

Institutional Priorities and Strategic Goals 2023-2024

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Institutional Research and Analysis

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McMaster Institutional Priorities and Strategic Goals

McMaster University continues to maintain its international reputation as a centre of excellence for teaching and learning, innovation, and creativity. This year, McMaster continued to rank among the world's top universities, ranking 33rd in the world for global impact in the 2023 Times Higher Education University Impact Rankings, a global metric that assesses universities' progress in achieving the United Nations' Sustainable Development Goals. As well, McMaster continues to stand out as one of Canada's most research-intensive universities, ranking second for faculty research intensity and third for graduate student research intensity in 2023, according to Research Infosource.

Looking to the Future

McMaster focuses on areas of strategic importance. In addition to advancing research excellence across the campus, we are positioning Canada as a global leader in critically important areas like electric vehicles, infectious disease research and nuclear medicine. We are focused on expanding our innovation ecosystem to support student and faculty entrepreneurs and strengthen McMaster's capacity as a biotechnology leader in our community and our region. We are continuing to equip our students with the knowledge and skills they need to excel in increasingly digital learning and work environments through the launch of our digital learning strategy and the establishment of the Generative AI Taskforce. This is exploring how McMaster can adapt and incorporate rapidly evolving artificial intelligence technologies, such as ChatGPT, into our teaching and learning practice. We have also made significant advances in our goals to embed an inclusive approach throughout our operations, and to engage diverse communities. Our focus on sustainability has remained a priority as we continue to work towards a net-zero carbon campus. As a result of the many efforts and initiatives undertaken by students, staff and faculty across McMaster, we are on track to cut our total carbon emissions on campus by more than 40% by the end of 2024 over 2018 levels. The university has also successfully reduced the carbon intensity of its investments by 70 per cent from 2018 levels. This report includes many further examples of our collective progress toward achieving these and all the university's institutional priorities and strategic goals.

Vision Statement

Impact, Ambition and Transformation through Excellence, Inclusion and Community: Advancing Human and Societal Health and Well-Being.

Strategic Priorities

McMaster's Institutional Priorities and Strategic Framework for 2021 to 2024 captures the depth of our collective aspirations and desire for impact in all that we do through five institutional priorities: (1) inclusive excellence, (2) teaching and learning, (3) research and scholarship, (4) engaging local, national, Indigenous, and global communities, and (5) operational excellence. The framework aligns with McMaster's Equity, Diversity, and Inclusion (EDI), Community Engagement, Research and Teaching and Learning strategies and supports other planning processes throughout the institution.

Collectively, McMaster's vision, mission, and strategic priorities support the priority areas of the Ontario government's 2020-25 Strategic Mandate Agreement (SMA3) and associated performance measurement metrics.



Building an Inclusive Campus Community

- This year, the <u>Access Program Community Group/School Outreach Initiative</u> expanded its outreach to more than 40 local elementary and high schools with the goal of building a pathway for students from equity-deserving communities to attend McMaster. This led to 3,310 interactions through one-on-ones, school/community partner visits, campus visits and outreach events.
- The School of Rehabilitation Science launched Students with Disabilities in Health Professions and Beyond, developing recommendations, guidelines, and tools. The project goal is to increase enrolment, representation and inclusion, and decrease attrition of students with disabilities in health professional programs.
- The Faculty of Science launched the <u>McMaster</u> Equitable Pathways to Learning University Science program (MePLUS) to engage Grade 11 and 12 students from equity-deserving groups from across Hamilton. Teens meet one Saturday a month on campus for hands-on workshops, mentorship and leadership coaching.

- McMaster University's assistive technology space reopened to students following a significant expansion. The Campus Accessible Tech Space (CATS) provides resources, facilities, and services for McMaster students with accessibility needs.
- The DeGroote School of Business has increased engagement with <u>LimeConnect</u>, the largest network of high-potential university students and professionals with disabilities in the world, to provide access to employment and networking opportunities for people with visible and non-visible disabilities.
- Psychotherapist-spiritual counsellors with Jewish, Palestinian and Muslim identities were contracted to help address the specific needs of Jewish, Palestinian and Muslim students. Contracts have been extended to 2025.
- The Faculty of Engineering has introduced the IBET Momentum Fellowship, which provides up to \$25,000 per year for up to four years to Indigenous and Black doctoral students. This initiative aims to increase the number of Indigenous and Black engineering professors teaching and researching in universities across Ontario, and create the next generation of students who will increase diversity in Canadian technology industries.



In the fall of 2023, the Exceptional Housing Costs Bursary was introduced to address increasing housing costs in Hamilton. All in-course students studying at McMaster who demonstrate financial need and proof of steep housing costs are eligible to apply for the bursary. The Office of the Registrar stewarded \$635,000 in relief funds to 1,342 undergraduate and graduate students via the bursary.

Supporting Tuition and Housing Affordability

- This year, McMaster established the ionkhihahonnién:ni bursary for Indigenous students, which means "they're making a path for us" in the Mohawk language. This program assists with tuition and helps cover cost-of-living expenses such as housing, childcare, food and transportation. It's an important recognition of the additional financial barriers faced by Indigenous students in accessing and completing university.
- Established this year, the new <u>Indigenous Financial</u>
 <u>Aid Specialist</u> role is a collaborative initiative
 between Indigenous Student Services and the Aid
 & Awards unit in the Office of the Registrar. This
 role will oversee the ionkhihahonnién:ni bursary and
 support Indigenous students with financial aid and
 financial literacy expertise.
- McMaster is upholding its responsibilities under the Jay Treaty of 1794 by extending Ontario tuition fees to Indigenous students whose ancestorial homelands are within the United States or a Canadian province outside of Ontario.
- A grant program that helps McMaster instructors create and adapt high-quality, free, open textbooks and course materials is making \$60,000 in funding available to instructors through the Open Educational Resources Grant Program. The textbooks and course materials created through this program are provided to students free of charge.

Inclusive excellence is a concept that recognizes the integral relationship between diversity and quality in research, teaching, service, and governance. It envisions diversity and quality as 'two sides of the same coin'.

Advancing Black Student Excellence

- The Black Student Success Centre has appointed a new Black wellness counsellor to provide culturally responsive therapy services and destigmatize seeking mental health support. This year, more than 150 Black undergraduate and graduate students with diverse intersectional identities accessed 500 hours of wellness support aimed at helping Black students navigate relationship and academic pressures, stressors and racism.
- The Canadian Black Nurses Alliance McMaster (CBNA-Mac), co-founded by students who identified the need for a community that fosters connections among Black nursing students, launched the Black Nurses and Students Allied for Success mentorship program. The program is aimed at fostering the collaboration and community building essential for driving the nursing profession forward.
- The Faculties of Science and Engineering launched Mac-ISTEP, a program that provides Black teens from Hamilton and Halton secondary schools with the opportunity to spend a term attending workshops in McMaster labs and take part in a week-long summer intensive that includes staying in residence. The program is part of Securing Black Futures: A National Partnership to Advance Youth Academic & Career Success, a Canada-wide initiative.
- Several initiatives, reaching a total of 1,678 high school students, have successfully contributed to an increase in the number of Black high school students applying to McMaster including:
- The Black Student Mentorship Program, which expanded this year to 10 local high schools across three school boards and provided weekly mentorship for Black high school students.
- Black Applicant Meet-and-Greet Sessions fostered connections with more than 1,000 applicants and family members.



Building a Culture of Truth and Reconciliation on Campus

- In the months and weeks leading up to National Day for Truth and Reconciliation, both Indigenous and non-Indigenous staff, students and faculty came together to co-develop programming, events and content to support Truth and Reconciliation across McMaster's campus and beyond, including:
- The creation of the McMaster Indigenous Studies Community Book Club. Organized by the Indigenous Studies Department, the club is open to all members of the McMaster community with the goal of creating open dialogue, promoting discussion and providing participants with an opportunity for learning and growth.
- A community-based project in which researchers at the McMaster Ancient DNA Centre worked with Indigenous communities to <u>create informational</u> <u>videos</u> to help communities decide whether to use DNA identification at residential school burial sites.
- A performance of <u>The Mush Hole: Truth</u>
 <u>Embodied</u>, a production developed by the Kaha:wi
 Dance Theatre. Three-hundred members of the
 McMaster community attended this powerful
 event, which explored the history and ongoing
 legacy of Canada's residential schools through
 dance and discussion.

- Efforts at McMaster to advance reconciliation and Indigenous health included:
- A celebration for Indigenous Nurses Day with Six Nations Polytechnic and an Indigenous Health Learning Lodge event that honoured leaders in Indigenous health care and education.
- The creation of a <u>mural painted by a local Indigenous artist was unveiled at the Institute for Applied Health Sciences building</u>. The mural was jointly commissioned by the School of Rehabilitation Sciences and the Department of Surgery at McMaster to underscore their commitment to Truth and Reconciliation.
- The <u>Department of Family Medicine (DFM)</u>
 invested \$1 million in an endowment to support
 Indigenous Health priorities defined and
 overseen by the DFM Indigenous Health Circle in
 collaboration with the Indigenous Health Learning
 Lodge.
- McMaster is committed to advancing Truth and Reconciliation on our campus, not just on September 30 but throughout the year. To help advance this goal, a communications standing committee has been formed to ensure that stories featuring the voices of Indigenous staff, faculty and students, events and other programming that promotes Truth and Reconciliation, are regularly highlighted.

- 6 -

Priority 2: Teaching and Learning Excellence

GOAL: Further advance and support innovation in teaching and learning, within and beyond the classroom, and across disciplines and Faculties, to elevate teaching as a professional discipline and equip our students with the knowledge and skills needed to make a transformative impact on our world.



Leading the Way in Generative Al

• Al is a powerful emerging tool and universities have an important role to play in how it is used in business and industry in Ontario. We are developing new ways to use and integrate Al in our teaching and learning to prepare our students to be innovators in this critical area. McMaster has launched an Al Advisory Committee to explore the use of Al across campus. Three subcommittees are examining the use of Al in teaching and learning, research and operational excellence in our work. It is a strategy that makes McMaster one of the few institutions in Canada taking a pan-university approach to integrating Al into our practices.

Excellence in Digital and Online Learning

- Digital learning presents exciting with new opportunities for innovation in teaching and learning spaces. In 2023, McMaster launched its <u>Digital</u> <u>Learning Strategic Framework</u> to enhance digital learning options and supports across the university and provide a coordinated approach for online tools and technologies. The framework focuses on enabling our educators and learners with the knowledge and confidence to use digital teaching and learning tools effectively, and on sharing best practices to deliver valuable experiences for our learners.
- Projects that exemplify McMaster's commitment to high-quality digital and online learning include:
- The Online Learning Fellowship Program, which supports faculty members in the design, development and delivery of high-quality online or hybrid courses and helps connect educators with colleagues and units on campus to build capacity in this critical area. This program is enhancing

- flexible learning opportunities for McMaster students while developing the skills and expertise of McMaster instructors in the area of online and hybrid teaching.
- A new suite of app-based biology-themed games that complement what is being taught in the classroom. More than 100 McMaster and George Brown students collaborated to design this gamebased STEM learning universe. The project is funded in part by the Government of Canada's Innovative Work-Integrated Learning Initiative and by CEWIL Canada's iHub.
- Providing students, staff and faculty with access to more than 21,000 on-demand instructional courses offered through LinkedIn Learning.
 Access to this popular online learning platform is helping the McMaster community gain relevant, high-demand business, media and technology skills to prepare them for the workforce or advance their careers.

Supporting Experiential Learning

- As the home of problem-based learning, McMaster has long been a Canadian leader in providing hands on educational opportunities for our students. Last year 80 per cent of McMaster students took part in some form of experiential learning.
- In the 2023/24 academic year, McMaster launched <u>EXPLORE</u>: an Experiential Learning Opportunities <u>Resource</u> for students to connect students at all levels and in all Faculties with experiential learning opportunities. McMaster also created the Experiential Learning Network which includes staff representing co-op, career and experiential learning teams across Faculties; and developed a university-wide experiential learning framework.

Using AI in Teaching and Learning

An early adopter of generative AI and machine learning, Assistant Professor in Engineering **Ryan Ahmed**, is integrating the latest technology into the classroom. "I'm encouraging my students to be dynamic and responsive in a world where technology is rapidly developing and changing," says Ryan. "As an engineer, you have to be ready for the next big breakthrough in tech. Innovation and education are the McMaster way – the two go hand in hand."

Associate Professor of Medicine, **Matt Sibbald** is building on the Michael G. DeGroote School of Medicine's history of problem-based learning by using generative AI to simulate what it's like to engage with a patient. Generative AI is where "tradition meets innovation," says Sibbald. Self-directed learning and group work are two cornerstones of teaching and learning at McMaster, "and generative AI has the potential to enhance both."



- In the Faculty of Engineering, 100 per cent of students in the Bachelor of Technology program graduated last year having taken part in a co-op experience, a 257 per cent increase over the previous year.
- Engineering Co-op and Career Services achieved record-breaking numbers for co-op work placements at the undergraduate level, with 81per cent of School of Engineering and Applied Sciences graduates.
- McMaster Engineering boasts the second-largest co-op program in Ontario.

New and Innovative Programs that Support Experiential Leaning

- In partnership with Mohawk College, Hamilton Health Sciences and St. Joseph's Healthcare Hamilton, McMaster announced the opening of the <u>Centre for Integrated and Advanced Medical</u> <u>Imaging (CIAMI)</u>. This new facility for educational training, imaging research and magnetic resonance imaging (MRI) promises to cut wait times and improve patient experience. The Ontario Ministry of Health provided \$5 million in funding over three years to support the creation, development, and testing of the CIAMI model.
- The Faculty of Humanities has significantly expanded resources related to experiential learning, including an Experiential Education Community of Practice, an Advisory Committee on Equity, resources for assessment and reflection, guidance on funding opportunities, and a consultation service to provide instructors with customized support related to existing or new experiential learning opportunities.
- Expanded international learning opportunities for students include the launch of a law student exchange minor with the University of Birmingham (UK) and a student exchange agreement with a consortium of Latin American universities.
- The launch of the Office of Undergraduate Research in the Faculty of Science, the first of its kind at McMaster, promotes excellence in undergraduate student and faculty-led, collaborative research and scholarship in all scientific disciplines. The Office is focused on providing early and equitable access to research opportunities for second-year students.

Microcredentials

 Over the past five years, the number of microcredential offerings across the McMaster campus has risen steadily in response to increased demand for professional development and skills enhancement from non-traditional learners and employers. Together, Faculties across McMaster and McMaster Continuing Education now offer more than 50 microcredentials in a diversity of areas.

- McMaster is continuing to increase the number and breadth of our microcredential offerings. This year, McMaster received funding from the Ministry of Colleges and Universities and the Ministry of Labour, Training and Skills Development's <u>Ontario</u> <u>Micro-credentials Challenge Fund</u> to develop microcredentials in the following areas:
- Leadership in Bioinnovation
- Digital Decode: Bridging the Digital Marketing Skills Gap in Today's Connected World
- Generative AI for Knowledge Workers
- Foundational Competencies and Tools for Equity-Based Co-Creation
- Nuclear Safety and Technology
- McMaster is also developing a website to make it easier for students to access information about the range of microcredentials available.

Developing the Next Generation of Leaders

- The world is changing in profound ways no one predicted, and leaders from all disciplines are needed to navigate the complex challenges facing the Canada today and into the future.
 McMaster is providing students with opportunities to develop critical leadership skills through realworld experiences, preparing them to take on the challenges of the society and the workforce.
- Innovative leadership programs at McMaster:
- McMaster is educating the next generation of leaders in the health care sector. In 2024, the DeGroote School of Medicine graduated 203 future physicians from its internationally acclaimed Undergraduate Medical Education Program. McMaster's School of Nursing graduated 540



The Wilson College of Leadership and Civic Engagement

- The Wilson College of Leadership and Civic Engagement was made possible by a \$50-million gift from Lynton "Red Wilson," which was announced in 2022.
- The College is focused on educating the next generation of leaders who can anticipate challenges and work across the public, private and non-profit sectors to build a positive, prosperous future for Canada and the world.
- The College is home to Canada's only combined Bachelor of Arts degree and minor in in Leadership and Civic Studies.
- In the past year, significant progress has been made on the development of the College including the hiring of an academic director, the establishment of an external advisory committee, and curriculum and program development.
- The College welcomes its first cohort of students in the fall of 2025.
- students from its Bachelor of Science in Nursing program, which is ranked 33rd in the 2024 QS World University Ranking.
- The Indigenous Studies Department launched its master's degree in Indigenous Studies. The new program will provide students with an immersive, multidisciplinary experience that centres Indigenous Studies research methodologies and creation, theory, ways of knowing and community engagement. Focusing on regeneration and resurgence-based programming, students will be trained to be leaders in Indigenous-led, community-based research, knowledge creation and public policy.
- McMaster has launched the <u>Bachelor of Health Sciences</u> (Honours) Integrated Rehabilitation and <u>Humanities program</u>, a collaboration between McMaster's Faculty of Health Science and the Faculty of Humanities. The program is the first of its kind in Canada and globally, and involves a blend of coursework that reflects the complex nature of health and well-being while considering what it means to be human at its most fundamental level.
- The newly launched <u>Collaborative Health</u>
 <u>Governance</u> program provides leaders in the
 health care sector with the opportunity to learn
 from national governance and healthcare leaders
 to understand the new world of governance in
 the healthcare sector, and make a positive and
 immediate impact in the boardroom.
- Over the past year, students in McMaster Executive MBA program have collaborated with the executive teams at Metrolinx, Telus Health and Canada Soccer Association to complete an integrative capstone project as part of their curriculum.

Training the Workforce of Tomorrow

- Starting in Fall 2024, Faculty of Humanities will launch their <u>Humanities Skills for Life certificate</u>, a mandatory 18-unit certificate that incorporates courses in key foundational skills including, digital literacy, career development, leadership, critical thinking, communication, problem solving, and intercultural understanding. The certificate is designed to help students relate skills they learn in the classroom to practical experience.
- The inaugural cohort of co-op students in Economics, Political Science and Work and Labour Studies began their program options in fall 2023. These students participate in three, four-month, full-time, paid work terms related to their studies or career aspirations. Students in these program options benefit from one-on-one support from co-op staff and a mandatory job search course designed to position them for success during the job seeking and application process.
- The Lab for Innovative Neurophysiological Study of Leadership, hosted by the DeGroote School of Business, is designed to have the "look and feel" of business settings, while permitting the use of leading-edge neurophysiological technologies. The Lab works closely with the DeGroote Leadership Hub, a directive designed to enhance leadership development opportunities for the DeGroote, McMaster, and wider communities. Activities include a four-year leadership development journey that all DeGroote undergraduate students engage in through the Bachelor of Commerce and Integrated Business and humanities course series. To date, more than 3,000 DeGroote undergraduate students have engaged with these programs.

- 10 -

 McMaster received a \$2.5 million SSHRC Partnership Grant to establish community-campus hubs to connect students in social sciences, humanities and the arts with community organizations to develop career-relevant skills for working in the social sector and encourage social innovation.

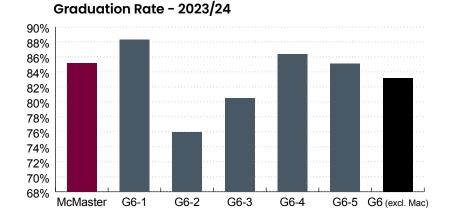
Supporting Academic Success for All

- The recommendations from McMaster's <u>Graduate</u> <u>Funding Task Force</u> will better support the success of graduate students. Recommendations include a shorter, four-year completion period for those in PhD programs – enabling students to move into the next phase of their careers more quickly – and removing limits for graduate students seeking off-campus employment, giving them more options to support themselves financially.
- In 2023, McMaster Engineering launched the <u>Black Outreach STEM Series (BOSS)</u> designed to integrate culturally relevant topics and memorable educational experiences into STEM workshops. BOSS initiatives include the Hair Care series and the Kente Cloth Design series, and have engaged more than 2,100 Black youth since the program's launch.
- In Fall 2023, the Faculty of Engineering welcomed a cohort of Engineering 1 students that included 43 per cent women. This is the closest the Faculty has come to achieving gender parity in its 65-year history.
- Accessibility Services worked with the Regional Assessment Resource Centre at Queen's University to pilot online modules designed for students with disabilities transitioning into the post-secondary learning environment. The course occurred throughout August and was supplemented by synchronous workshops on academic skills, notetaking, assistive technology and a guest lecture. 265 students with disabilities enrolled in the course.

- Over the past year the MacPherson Institute has provided resources and workshops to enhance accessibility practices in course design and delivery. Over 100 educators have participated in activities, which include, a five-part workshop series on Universal Design for Learning, accessible document creation workshops, assessment workshops focused on accessibility, and customized workshops on the topic of Universal Design for learning.
- Student Accessibility Services (SAS) has reduced wait times to less than a week during the peak time of the academic year, and the average wait time is one to three days for students to receive an intake appointment with SAS. As well, the Tim Nolan Testing Centre facilitated 23,758 test or exam bookings, a 27 per cent increase compared to last year.

Celebrating Student Success

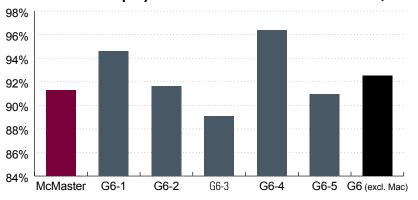
- McMaster students are the recipients of some of Canda's most prestigious honours and awards – a testament to the outstanding quality of the teaching and learning experience across the institution.
 Awards include:
- Seven McMaster students across a diverse range of Faculties were named <u>2023 Vanier Canada</u> <u>Graduate Scholars</u>
- Three students from the Faculties of Social Science, Science and Health Sciences were awarded 2023 Banting Postdoctoral Fellowships
- Two PhD students from the Faculties of Science and Health Sciences were recipients of the Governor General's Academic Medal
- A McMaster Health Sciences student was named a <u>McCall MacBain Scholar</u>
- A first-year student in McMaster's Faculty of Health Sciences was named a <u>2024 Cansbridge Fellow</u>



Note 1: Data sourced from University Statistical Enrolment Report (USER) – Enrolment and Degrees Awarded data collections.

Note 2: Proportion of all new, full-time, year one university students of undergraduate (bachelor or first professional degree) programs who commenced their study in a given fall term and graduated from the same institution within seven years (e.g., 2023-24 data represents the percentage of 2016 entering cohort graduated as of 2023 calendar year).

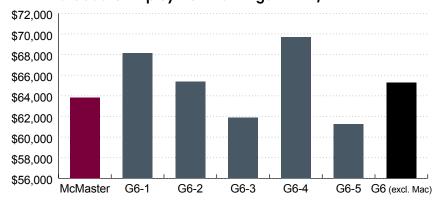
Graduate Employment Rate in a Related Field - 2023/24



Note 1: Data sourced from Ministry of Colleges and Universities Ontario University Graduate Survey (OUGS).

Note2: Proportion of graduates of undergraduate (bachelor or first professional degree) programs employed full-time who consider their jobs either "closely" or "somewhat" related to the skills they developed in their university program, two years after graduation. (e.g., 2023-24 data represents employment rate of 2021 graduates in 2023 calendar year).

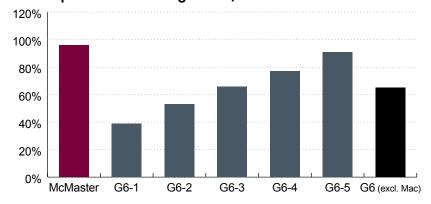
Graduate Employment Earnings - 2023/24



Note 1: Data sourced from Education and Labour Market Longitudinal Platform (ELMLP), Statistics Canada

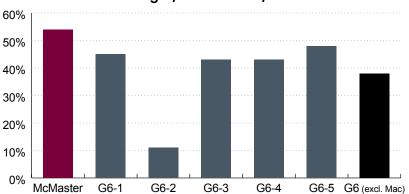
Note 2: Median employment earnings of university graduates, two years after graduation (e.g., 2023-24 data represents earnings of 2021 graduates in 2023 calendar year).

Experiential Learning - 2023/24



Note 1: Number and proportion of graduates in undergraduate programs who participated in at least one course with required Experiential Learning (EL) component(s).

Institutional Strength/Focus - 2023/24



Note 1: Data sourced from University Statistical Enrolment Report (USER), enrolment data collection.

Note 2: Proportion of enrolment in institution's program area(s) of strength: Professional, Quasi-Professional, and Second-Entry Programs.

- 12 *-*

Priority 3: Research and Scholarship

GOAL: Be the go-to place for world-class researchers and collaborators who share our values and commitment to working together across disciplines, sectors, and borders to develop knowledge, tackle global issues, and advance human understanding.



McMaster remains among Canada's most research-intensive universities.

We are ranked **33rd in the world** for impact, and remain among the top universities in the world in the Times Higher Education's Industry metric.



In 2023 McMaster launched its new five-year Strategic Research Plan, <u>Transforming our region, impacting our world</u>, which is designed to advance the university's research strengths and maximize our impact — locally and globally. Building on decades of research excellence, it will accelerate the McMaster's research community's efforts to drive solutions that address complex global challenges.

McMaster Research by the Numbers

- McMaster's research income totalled over \$369 million in 2022, with funding from the tri-agencies totalling over \$99M million and government investments through the Canada Foundation for Innovation, the Canada Research Chairs program, Health Canada and other federal funding totalling \$83.7 million
- McMaster received the following amounts in agency funding:
- \$63,256,000 Canadian Institutes of Health Research (CIHR)
- \$28,019,000 Natural Sciences and Engineering Research Council (NSERC)
- \$8,651,000 Social Sciences and Humanities Research Council (SSHRC)
- \$18,904,000 Canadian Foundation for Innovation (CFI)
- In the 2023 Research Infosource rankings, McMaster placed second for faculty research intensity, third for graduate student research intensity, and ninth for Research University of the Year among medical/doctoral schools.
- Over the past five years, McMaster has attracted over \$522 million in investments from the private sector, earning the second-highest spot for corporate research income (Research Infosource 2023).
- Sixteen McMaster researchers were featured on the <u>Clarivate Analytics 2023 list of highly cited researchers</u>.
 Those included in the list represent the top one per cent of citations in a given publication year.

Keeping Canadians Healthy

- Research led by McMaster, BC Cancer, Hamilton Health Sciences, and the University of British Columbia found that some women with early-stage, low-risk breast cancer may not need radiotherapy after breast conserving surgery.
- McMaster's research related to women and maternal health includes endometriosis testing, working to advance and investigate equity in maternal and perinatal care, addressing pregnancy-related nearmiss events and deaths, and a McMaster-led analysis identified <u>high rates of injuries with forceps and</u> <u>vacuum delivery in Canada</u>.
- Researchers led by a McMaster professor and postdoctoral research fellow <u>uncovered a key</u> <u>mechanism for promoting weight loss and maintaining</u> <u>the burning of calories during dieting</u>.
- About \$34 million was awarded to researchers with McMaster's Faculty of Health Sciences

- from CIHR. <u>Spring</u> and <u>fall</u> 2023 project grant competitions with about 60 Health Sciences research team projects secured critical funding to advance our understanding of health and medicine and to address critical health issues, including tree nut allergies and the impact of cannabis exposure to babies.
- Researchers were awarded over \$4 million combined from the Juravinski Research Institute to lead research on severe maternal morbidity, child health care and integrated health care models in Hamilton.
- The Canadian Transfusion Trials Group a national initiative designed to promote collaboration and excellence in transfusion medicine research co-led by a McMaster researcher received \$2.3 million from Canadian Blood Services. The funding will be used to support the development of a cohesive and diverse transfusion medicine research community across Canada.

Addressing the Growing Burden of Chronic Disease

- Researchers received <u>federal funding to improve</u> <u>awareness of ways to reduce the risk of dementia</u>, as part of the government's Dementia Strategic Fund.
- Researchers with McMaster and a Denmark-based pharmaceutical company made a groundbreaking discovery of a new cell that remembers allergies, McMaster researchers crafted the <u>first-ever</u> guidelines to help prepare families who plan to build their child's tolerance to common food allergens and a McMaster researcher <u>developed new guidelines</u> for treating the common skin condition known as eczema.
- Researchers from the Faculty of Health Sciences were <u>awarded more than \$14 million from CIHR</u> to advance studies on brain health, metabolic diseases, antimicrobial resistance and more.
- A McMaster surgery professor is leading a major international, multi-centre trial investigating a potential new treatment regimen for diabetic macular edema using a medication already approved for use in Canada.
- A McMaster study that aims to improve care for Canadians living with a common type of blood cancer received \$4.9 million in support from Pfizer. The EMBRACE study will explore how adult patients with relapsed or refractory multiple myeloma (RRMM) can safely receive treatment and care at home.

Promoting Health and Well-being Across the Lifespan

- McMaster Child Health Research Day, welcomed 130 Health Sciences students, patient families and guests gathered to celebrate innovative research studies and compete for awards. The breadth of research presented included more than 125 studies spanning topics from artificial intelligence applications to basic science, chronic conditions, and mental health interventions, among others. The array of child-centred health research was unprecedented for the region.
- The Enhancing Mobility and Participation for Older Adult Wellness through Digital Inclusion (EMPOWrD) program, is improving mobility/wellness among older Canadians through effective design to bridge digital divides along the dimensions of access, use and embracement.

- A \$2.4-million grant from Health Canada will support a research project focused on <u>creating education</u> <u>tools on palliative care</u> that can be used by the public and by clinicians to improve palliative care across the country.
- McMaster and the University of Liverpool have partnered to advance research and innovation at both institutions. As part of the partnership, the two research-intensive universities have launched a \$500,000 seed fund that will support collaborations in areas of complementary research strength, including health research across the life stages and research and development in port design and sustainability.

Transformative Innovations and Technologies

- Researchers at McMaster and St. Joseph's
 Healthcare Hamilton have produced a simple rapid
 test that can detect a key driver of severe asthma.
 This new rapid test helps clinicians make decisions
 about using drugs such as steroids or new biologics
 for patients with severe asthma and other lung
 diseases, such as severe cough and COPD, and
 help to limit the unnecessary use of antibiotics
- McMaster researchers have created a new packaging tray that can signal when salmonella or other dangerous pathogens are present in packages of raw or cooked food such as chicken. The new technology will enable producers, retailers and consumers to tell in real time whether the contents of a sealed food package are contaminated without having to open it, preventing exposure to contamination while simplifying cumbersome and expensive lab-based detection processes.
- A team of McMaster researchers is taking a leading role in a Canadian <u>initiative aimed at making cultured</u> <u>meat more affordable</u> and accessible to everyday consumers. The project is supported by a \$10-million investment from Genome Canada through Ontario Genomics and will bring together experts from multiple postsecondary institutions across the country, including seven researchers from McMaster.
- A ground-breaking study received national and international attention for revealing that changing the sound of hospital medical devices could help improve patient outcomes.



Maintaining and Restoring a Healthy Environment

- Eight McMaster researchers have been <u>awarded</u>
 <u>a combined \$3.2 million from the Government</u>
 <u>of Canada's New Frontiers in Research Fund</u> to
 advance research across a number of disciplines,
 including climate change adaptation and mitigation.
- A new global centre focused on climate change promises to address complex water crises that span international boundaries and jurisdictions.
 Co-led by McMaster, the centre received \$3.75 million in funding from the National Science
 Foundation Global Centres to lead research focused on understanding and mitigating water crises in transboundary jurisdictions – areas that encompass or intersect multiple sovereign nations, including those of Indigenous Peoples.
- The Faculty of Engineering's Climate Adaptation and Resilience Strategies team received \$1.5 million from the New Frontiers in Research Fund to explore the challenges faced by climate migrants and host communities in key urban areas. The team is focused on the socio-economic vulnerabilities among urban migrants in the Lake Victoria Basin and Great Lakes Region. The investigators will study the threats and opportunities in the Lake Victoria region and apply the findings to plan for climateinduced migration in the Laurentian Great Lakes.

Civil Society, Cultures and Sustainable Prosperity

- McMaster's HOPE Chair in Peace and Health in the Global Peace and Social Justice program, has received more than \$1.7 million from the Nova Scotia Department of Environment and Climate Change to work with African Nova Scotian communities to address issues related to climate change and climate justice. The three-year African Nova Scotian Climate Justice Ambassadors Program aims to train members in 25 African Nova Scotian communities in climate resilience, justice and advocacy.
- The Future of Canada Project concluded its three-year, \$5-million pilot having supported 14 interdisciplinary research initiatives, seven Future Fellows and a three-day forum, Imagining 2080, attended by 150 leaders from across Canada, including academics, futurists, non-profit leaders, policy makers and students. Advised by a council of prominent Canadian leaders, the Project's activities focused on five key themes: climate change, rapid technological advancement, pandemic, challenges of reconciliation, and the erosion of truth and trust.



Using AI to Fight Superbugs

Antibiotic resistance research at McMaster made headlines around the world and was named one of the year's most important scientific and technological advances by *The New York Times*.

In collaboration with researchers from Massachusetts Institute of Technology, McMaster researchers, led by **Jonathan Stokes**, professor of biochemistry and biomedical sciences, used artificial intelligence to discover a new antibiotic which could be used to fight a deadly, drug-resistant pathogen that strikes vulnerable hospital patients.

Researchers screened more than 6,500 antibacterial molecules, finding nine potential antibiotics and were then able to identify the new antibiotic compound. The screening process only took an hour and half, compared to the thousands of research hours this discovery would have taken using conventional methods.

Watch Video ▶

The Global Nexus School of Pandemic Prevention and Response

Global Nexus is a partnership-focused health innovation accelerator based in McMaster's Faculty of Health Sciences. It facilitates seamless collaboration between academic and non-academic partners in sectors including government, public health, industry, and communities. Together with these partners, Global Nexus is co-developing transformative health solutions that have broad social impact.

- Transformative infectious disease research:
- Researchers have <u>discovered a new way to protect</u> <u>against infections</u> like COVID-19 using synthetic aptamers. These aptamers are made up of genetic material that can be designed to stick to various targets, much like antibodies.
- McMaster's <u>inhaled COVID-19 vaccine</u> developed by Global Nexus researchers is moving to Phase 2 clinical trials.
- The Canadian Pandemic Preparedness Hub, co-led by McMaster and the University of Ottawa, received more than \$115 million in research and infrastructure funding to modernize and futureproof biomanufacturing facilities at McMaster and the Ottawa Hospital, where researchers are developing a range of biological products suitable for use in clinical trials, including vaccines, antibodies and cell-based therapies.
- The McMaster-led COVID <u>CommUNITY South</u>
 <u>Asian research program</u> found that grassroots
 advocacy and partnerships with local community
 groups drove an increase in vaccine confidence
 and access in South Asian communities, some of
 the worst affected communities in the early days of
 the pandemic.

- McMaster researchers have received \$750,000 from the Canadian Institutes of Health Research (CIHR) for a multi-year study into the connection between respiratory infections and brain aging.
- Global Nexus researchers shared their expertise and kept Canadians informed about a range of serious public health threats through OpEds and other media stories including:
- An ounce of prevention: Now is the time to take action in H5N1 avian flu, because the stakes are enormous
- West Nile and Lyme Disease: Here's what you need to know
- Protecting older adults amid rising COVID-19 hospitalization rates
- What you need to know about Salmonella
- Understanding E.coli: Symptoms, treatments and prevention
- Global Nexus hosted the <u>Future of Vaccinology</u> <u>Symposium</u>, which focused on the future of vaccine design, manufacturing and access.
- Pfizer Canada invested \$500,000 in McMaster projects aimed training emerging scholars from equity-deserving groups in the field of vaccinology and included conducting vaccine research focused on populations who are especially vulnerable to infectious diseases.
- A new agreement between McMaster and the National Research Council of Canada (NRC) will enable collaboration on evidence-based solutions to infectious diseases. The agreement includes collaboration on research related to infectious disease, antimicrobial resistance, drug discovery, diagnostics, biocompatible materials and other areas.



Celebrating Success: Fusion Pharmaceuticals

Fusion Pharmaceuticals, a cancer therapy and diagnostics company founded by McMaster professor of chemistry and chemical biology, **John Valliant**, was acquired by AstraZeneca for \$2 billion US, making it McMaster's first unicorn.

Under Valliant's leadership, Fusion, which is based at the McMaster Innovation Park, was the first publicly traded spin-out company of the McMaster-based Centre for Probe Development and Commercialization.

Commercialization and Entrepreneurship

McMaster is one of the world's top universities for global and industry impact. We are ranked first in Canada in research commercialization licensing, our founders have created more than 331 startup companies and have raised more than \$550 million in venture capital funds.

McMaster's entrepreneurial ecosystem thrives on world-class research programs and a problem-based learning culture that allows our entrepreneurs to focus on finding impactful solutions for people and the planet.

- In 2023, the McMaster Industry Liaison Office recorded 87 invention disclosures and 17 patents issued.
- McMaster has established the <u>Entrepreneurship</u>
 <u>Academy</u> a new initiative designed to enhance
 McMaster's unique entrepreneurial training, research
 and translation pipeline. Key initiatives include:
- The Professor Entrepreneurship Fellowship which releases full-time faculty who have started companies that involve McMaster intellectual property from teaching one course, or the equivalent, for one year
- The Innovation Matchmaking program connects research teams from McMaster or affiliated hospitals and provides then with \$75,000 in prepfunding to build investable ventures
- Mentorship programs that connect entrepreneurs with investors and industry leaders to help them grow their companies
- Providing access to lab space for start-up companies for a flat rate to help them develop concepts and prototypes
- Three McMaster startup companies received \$256,000 each in the third round of <u>McMaster</u> <u>Seed Fund</u> investments to advance their innovative technologies.
- HARVEST aims to support decarbonization of the restaurant industry with their fuel-less, carbon-free hot water heating system.

- A.I. VALI Inc. has developed an AI platform that uses interactive machine learning to document and analyze endoscopy videos in real-time.
- Esphera SynBio has developed a novel therapeutic technology designed to treat infectious diseases and cancer.
- In a new model of cooperation between a venture capital fund and a public university, McMaster has partnered with Celesta Capital a deep technology venture capital firm support McMaster startups and researchers in commercializing their intellectual property and connecting with venture capital hubs in Canada, Silicon Valley, India and beyond. The partnership will also provide access to emerging companies, co-judged pitch competitions, mentorship for entrepreneurs, ecosystem development and advice on intellectual property strategies and invention optimization.
- McMaster's Michael G. DeGroote School of Medicine, Waterloo Regional Campus <u>launched</u> <u>MACcelerate at Communitech</u>, which is aimed at creating an environment un which medical professionals and aspiring practitioners collaborate with engineers and entrepreneurs to redefine the future of healthcare and enhance clinical outcomes.
- The DeGroote School of Business received a SSHRC Partnership Engage Grant focusing on elderpreneurs and established the <u>Centre for</u> Research on Community Oriented Entrepreneurship
- The Marnix E. Heersink School of Biomedical Innovation and Entrepreneurship launched multiple Al initiatives this past year including:
- The Master of Biomedical Innovation (MBI), launched in September 2023, integrates AI into its curriculum, projects, and electives.
- Al in Healthcare Rounds includes monthly Zoom sessions discussing the latest Al advancements in healthcare, facilitated by experts.
- Al Bootcamp: The Essentials is a three-session bootcamp offering hands-on experience with ChatGPT and Al tools.

- The Heersink Signature Scholarship pairs Faculty of Health Sciences trainees with biomedical expertise with Faculty of Engineering trainees with AI expertise. Five pairs have been awarded scholarships to rapidly integrate AI into biomedical research and healthcare.
- The Faculties of Science and Engineering are collaborating to expand and strengthen efforts to increase research revenue through a pilot program that includes the creation of new positions to help support research groups, faculty commercialization of research, and student innovation. STEM Innovation Agenda (mcmaster.ca)
- McMaster has established the Societal Impact Academy. The Academy will host several initiatives aimed at supporting research and knowledge creation, mobilization and exchange activities to shape responsible, ethical impact in society, and celebrate different forms of research impact. Key initiatives include:
- The Societal Impact Seed Grant which supports meaningful campus-society collaborations across the disciplines.
- The Society & Impact Luncheon Series which explores how academic researchers and community partners can work together to advance meaningful social change.
- The Societal Impact Pitch Competition, which calls upon graduate students to showcase how their research can generate positive impact and help create a brighter world, with a \$1,000 grand prize.
- The Societal Impact Resource Network, which will build networks and communities to bring those who conduct work with societal impact together and determine resource needs and support.

Realizing McMaster's Nuclear Potential

 As Canada's nuclear university, McMaster is maximizing its world-class nuclear facilities to drive innovations and make contributions to nuclear medicine, clean energy and next-generation materials to secure a healthier and more sustainable world.

• Partnerships and New Programs:

- McMaster received \$6.8 million from the federal government as part of a national initiative to create a Canadian Medical Isotope Ecosystem a pan-Canadian network for medical isotope research and innovation. The funding for McMaster will be used to expand reactor staffing and operating hours at the McMaster Nuclear Reactor (MNR), enhancing MNR's capacity for medical isotope research and production of custom isotopes for clinical trials.
- McMaster partnered with Canadian Nuclear Laboratories (CNL) to host the first round of the CNL Nuclear Undergraduate Research Experience Program in Summer 2023. The program offered 12 undergraduates from McMaster the opportunity to conduct nuclear research in cutting-edge facilities, work with leading academic and industry experts, and enter the highly skilled workforce of tomorrow.
- McMaster and King's College London formed a
 partnership to advance research and training in
 nuclear medicine. The two world-leading nuclear
 research institutions will work together to produce
 94mTc a radioisotope that can be used in PET
 scans of tissues and organs to help diagnose
 cancer and heart disease, among others.

Small Modular Reactor research:

- Six McMaster researchers were <u>awarded a</u> <u>combined \$3.6 million</u> from the Canadian Nuclear Safety Commission (CNSC), NSERC and Natural Resources Canada (NRCan) to lead research on small modular reactor (SMR) design, deployment and safety.
- Two McMaster researchers were <u>awarded \$1.4</u> <u>million from NSERC and NRCan</u> over four years to develop an environmentally friendly laser-based waste management solution.
- McMaster researchers received \$1.2 million from NSERC and NRCan over four years to lead a study focused on evaluating SMR fuel performance and safety. This research will focus on TRISO fuels, which can withstand extreme high temperatures and provide multiple layers of added protection compared to traditional nuclear reactor fuels.



Last year alone, medical isotopes produced in the McMaster Nuclear Reactor were used to treat 70,000 cancer patients world-wide.

2024 marks the 65th anniversary of the construction of the McMaster Nuclear Reactor, which remains the only research reactor of its kind on Canada.

Watch Video >

Awards and Chairs

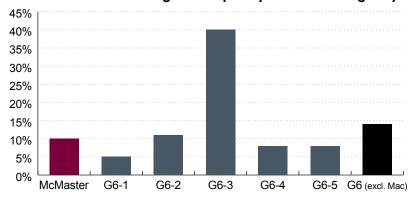
- In 2023-24, seven McMaster researchers were named Canada Research Chairs and five had their chairs renewed. Also in 2023-24, four researchers were elected Fellows of the Royal Society of Canada, four were named to the Canadian Academy of Health Sciences, and four McMaster leaders were appointed to the Order of Canada. Other awards presented to McMaster researchers in 2023-2024 include the 2024 Killam Prize in Health Sciences, the Gairdner Early Career Investigator Award, the Canadian Science Publishing Senior Investigator Award, the 2023 Polanyi Prize in Physics and the 2024 Henry G. Friesen International Prize in Health Research.
- The Faculty of Engineering recruited a worldrenowned biosensing expert as the Canada
 Excellence Research Chair (CERC) in Nano-Optical
 Biosensing and Molecular Diagnostics. The \$8 million
 award will support a multidisciplinary research team
 at McMaster focused on developing breakthrough
 biosensing and bioimaging methods with applications
 in clinical diagnostics, environmental protection and
 food safety.
- Allan Downey, an associate professor jointly appointed between the departments of History and Indigenous Studies was named a Canada Research

Chair in Indigenous History, Self-Determination and Nationhood. Downey was also named a University Scholar. Several researchers have received national and international attention, as well as significant funding.

Enabling Research

- McMaster recognizes the value of international research collaborations in advancing our individual and collective research discoveries, and is <u>committed</u> to <u>ensuring McMaster's research remains secure and</u> competitive on the global stage.
- The Digital Research Commons Pilot is a multi-year project to create a more connected and user-focused approach to digital research support. The goal of the pilot is to improve access to systems, services, software, and training for researchers across the institution.
- McMaster's first Research Data Management (RDM)
 Institutional Strategy was launched in 2023, and was created through the contributions, writing, input, and feedback from hundreds of members of the McMaster research community. The result is a guiding framework and a growing suite of related services that will support all McMaster researchers in planning for and managing their research data.

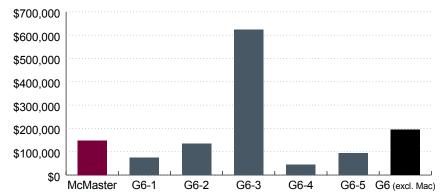
Research Funding and Capacity: Federal Tri-Agency Funding Secured - 2023/24



Note 1: Data sourced from Research Support Program, The Tri-Agency Institutional Programs Secretariat (TIPS)

Note 2: Amount and funding received by McMaster from federal research granting agencies and proportion of total Tri-Agency funding received by Ontario Universities.

Research Revenue Attracted from Private Sector Sources - 2023/24



Note 1: Data sourced from Council of Ontario Finance (COFO).

Note 2: Total research revenue attracted from private sector Officers and not-for-profit sources.

Note 3: This metric is calculated based on the rolling average of the three most recent years

- 20 -

Priority 4: Engaging Local, National, Indigenous and Global Communities

GOAL: Further develop and expand our network of longstanding and respectful partnerships with communities, partners, research collaborators, and supporters, locally, nationally and globally for the benefit of all.



Celebrating the Solar Eclipse

To mark the total solar eclipse, McMaster welcomed 5,500 members of the campus and local communities to a viewing party that took place at Ron Joyce Stadium.

In addition, students and experts in the Department of Physics and Astronomy provided free educational programming to the Hamilton-Wentworth Catholic School Board, the Grand Erie School Board, Hamilton-Wentworth District School Board, Halton District School Board, Halton District School Board, Halton District Catholic School Board, Six Nations District Schools and various other community partners including the Bruce Trail Conservancy, the Bay Area Science and Engineering Fair, Royal Botanical Gardens, Tourism Hamilton and the Hamilton Amateur Astronomers group.

Watch Video ▶



- A new interdisciplinary minor in Civic Vitality,
 Democracy and Elections Management (CIVDEM)
 was established in partnership with the Department
 of Political Science. The minor equips students
 to strengthen democratic resiliency, and electoral
 integrity, and empowers underrepresented groups
 to participate in the political and electoral process.
 Students gain the foundations of knowledge,
 focused expertise, and research competencies in
 the areas of civic vitality, democracy and elections
 that are local, national and global in scope.
- A national dialogue series is underway to formalize and strengthen the pan-Canadian health evidencesupport system. The project is organized by the Global Commission on Evidence to Address Societal Challenges (hosted at the McMaster Health Forum), CIHR and in collaboration with Health Canada, the Public Health Agency of Canada, Canada's Drug Agency the Canadian Institute for Health Information the National Alliance of Provincial Health Research Organizations, Fonds de recherche du Québec and Health Research BC.
- Brenda Vrkljan, a professor in the Department of Rehabilitation Science, is leading a study that connects older adult drivers with McMaster Engineering students, staff and faculty at the McMaster Automotive Resource Centre (MARC).
 The study is intended to facilitate meaningful

- knowledge transfer that will lead to safer and more accessible automotive design. The event, Mobility Matters, hosted more than 70 older adults at MARC in April to learn more about electrification in the automotive industry and to share key insights on accessibility challenges they face on the road. Students from the McMaster EcoCAR team based at MARC who are competing in a multi-year competition to engineer the next-generation of battery electric vehicles, led presentations and discussion groups with attendees.
- The Linguistics and Languages department, partnered with the Hamilton Public Library to connect older adults with digital storytelling platforms and training in a project called Writing Through Time.
- The DeGroote School of Business is contributing to a recently announced Public Health Agency of Canada project that will use equity-centred design thinking to create and implement evidencebased parenting resources for diverse groups of caregivers.
- The McMaster Digital Transformation Research
 Centre secured a partnership with the Innovation
 Factory and the National Research Council to
 support its Hamilton Ecosystem to Accelerate &
 Leverage Trials of Health Innovation Program, which
 helps Age-Tech startups develop their technologies
 through advanced user-experience testing and
 insights.

Improving Access to Mental Health Services for Black Youth in Hamilton



Ingrid Waldron, the HOPE Chair in Peace and Health, in collaboration with researchers and community partners including, Empowerment Squared, the Medavie Health Foundation, the Balsam Foundation, the Echo Foundation, worked with Black communities in Hamilton to develop a vision for addressing gaps in mental health policy, programs and services aimed at Black youth.

As well, Waldron, working with colleagues in the Faculty of Engineering including Zobia Jawed as well as community partners, <u>has created workshops for marginalized communities in the GTHA for developing climate resiliency and an awareness of climate justice principles</u>.

Engaging Indigenous Communities

- McMaster has established the position of Vice-Provost, Indigenous. The introduction of this role will play an important part in advancing McMaster's commitment to Truth and Reconciliation. This position will be informed by the Indigenous community at McMaster, and includes responsibility for implementing and maintaining a university Indigenous education and research plan, and providing vision and leadership for decolonization while furthering the Indigenization of the university.
- This year, McMaster introduced the Walls to Bridges Program, part of a Canada-wide program that moves university classes into prisons where incarcerated and non-incarcerated students can earn university credits while taking courses together. McMaster's program is led by Savage Bear, the Director of the McMaster Indigenous Research Institute. So far, the Indigenous Studies Department has brought two courses to the Grand Valley Institution for Women (GVI) in Kitchener, providing a transformative learning experience for residents at GVI and the McMaster undergraduate students learning alongside them.
- The annual John Douglas Talor Conference,
 "Acknowledgement: Land, Relations, and
 Responsibilities," explored Indigenous land history in southern Ontario and the importance of Haudenosaunee wampum agreements. The conference included a display of three historically significant wampum belts: the Dish With One Spoon wampum belt, the Two Row belt, and the Pledge of the Crown belt.
- The Indigenous Language Revitalization Program, offered in collaboration with the Onkwawenna Kentyokhwa program at Six Nations, will welcome its first cohort in September 2024. The Six Nations program and its connection with McMaster was featured in an <u>article in the New York Times</u>.
- McMaster co-hosted the <u>Community Energy</u>
 <u>Transition Workshop</u> to explore ways of achieving
 safe, reliable and zero-emission energy in
 collaboration with residents from northern and
 remote communities. The workshop was delivered
 by McMaster staff and researchers with expertise in
 new and existing nuclear deployments, safety and
 developing advanced tools for reaction monitoring
 and inspection. McMaster and its co-host, First
 Nations Power Authority (FNPA), welcomed
 50 attendees from Indigenous communities,
 government labs and academia across Canada.



As part of its multi-year Indigenization strategy, the Faculty of Science hired a local Indigenous artist to create a mural for the entrance to the Burke Science Building. The installation project was led by three undergraduate students working under the supervision of staff in the Dean's Office.



- McMaster University Library is playing an important role in supporting the preservation of Indigenous culture through its archival collections:
- The Basil H. Johnston Archives have become part of the Canadian Commission for UNESCO Canada Memory of the World Register. Johnston (1929-2015) was an Anishinaabe (Ojibwe) author, linguist, and teacher.
- Fall 2023 marked the 50th Anniversary of Maria Campbell's work Halfbreed about her experiences as a Métis woman in Canada. An unpublished manuscript in the William Ready Division of Archives and Research Collections was key to a new edition published in 2019 with previously omitted sections.
- In 2023, McMaster acquired the Harvey Feit Archive. Feit, a professor emeritus of anthropology at McMaster, dedicated his life to research and work with Eeyou (James Bay Cree) peoples, and was involved in the negotiation and implementation of the James Bay and Northern Québec Agreement (1975).

Engaging Global Communities

- Building on 15 years of partnership, the Faculty of Health Sciences collaborations with institutions in Guyana recently included a memorandum of understanding (MOU) signed in November 2023 with the Doobay Medical Research Centre. The agreement formalizes existing educational, research and humanitarian collaborations between the institutions, and builds on many existing collaborations between McMaster Faculty and Hamilton Hospitals including the St. Joseph's Health System International Outreach Program. Also, McMaster was awarded a \$2.5 million federal government grant that will be used to transform maternal and neonatal care in Guyana.
- As part of McMaster's institutional strategy to develop research and academic partnerships with leading universities globally, McMaster recently signed an MOU with Aga Khan University (AKU). The MOU renews and expands on a 40-year history of cooperation and further aligns McMaster's academic and research strengths with those of AKU in health care, sustainability, climate change, data science, cultural studies and global peace, among other areas of study

- 24 -

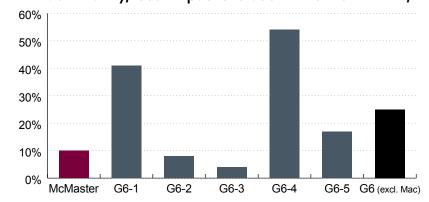




- McMaster has strengthened its growing partnership with the University of Alabama at Birmingham by signing an MOU that sets the stage for further collaboration, including the exploration of joint degrees, research collaborations, global health initiatives and other innovations. The MOU also addresses global health challenges and fosters innovative solutions that can make a meaningful difference in our communities.
- The Department of Family Medicine and Syiah
 Kuala University in Banda Aceh, Indonesia renewed
 their Memorandum of Understanding (MOU) for
 another five years (2023 2028). Syiah Kuala
 University launched its family medicine residency
 program this August after more than 12 years of
 planning and development. McMaster has been
 a key partner in supporting and mentoring the
 Indonesian university to establish its family medicine
 curriculum and training, and help build the capacity
 of family medicine worldwide.
- McMaster continues to support scholars at risk through the <u>Scholars at Risk Program</u>. Established in 2022, this program aims to support McMaster faculty, departments, and research centers in employing forcibly displaced researchers and scholars remotely and locally. This includes refugees, those displaced within their country of origin, or those living in conflict-ridden situations and at risk of violence. So far, seven scholars have been supported, including scholars from Ukraine, Afghanistan, and Palestine.
- McMaster is strengthening its academic and research ties with Caribbean post-secondary institutions as the lead Canadian partner in the Canada-Caribbean Institute (CCI). Established in 2020, the CCI's mission is to bring together scholars from across Canada and the Caribbean to collaborate on economic, environmental and social issues that contribute to the shared prosperity of both regions. The CCI supports research on a range of key policy areas including health; climate change; advancing the United Nations' Sustainable Development Goals; trade and investment; Caribbean culture and the diaspora; and government and foreign relations, among other areas.

- McMaster is a partner in the African Youth International Internship Project that will provide support for students and other youth from across Canada to go on internships in Liberia and Ghana. The program, which received \$4.9 million in funding from Global Affairs Canada is aimed at giving Canadian students the opportunity to gain international experience while focusing on genderempowering educational research and inclusive growth, climate change mitigation, adaptation and environmental research
- The Centre for Advanced Research in Experimental and Applied Linguistics (ARiEAL) has piloted an international visiting researcher program that emphasizes collaboration with PhD candidates and junior academics from locations that are traditionally under-represented in Western academia. This year, out of 40 applications, they welcomed four scholars from Spain, Ghana, Nigeria and Brazil.

Community/Local Impact of Student Enrolment - 2023/24



Note 1: Data sourced from University Statistical Enrolment Report (USER) and Census Data (Statistics Canada), reporting period is fall term enrolment.

Note 2: Institutional enrolment share in the population of the city in which the institution is located.

- 26 -

Priority 5: Operational Excellence

GOAL: Enable the administrative operations of the university to most effectively support the institutional vision and aspirations of our community of researchers, scholars, teachers and learners.





Ensuring Student Housing for the Future

- McMaster's 10 Bay Residence opened in September 2023, enabling students in graduate programs to lease an apartment-style housing location in downtown Hamilton. With more than 640 beds, 10 Bay's location allows for flexibility in travelling to McMaster's main campus and satellite locations and provides all-inclusive utilities, Internet, parking and amenities like study and athletic spaces. The residence also features live-in community staff who look to connect students in the spirit of collaboration, friendship and inclusiveness. This building launch is part of a public-private partnership with Knightstone Capital.
- McMaster also broke ground on Lincoln Alexander Hall which is slated to open in Fall 2026. The project, which is the University's 15th and largest residence building, and will provide more than 1,300 beds and allow McMaster to offer a guaranteed residence space to all first-year students.

Expanding Revenue Sources

 In support of McMaster's goal to diversify and expand its revenue in support of the academic and research missions, the role of Associate Vice-President, Real Estate and Partnerships, has been established. This role will also oversee the university's critically important ancillary services, including Hospitality Services, the Campus Store, Media Production Services and Parking Services, bringing together the various revenue generating functions under one portfolio and championing the ongoing focus on operational and service excellence for the campus community.

Sustainability and Decarbonization

- After extensive consultation, the new 2023-2033
 Campus Plan was launched and aims to transform campus into a living laboratory that champions sustainability, accessibility, equity, and inclusion.
 This blueprint seeks not only to enhance the university's physical environment but also to support the exceptional quality of its education and research initiatives.
- McMaster has surpassed its carbon reduction targets for its investment portfolio a full two years ahead of schedule. As outlined in this year's <u>Annual Financial</u> <u>Report</u>, the university has successfully reduced the carbon intensity of its investments by 70 per cent from 2018 levels, surpassing its original goal of 65 per cent by 2025. McMaster has divested from highercarbon holdings, which has resulted in a reduction in its holdings in the Carbon Underground 200 (CU200) to 1.6 per cent from 2.7 per cent last year.
- The Enterprise Risk Management Program has developed an Enterprise Risk Framework and the Enterprise Risk Management Committee has been working to guide the process.



Maintaining a Balanced Budget

- McMaster produced a balanced budget through a close collaboration with the Budget Committee. The university was one of only two Ontario universities to successfully balance its budget this year.
- McMaster's Budget Model review was completed, and the implementation of recommendations is ongoing.

Improving Systems and Streamlining Operations

- An integrated, service-focused OneHR Operating model to support the university community launched this year. This new model fosters collaboration across HR, driving operational excellence with coordinated partnership, two-way dialogue and integration of services.
- McMaster has significantly bolstered and reinforced its systems and data security infrastructure by implementing new tools, processes, and technologies, such as multi-factor authentication for Microsoft 365 and enhanced network security measures.
- In September 2023, the university unveiled MacHub, a personalized online platform designed to facilitate communication with academic advisors, provide quick access to essential university resources, and address frequently asked questions regarding academic life, such as course enrollment procedures. A collaborative effort between University Technology Services (UTS) and Student Affairs, the Current Student CRM Digital Transformation Project will help realize operational efficiencies and gain valuable insights from data analytics.

In response to the federal government's temporary reduction of new international student study permits, the Registrar's Office closely monitored government developments and worked with several partners on campus so that they were ready to support the McMaster community and prospective students. In response, the McMaster PAL Tool was created. This tool helps students self-identify if they need a Provincial Attestation Letter (PAL) and guides them through the process of obtaining one. For McMaster administrators, the tool speeds up the process of sharing a PAL and gets students what they need, fast

Awards and Accolades

- In 2023, McMaster received two top employer awards through Canada's Top Employer Awards program. For the ninth year in a row, the University proudly secured a position on Hamilton-Niagara's Top Employers list and for the sixth consecutive year, McMaster ranked as one of Canada's Best Diversity Employers.
- The Finance 2 Go initiative in the Faculty of Health Sciences won national prize in the 2023 Canadian Association of University Business Officers Quality and Productivity Awards Program. Finance 2 Go combines process improvements and technology with mobile support, offering a more efficient and effective way to process financial transactions within the Faculty's complex environment, which includes funding and delivering health professional education and working with hospital affiliates.





Land Acknowledgement

McMaster University recognizes
and acknowledges that it is located
on the traditional territories of the
Mississauga and Haudenosaunee nations,
and within the lands protected by
the "Dish with One Spoon"
wampum agreement.

