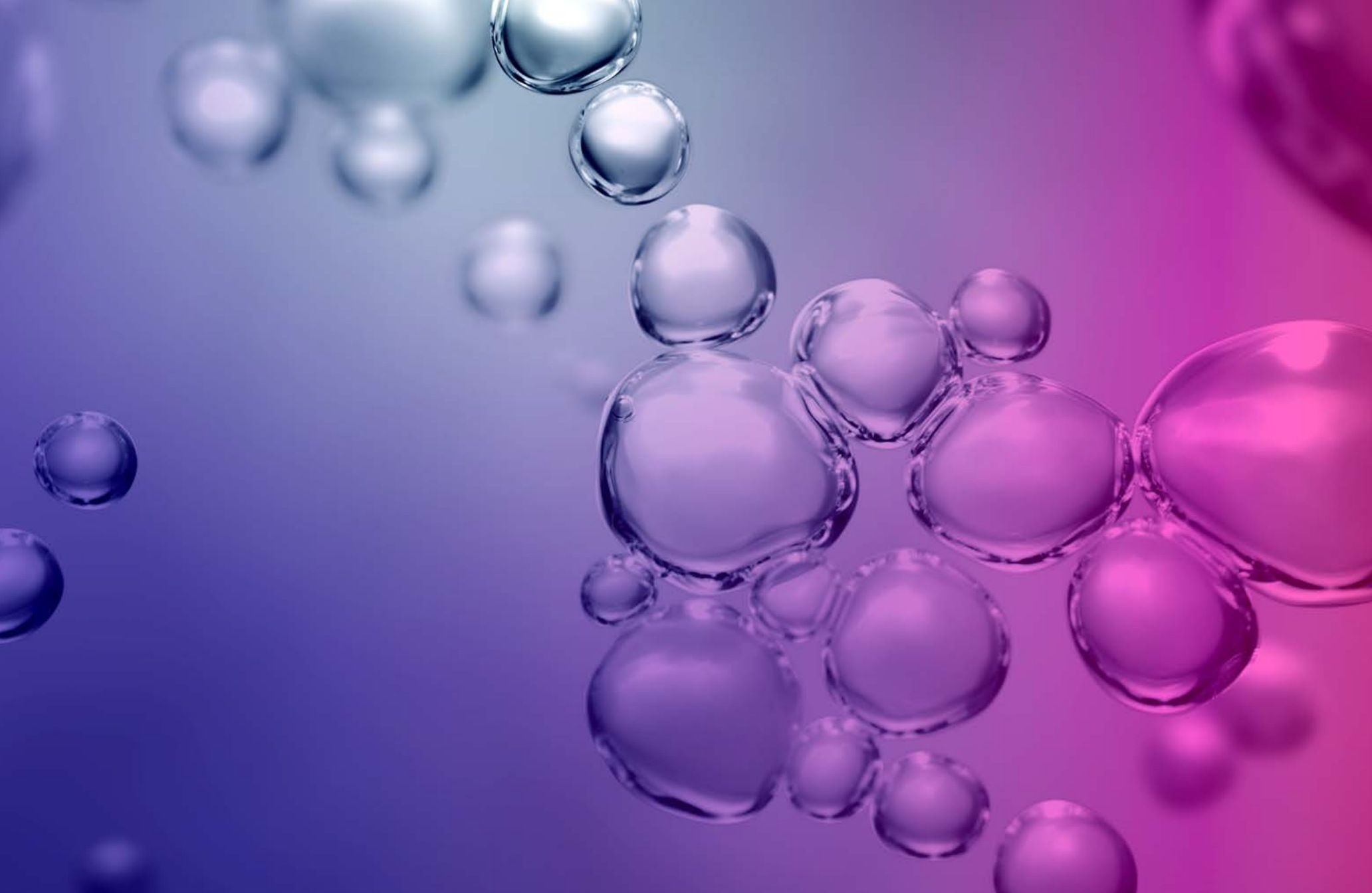
INSTITUTION	MACLEAN'S	THE	QS
McGill University	1	49	30
UNIVERSITY OF TORONTO	2	21	21
UNIVERSITY OF BRITISH COLUMBIA	3	41	34*
MCMASTER UNIVERSITY	4	103*	189*
UNIVERSITY OF ALBERTA	6	109*	111
UNIVERSITÉ DE MONTRÉAL	10	111*	141*

In the THE World University Rankings, McGill was ranked 49th in the world (compared to 46th in 2023), which represented the third highest ranking among Canadian universities. In the QS World University Rankings, McGill ranked 30th in the world, up one spot from the previous year, which represented the 2nd highest ranking among Canadian universities.

Maclean's Education Ranking (2024): Canada's best Medical Doctoral universities ranked on 12 indicators. Released October 2023.

Times Higher Education (THE) World University Rankings (2024): global performance rankings of 1,906 research intensive universities across 108 countries, based on 18 performance indicators. THE added five new performance indicators in 2024, with three of these related to research quality: Research Strength, Research Excellence and Research Influence. Released September 2023.

QS World University Rankings (QS) (2024): global ranking of 1,500 institutions across 104 locations, assessed on nine performance indicators which includes employability and sustainability. QS added two research related performance indicators: International Research Network and Sustainability. Released June 2023.

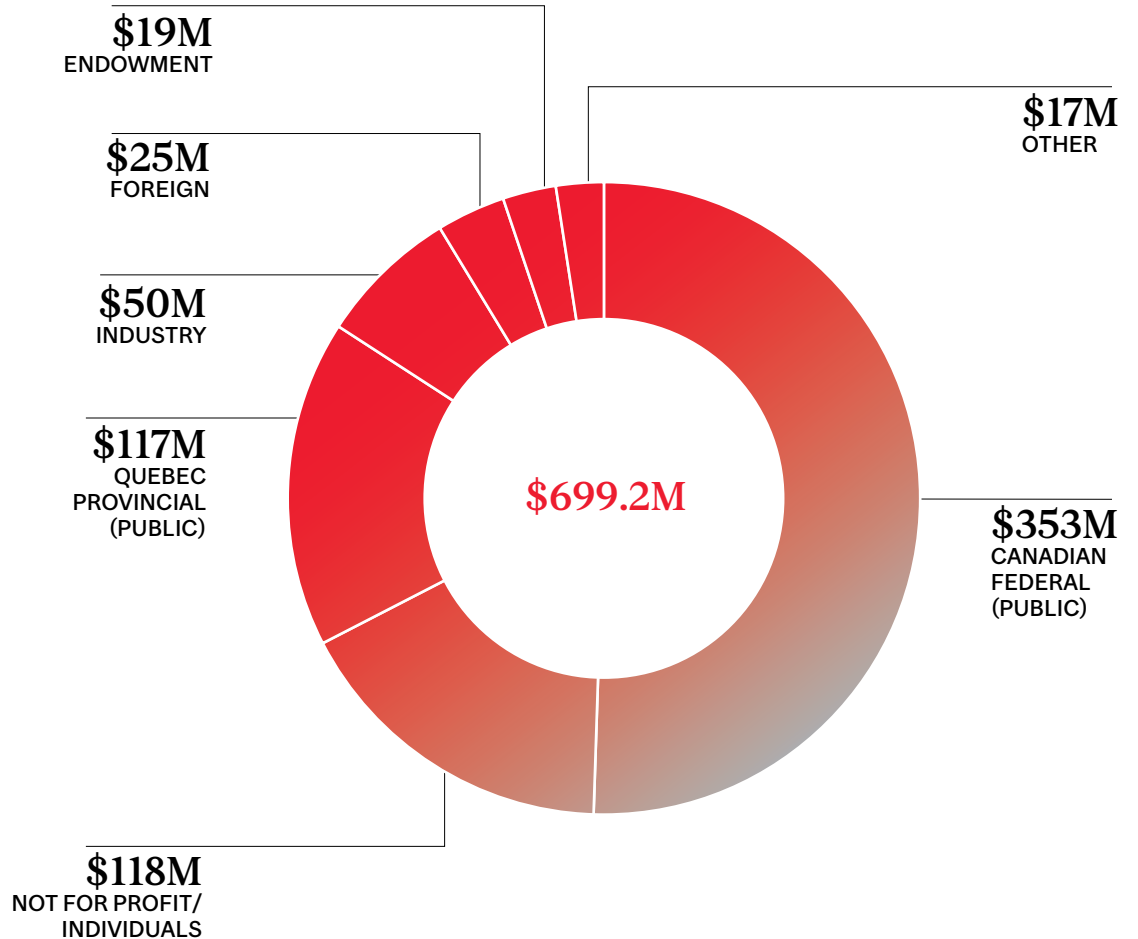


+
**ALL
FUNDING**

In FY2022, McGill's total research funding was \$699.2 million, contributed to largely by Canadian federal funding, following by not-for-profit and provincial funding. Not-for-profits include organizations with strong funding mandates such as Brain Canada and Genome Canada.

FIGURE 1: CATEGORIES OF TOTAL RESEARCH FUNDING AMOUNT (\$M), FY2022

Source: CAUBO



There was a 48% increase in provincial funding from FY2021 to FY2022.
 Over a third of provincial funding in FY2022 was in the form of matching funds for grants awarded to McGill by the Canada Foundation for Innovation.

CATEGORY OF FUNDING

- Endowment
- Other
- Foreign Govt
- Industry
- Provincial
- Not for Profit / Individuals
- Federal

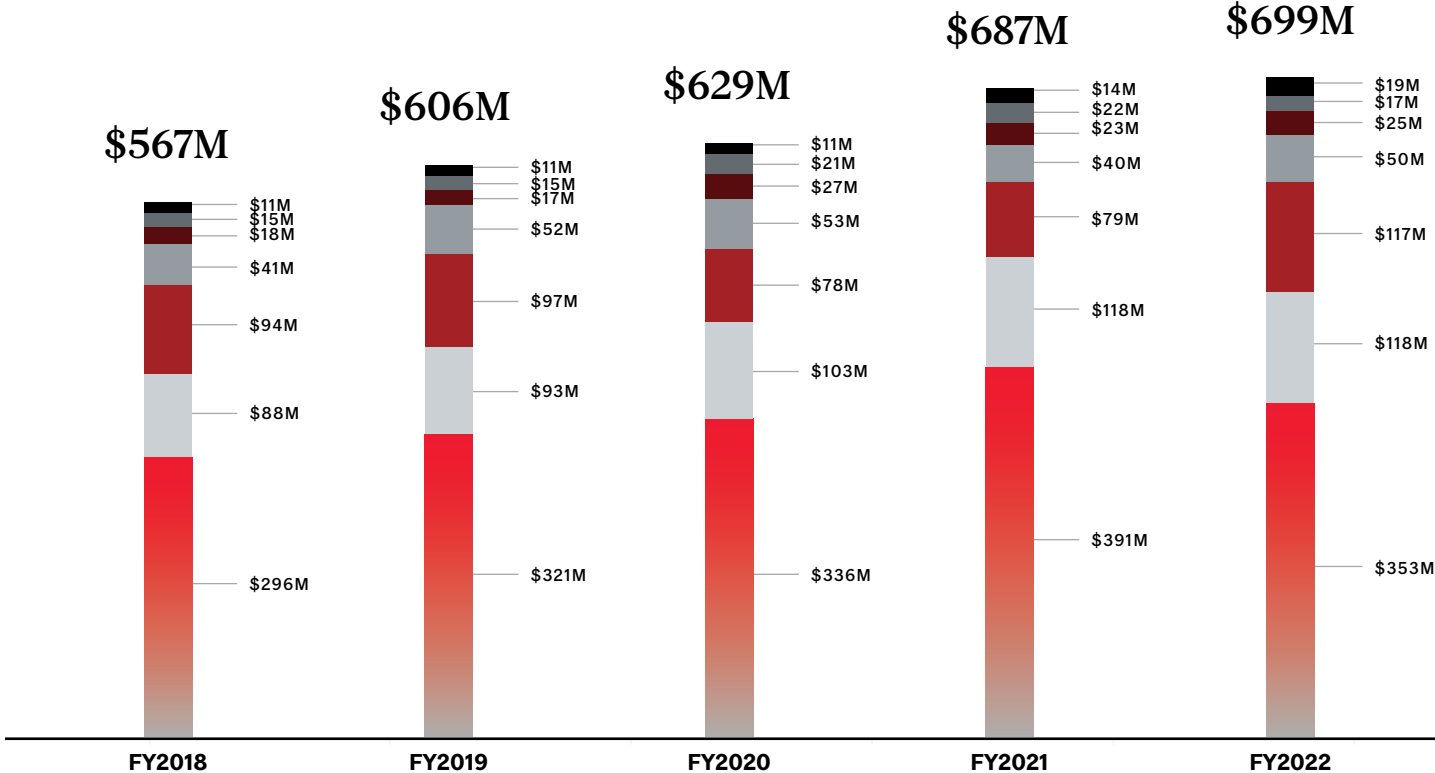
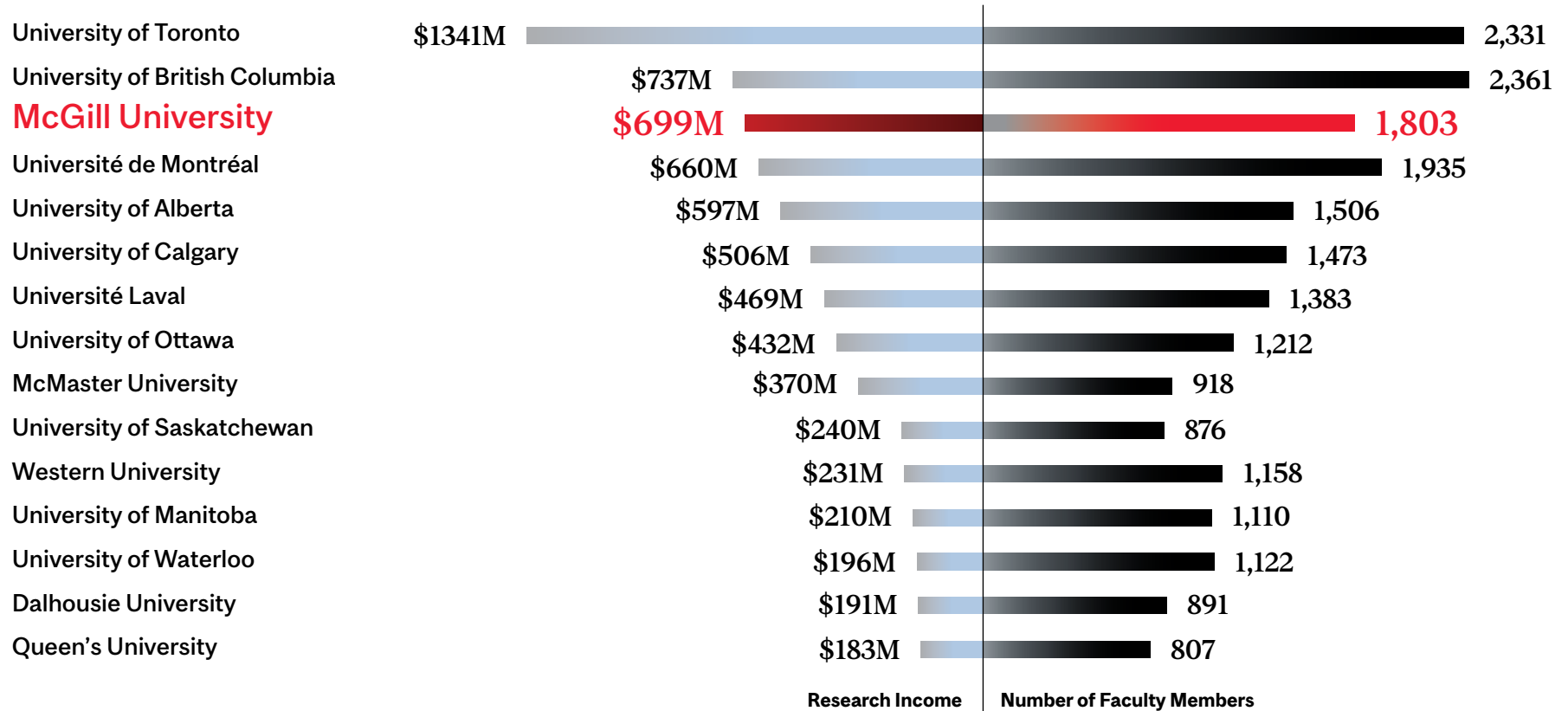


FIGURE 2: MCGILL'S RESEARCH FUNDING BY CATEGORY OF FUNDING (\$M), FY2018 TO FY2022

Source: CAUBO

FIGURE 3: U15 TOTAL RESEARCH FUNDING (\$M) AND FACULTY COUNT, FY2022

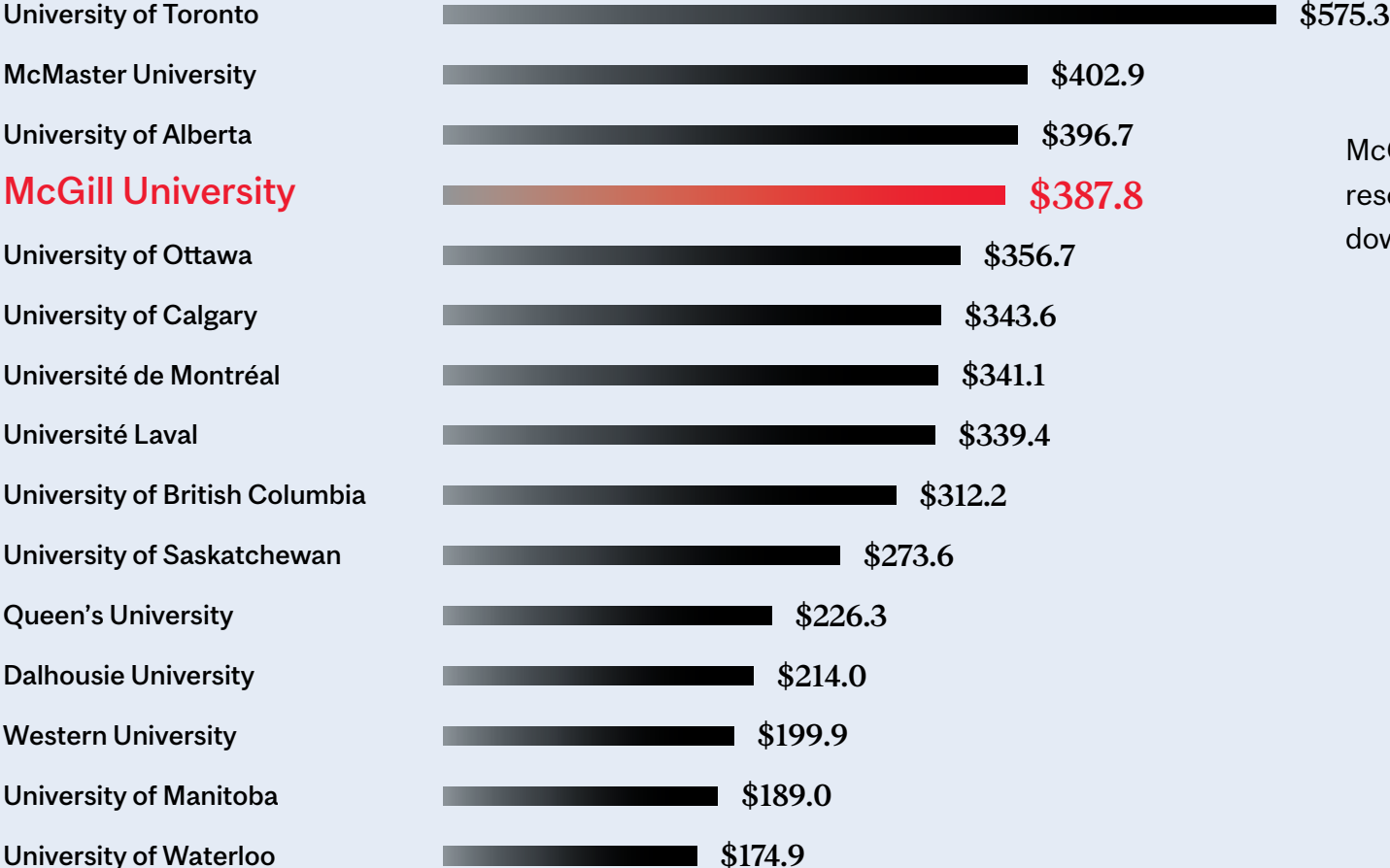
Source: CAUBO (totals) and Statistics Canada (faculty counts). Faculty counts include full time, tenure/tenure track academic staff.



Total funding and faculty count together are used to calculate the funding per faculty, also referred to as “research intensity”.

FIGURE 4: U15 RESEARCH FUNDING PER FACULTY MEMBER (\$K), OR “RESEARCH INTENSITY”, FY2022

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



McGill is 4th in the U15 in research intensity in FY2022, down from 3rd in FY2021.

TRI-AGENCY FUNDING

INSTITUTION	TOTAL TRI-AGENCY FUNDING (\$M)	SHARE OF U15	TRI-AGENCY RESEARCH INTENSITY (\$K)
UNIVERSITY OF TORONTO	\$366.8	19.7%	\$157,365
UNIVERSITY OF BRITISH COLUMBIA	\$208.6	11.2%	\$88,370
McGill University	\$191.9	10.3%	\$106,455
UNIVERSITÉ DE MONTRÉAL	\$153.7	8.3%	\$79,459
UNIVERSITY OF ALBERTA	\$135.4	7.3%	\$89,909
UNIVERSITY OF CALGARY	\$115.2	6.2%	\$78,208
UNIVERSITÉ LAVAL	\$107.1	5.8%	\$77,441
UNIVERSITY OF OTTAWA	\$98.2	5.3%	\$80,996
MCMASTER UNIVERSITY	\$97.1	5.2%	\$105,789
UNIVERSITY OF WATERLOO	\$77.4	4.1%	\$69,027
WESTERN UNIVERSITY	\$72.4	3.9%	\$62,506
UNIVERSITY OF SASKATCHEWAN	\$63.0	3.4%	\$71,938
QUEEN'S UNIVERSITY	\$60.9	3.3%	\$75,454
DALHOUSIE UNIVERSITY	\$57.4	3.1%	\$64,423
UNIVERSITY OF MANITOBA	\$53.2	2.9%	\$47,960
GRAND TOTAL	\$1,858	100%	\$157,365

As in FY2021 McGill is ranked 3rd in the U15 in FY2022 for both total tri-agency funding and share of U15 funding. For Tri-Agency research intensity (\$K), McGill is ranked 2nd in the U15, up from 3rd in FY2021.

TABLE 2:
U15 TRI-AGENCY RESEARCH FUNDING (\$M), PER CENT SHARE OF U15 TOTAL FUNDING, AND RESEARCH INTENSITY (\$K), FY2022

Source: OST



\$366.8M

FIGURE 5: U6 TOTAL TRI-AGENCY FUNDING, FY2022

Source: OST

Almost two-thirds of McGill's Tri-Agency funding comes from CIHR, placing McGill 2nd in the U15 in funding from CIHR and highlighting its strength in health research.

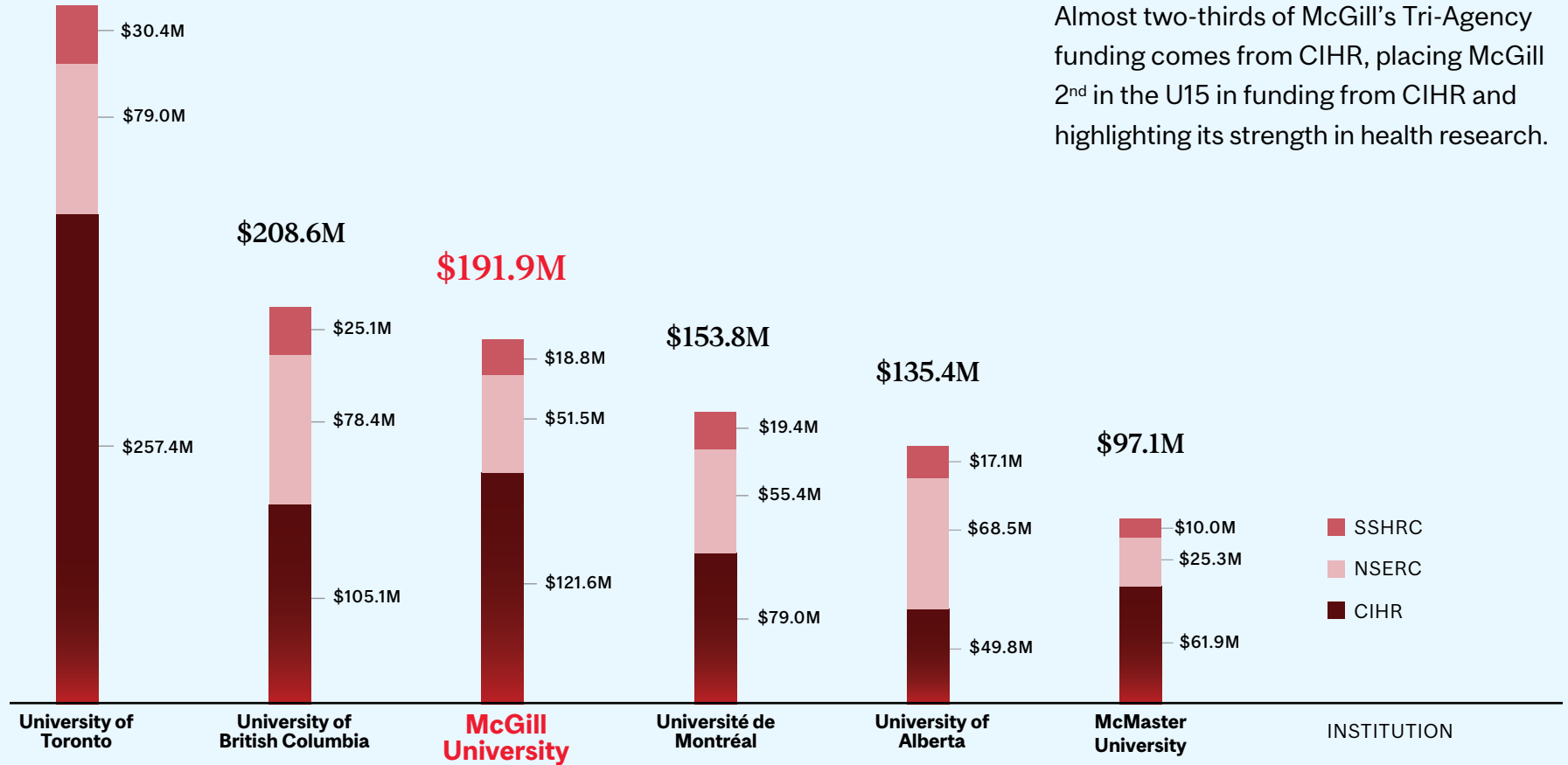
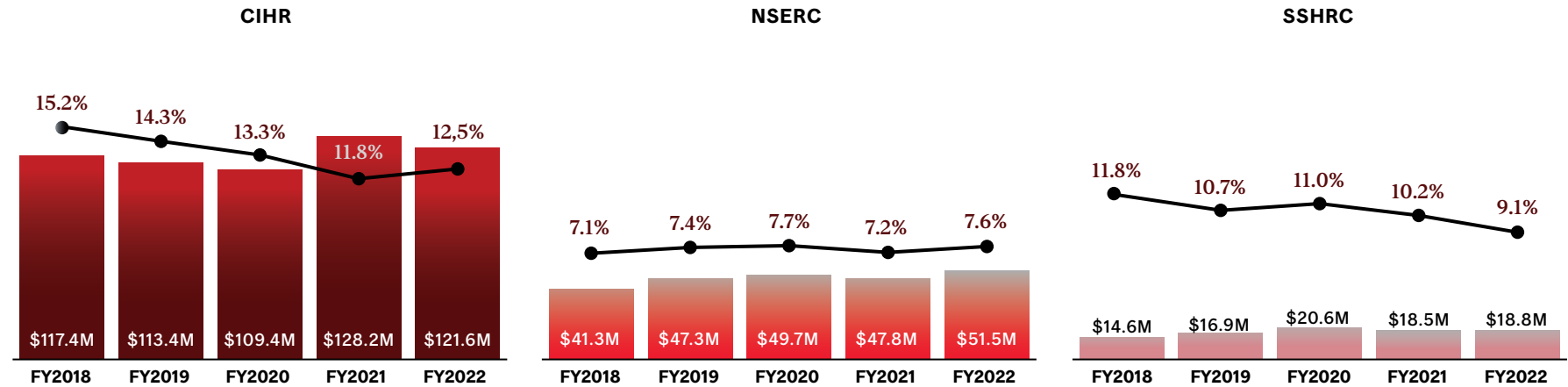


FIGURE 6: MCGILL'S SHARE OF U15 TRI-AGENCY FUNDING AND TOTAL FUNDING AMOUNT, FY2018 TO FY2022

Source: OST



Funding Efficiency Index (FEI) of 1.00, depicted by the black line, reflects a situation where McGill’s share of the U15 Tri-Agency funding is proportionate to its share of the U15 faculty count.

Figure 7 indicates that for CIHR and SSHRC funding, McGill has a greater share of funding relative to faculty count (FEI > 1.00). For NSERC, McGill has a smaller share of the NSERC funding to the U15 relative to its faculty count (FEI < 1.00).

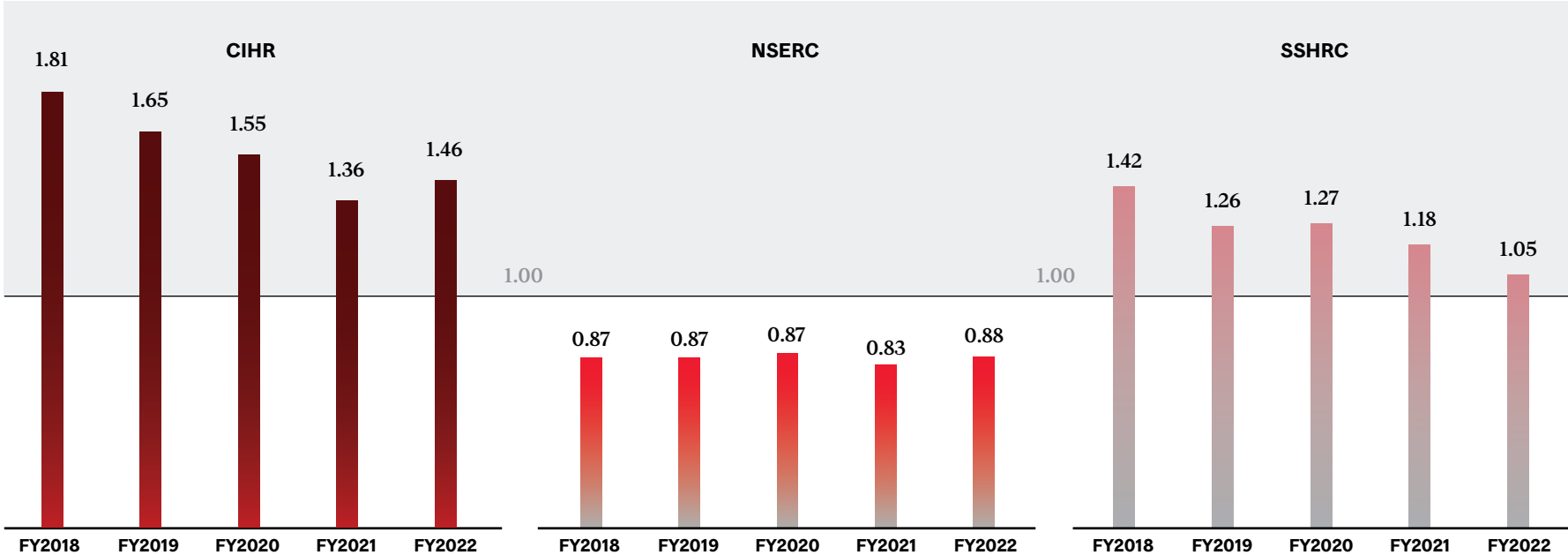


FIGURE 7: MCGILL’S SHARE OF U15 TRI-AGENCY FUNDING RELATIVE TO FACULTY COUNT, “FUNDING EFFICIENCY INDEX”, FY2018 TO FY2022

Source: OST and Statistics Canada



CANADA FOUNDATION FOR INNOVATION (CFI) FUNDING

INSTITUTION	FUNDING (\$ MILLION) FROM THE CFI	SHARE OF U15 (%)	# PROJECTS AS LEAD INSTITUTION
UNIVERSITY OF TORONTO	\$68.3	19.9%	18
McGill University	\$42.4	12.4%	8
UNIVERSITY OF BRITISH COLUMBIA	\$36.0	10.5%	10
UNIVERSITY OF CALGARY	\$31.8	9.3%	7
UNIVERSITY OF WATERLOO	\$30.5	8.9%	6
UNIVERSITÉ DE MONTRÉAL**	\$25.2	7.3%	7
UNIVERSITY OF OTTAWA	\$21.8	6.4%	4
QUEEN'S UNIVERSITY	\$18.7	5.5%	3
UNIVERSITY OF SASKATCHEWAN	\$17.6	5.1%	1
WESTERN UNIVERSITY	\$14.7	4.3%	5
UNIVERSITÉ LAVAL	\$13.8	4.0%	6
DALHOUSIE UNIVERSITY	\$9.9	2.9%	3
UNIVERSITY OF ALBERTA	\$7.8	2.3%	2
UNIVERSITY OF MANITOBA	\$4.3	1.3%	2
MCMASTER UNIVERSITY	\$0	0%	0
GRAND TOTAL	\$342.7	100%	82

TABLE 3:
FUNDING AWARDED
TO THE U15, SHARE
AND NUMBER OF
PROJECTS IN THE CFI
INNOVATION FUND
COMPETITION
(2023)

Source: OST

* data includes affiliated
hospitals/research
centres

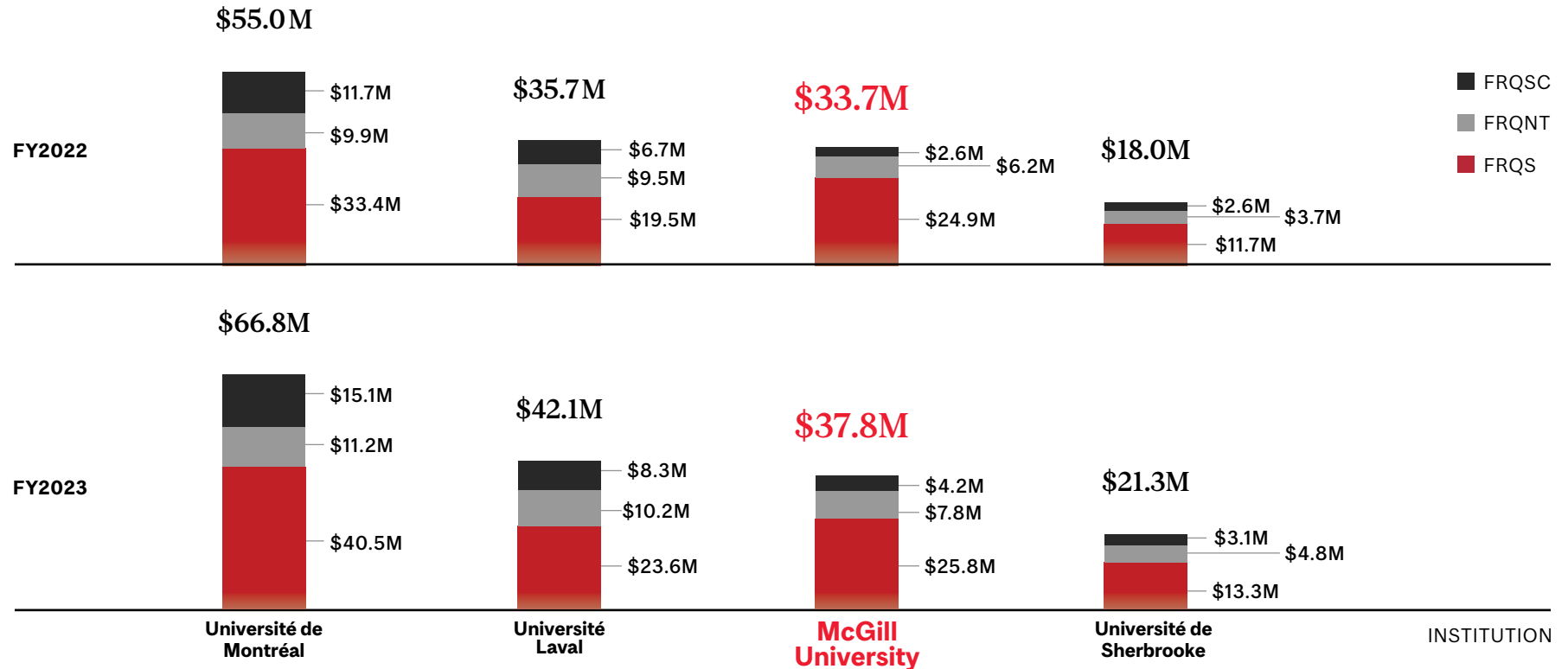
** data for Université de
Montréal includes
Polytechnique Montréal

FONDS DE RECHERCHE DU QUÉBEC FUNDING

FIGURE 8: QC4 TOTAL FRQ FUNDING, FY2022 AND FY2023

Source: FRQ

McGill is 3rd in FRQ funding in FY2022 and FY2023, down from a 2nd place tie with Université Laval in FY2021.





+
**INNOVATION +
PARTNERSHIPS**

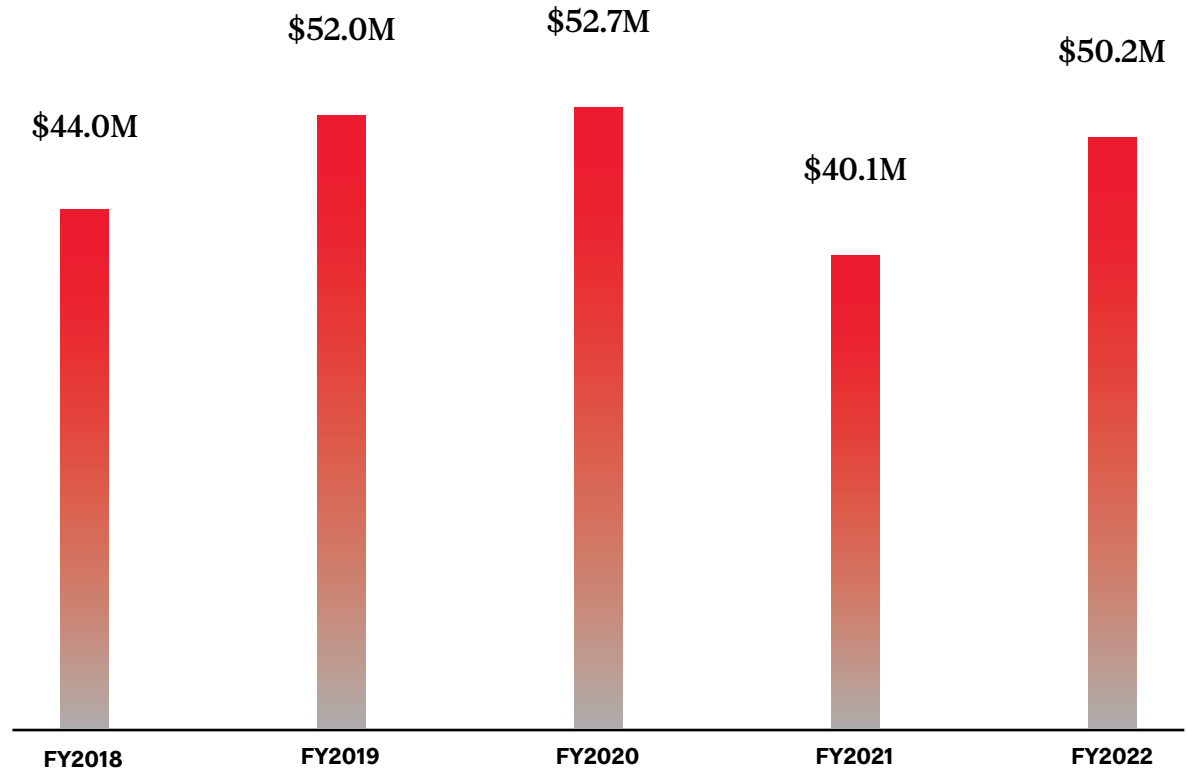
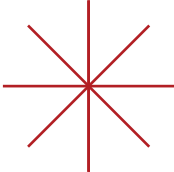


FIGURE 9: MCGILL'S INDUSTRY SPONSORED RESEARCH FUNDING (\$M), FY2018 TO FY2022

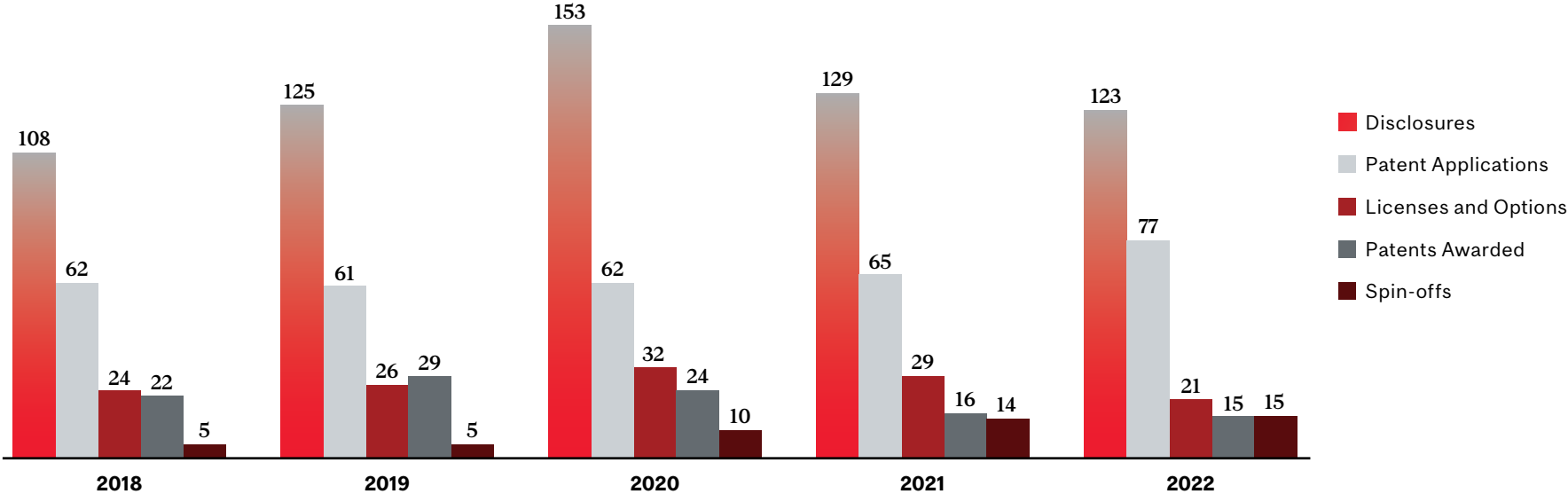
Source: CAUBO. Includes industry sponsored donations, grants and contracts.

FIGURE 10: INNOVATION AND PARTNERSHIP METRICS, 2018 TO 2022

Source: McGill Innovation and Partnerships. Note data is for calendar year



McGill was 1st in Quebec and 2nd in Canada for number of spin-offs in 2022, with 15 spin-offs, behind only the University of Calgary, who had one additional spin-off.





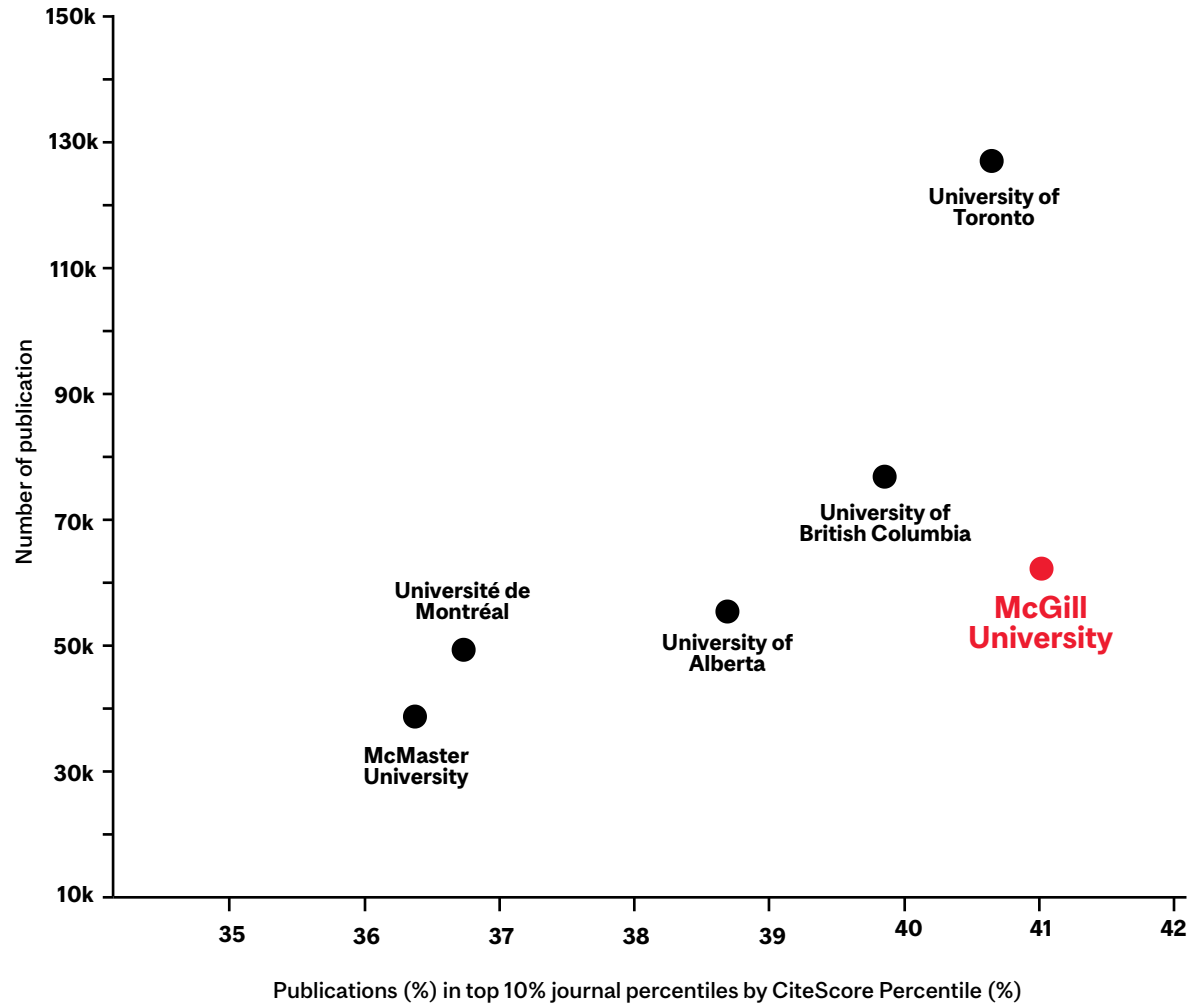
PUBLICATIONS + BIBLIOMETRICS

McGill has shown a consistent yearly increase in scholarly output (publication count). 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 as it is a time dependent metric. 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 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 FROM JANUARY 2018 TO DECEMBER 2023

METRIC	2018	2019	2020	2021	2022	2023
NUMBER OF PUBLICATIONS	9,338	9,494	9,899	10,710	10,850	10,693
FIELD-WEIGHTED CITATION IMPACT (FWCI)	1.85	1.84	1.69	1.67	1.65	1.64

Source: SciVal. As of February 2024. Note data is for calendar year.



McGill has the highest percentage of publications in the top 10% of journal percentiles in the U6. The top 10% journal percentiles are based on CiteScore, which measures the citation impact of journals in Scopus. It is based on the number of citations for a journal, divided by the number of publications in the journal, both during the last 4 years.

FIGURE 11: U6 PUBLICATION NUMBER AND PERCENT OF PUBLICATIONS IN TOP JOURNAL PERCENTILES, 2018 TO 2023

Source: SciVal/Scopus as of February 2024.

FIGURE 12: TOP 10 INTERNATIONAL INSTITUTIONS COLLABORATING WITH MCGILL WITH NUMBER OF CO-AUTHORED PUBLICATIONS INDICATED BY BUBBLE SIZE, 2018 TO 2023.

Source: SciVal/Scopus as of February 2024.

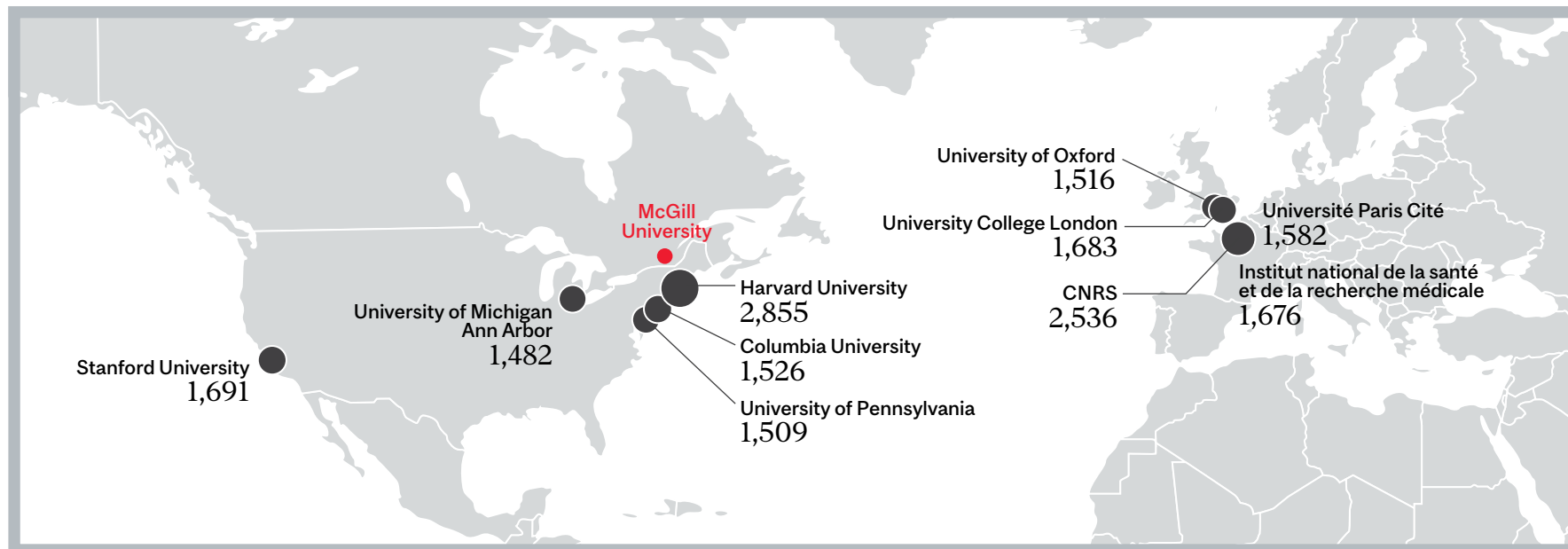
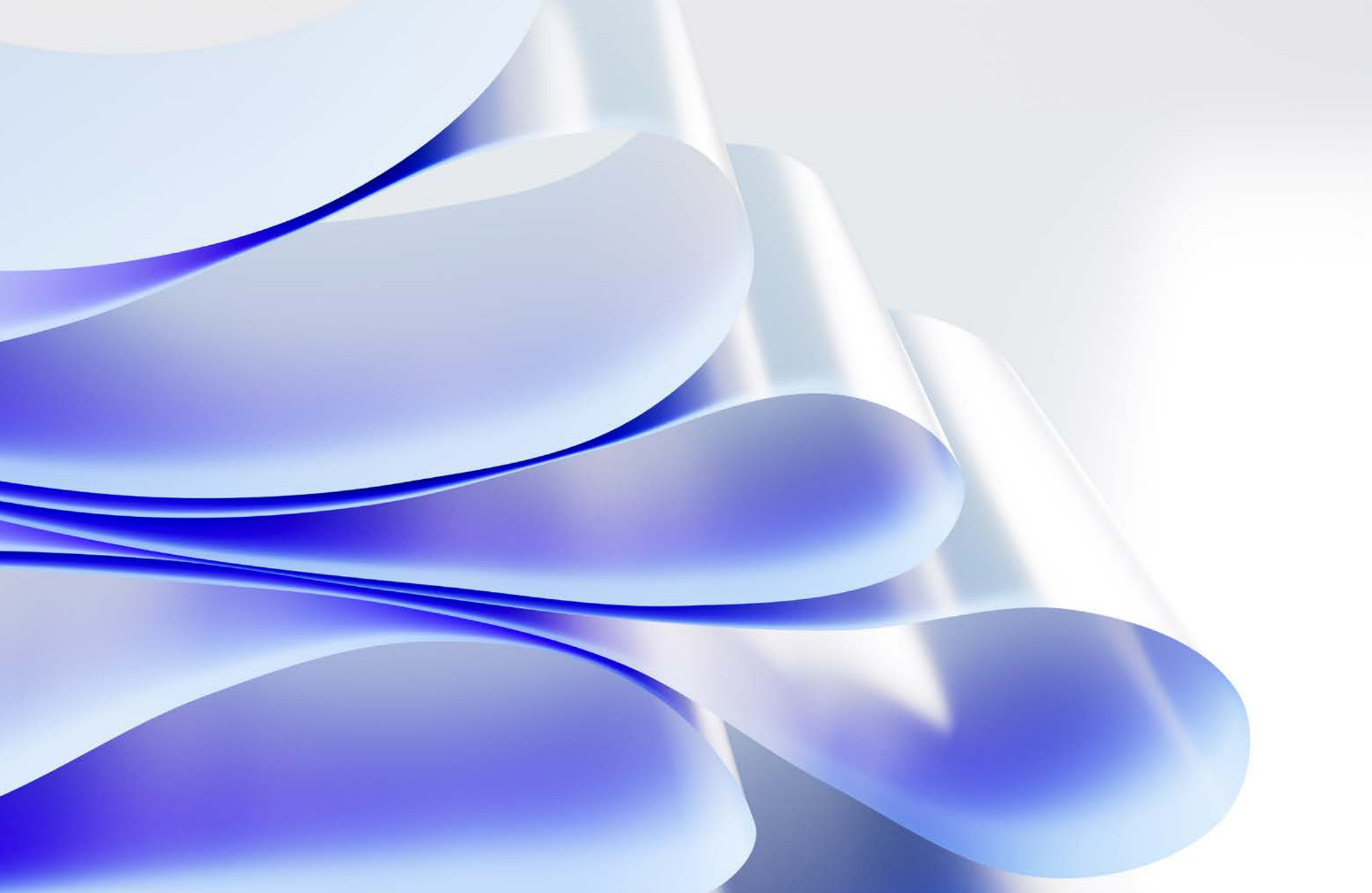


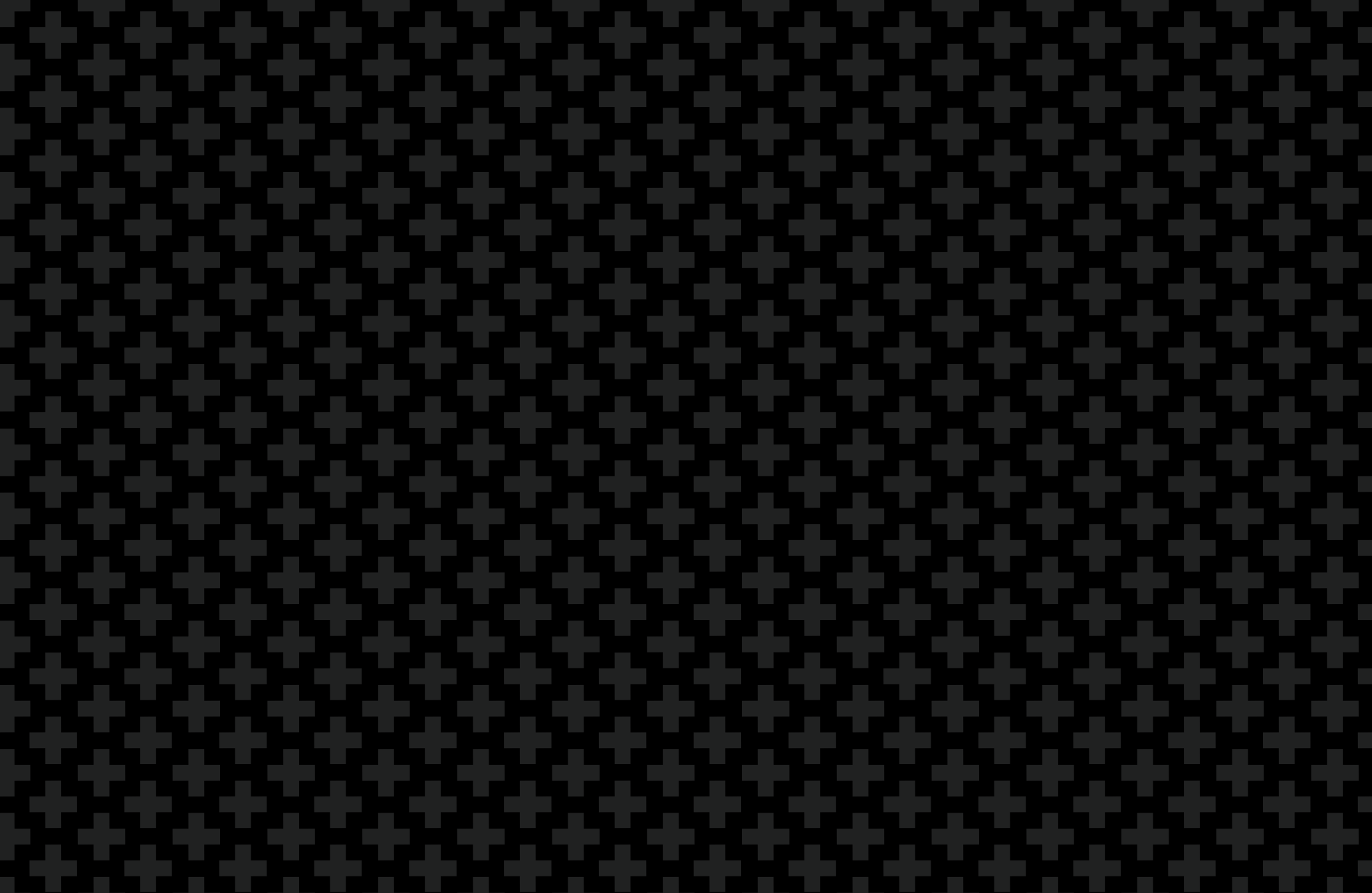
Figure 12 maps the international institutions with which McGill has had the greatest number of co-authored publications over the last five years. This includes Harvard University, with over 2,500 co-authored publications. The top 10 institutions collaborating with McGill come from just three countries: the United States, France and the United Kingdom.



In alignment with recommendations stemming from the San Francisco Declaration on Research Assessment (DORA), McGill recognizes the value of non-traditional research outputs. One qualitative indicator of research impact is the influence of research on policy and practice. Below is a brief summary of the impact of McGill research on policy from January 2018 to December 2023. Publications authored by McGill researchers were cited by over 7,000 policy documents.

Organizations (i.e., policy bodies) that cited McGill's publications included:

- World Health Organization (the policy body citing McGill publications most frequently)
- World Bank
- Government of Canada
- Province of Québec
- Organisation for Economic Co-operation and Development
- United Nations Environment Programme



“

The stories included in this report prove that research partnerships are an integral part of McGill's DNA. It is through collaborative approaches that progress will be made.

”

Martha Crago, Vice-President, Research and Innovation



McGill

Research and
Innovation