

### INSTITUTIONAL PRIORITIES AND STRATEGIC GOALS 2022-2023

Any questions concerning the contents of this book should be directed to:

### INSTITUTIONAL RESEARCH AND ANALYSIS

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\*Any revisions to the McMaster Institutional Priorities and Strategic Goals will be reflected in its web version.

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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 was again one of only two universities in Ontario, and one of only four in Canada, to be ranked among the world's top 100 universities (Times Higher Education). McMaster ranked 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. Furthermore, McMaster continues to stand out as one of Canada's most research-intensive universities, ranking second in both graduate student research intensity and faculty research intensity, according to *Research Infosource*.

We serve our community and society by nurturing and supporting the fulfillment of human potential: inspiring creativity and critical thinking, promoting an enduring love of learning and the habit of inquiry and undertaking innovative research that extends the boundaries and enhances the efficacy of knowledge. We are committed to the advancement of human and societal health and well-being, and ultimately to creating a brighter world for all.

### **VISION STATEMENT**

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

#### MISSION STATEMENT

At McMaster, our purpose is the discovery, communication, and preservation of knowledge. In our teaching, research, and scholarship, we are committed to creativity, innovation, and excellence. We value integrity, quality, inclusiveness, and teamwork in everything we do. We inspire critical thinking, personal growth, and a passion for lifelong learning. We serve the social, cultural, and economic needs of our community and our society. McMaster University was founded in 1887 and is governed by the McMaster University Act 1976.

#### 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 the Equity, Diversity, and Inclusion (EDI), Community Engagement, 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.

### 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. This report includes many further examples of our collective progress toward achieving these and all the university's institutional priorities and strategic goals.

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## **PRIORITY 1: Inclusive Excellence**

Aspire to embed an inclusive approach that intentionally engages and respects a diversity of peoples, perspectives and ways of knowing in everything we do.





# Systems and structures that mobilize and sustain equity, diversity and inclusion

- Human Resources (HR) developed and launched a number of initiatives aimed at advancing inclusive excellence across campus:
- More than 300 Employment Equity Facilitators have been trained to support faculty and staff search committees with an employment equity and inclusive excellence focus.
- As part of the McMaster Web Strategy proposal, an Accessibility for Ontarians with Disabilities Act (AODA) web accessibility compliance roadmap was developed. This roadmap aligns with the McMaster IT Strategic Plan and 'institutional commitment and capacity' pillar under the EDI strategic framework and accompanying action plan.
- In 2022, McMaster received a WSIB rebate of more than \$46,000 through the annual Workplace Safety and Insurance Board (WSIB) Excellence Program, which recognizes excellence in an organization's health and safety management system. This rebate has been invested into health, safety and well-being program development.
- The "Working Mind," an evidence-based mental health training program designed to promote mental health and reduce stigma around mental illness in the workplace, was launched in February 2023. The number of certified facilitators will increase eight-fold over the next year, significantly increasing capacity to deliver this training to employees.
- In May 2023, a pilot project was initiated to provide new training for frontline staff who offer support and care to students in distress
- McMaster Continuing Education continues to collaborate with Human Resources Services to develop McMaster's Inclusive Excellence Leadership Program. Over 100 people managers have participated in this program.

- The Faculty of Health Sciences has implemented initiatives and programs in support of equity, diversity and inclusion:
- In 2022, the Department of Pediatrics developed a framework to guide education, research and clinical care with an anti-racism, anti-oppression and Indigenous reconciliation lens, including a statement of commitment to embodying an anti-racist, antioppressive stance and actively working towards reconciliation, self-determination, and decolonization in daily interactions and organizational structures. This statement will inform policy development and support strategic plan goals.
- In 2023, the School of Rehabilitation Science implemented the Black Equity Stream for admissions to the Physiotherapy (MSc), Occupational Therapy (MSc) and Speech Language Pathology (MSc) program.
- Following the successful launch of the Summer Scholars Program in 2022, the Department of Biochemistry and Biomedical Sciences secured funding to offer the program again in 2023. The program is open to Ontario residents enrolled in a STEM postsecondary degree or diploma program and who self-identify as Black, Indigenous, and/or 2SLGBTQIA+.
- The Health Sciences Library is currently reviewing its archival collection, access, and preservation policies and practices to incorporate principles of decolonization and meet guidelines set out in the Steering Committee on Canada's Archives' document, "A Reconciliation Framework: The Response to the Report of the Truth and Reconciliation Commission Taskforce".

McMaster was recognized as one of

Hamilton-Niagara's top employers for the **eighth year in a row**, driving increased talent attraction and retention.



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- The Faculty of Humanities has developed a number of systems and structures that advance equity, diversity and inclusion:
- Since 2020, three-quarters of tenured, tenure-track and teachingtrack hires in the Faculty of Humanities have gone to members of equity-deserving communities.
- o The Faculty of Humanities' Advisory Committee on Equity's terms of reference were approved and the group began meeting in fall 2022. All departmental staff attended EDI training in November 2022 and each department has undertaken various EDI activities that have included drafting an anti-oppression statement, decolonizing curricula, creating awards for Black and Indigenous students, and conducting surveys among equity-deserving students.
- Supported by university, Faculty and departmental funding (including the Scholars at Risk Program), displaced scholars and students from Afghanistan and Ukraine are being hosted by the Faculty of Humanities.
- The Office of the Registrar has continued to offer services and programs for equity-deserving students including:
- o The introduction of the Inclusive Service Agreement, which sets out the standards of service that our stakeholders can expect, along with the available resources for additional support.
- o New recruitment initiatives have been created for Black prospective students, developed in collaboration with Access Program staff and the Black Student Success Centre. These initiatives include one-to-one virtual appointments, small group presentations at specific high schools and organizations, and the Black Applicant Meet Up during the Fall Preview Open House.

- Student Affairs continued its commitment to providing services and facilities for all students including:
- To meet the growing demand for Student Accessibility Services, approximately 10,000 accommodated exams were administered
- Student Accessibility Services launched its redeveloped website to enhance the user experience for students with disabilities and the faculty and staff supporting them. The project prioritized meeting the regulations set by the Accessibility for Ontarians with Disabilities Act (AODA).
- o Building relationships with trans-identified, gender-diverse and gender-questioning students. The Student Wellness Centre provides dedicated counsellors and physicians for students on this journey.
- Housing & Conference Services (HCS) improved building accessibility for students and staff requiring mobility assistance through audits aimed at full AODA compliance.
- Through support from the McMaster Okanagan Committee, Housing & Conference Services reduced financial barriers as a stakeholder in the Period Equity Pilot. Free menstrual products are now available in select washrooms in Whidden and Wallingford Halls.
- o The Student Wellness Centre and Black Student Success Centre facilitated Black X-Scape, a student-led mental health peer support group for Black students.

Enhance and innovate research, academic programs and teaching and learning practices in a manner that exemplifies inclusive excellence and interdisciplinary approaches with an impact in diverse communities

- The Indigenous Health Learning Lodge (IHLL) hosted its first welcome gathering in September 2022. The IHLL also recruited a curriculum development lead and is developing an Indigenous Health Resource, to be available fall 2023, as a useful resource for administrators, faculty and learners. The IHLL is also further developing the core Indigenous health curriculum, which will assist various health sciences program developers to fill the gaps in existing curriculum.
- McMaster Continuing Education continues to participate in partnerships serve adult learners from equity-deserving backgrounds and provide opportunities to re-skill and upskill to be better positioned for employment including:
- A partnership with the Department of Psychiatry & Behavioural Neurosciences to offer an anti-Black racism and Critical Race Education online course to be delivered in 2023-2024.
- The development of the Family Engagement in Research: Leadership Academy initiative in partnership with the School of Rehabilitation Science. The aim of the academy is to be a springboard for the development of leadership capabilities in family engagement.
- A partnership with Lighthouse Labs, a well-regarded Canadian tech training company, to offer students from diverse backgrounds a 12-week cyber security bootcamp at no cost through the ICT Boost Project funded by the Government of Canada's Sectoral Workforce Solutions Program.

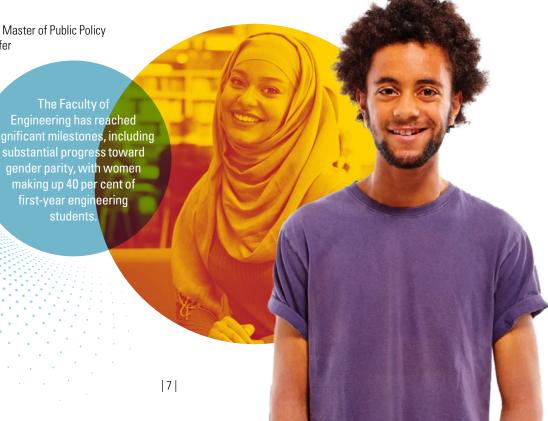
The Faculty of

 A partnership with McMaster's Master of Public Policy in Digital Society program to offer a foundations in project management course.

of Health Sciences has generated digital artifacts, as well as digital modules and microcredentials, and continues to run programming that seeks to foster inclusivity in various formats across different learning environments – clinical, virtual and classroom. • The iArts program in the School of the Arts launched in 2022,

• The Office of Continuing Professional Development in the Faculty

- emphasizing interdisciplinary creative practice and preparing students for professional careers in the arts. Along with its focus on student-directed learning, the program is also strongly committed to issues of social justice, equity, diversity and environmental
- Over the past year, McMaster's Global Health Office has:
- Continued to support forcibly displaced scholars through active participation on McMaster's Committee on Students and Scholars in Crisis.
- Leveraged the MacPherson Institutes' Student Partner Program to review and design a peer 'buddy' support and mentorship program to support students transitioning from undergraduate to graduate school, transitioning back to school after professional work, being an international student, being a newcomer to Canada, or as a student from an underrepresented group.
- The McMaster Co-Design Hub for Vulnerable Populations, led by researchers in the School of Rehabilitation Science, the Faculties of Engineering and Business, and the schools of Medicine and Social Work, along with representatives from OCAD University, hosted the CoPro 2022 International Forum at Six Nations Gathering Place by the Grand. The forum hosted over 30 speakers from eight countries.





- The Black Student Success Centre engaged in outreach to high school students in partnership with Hamilton school boards to support an inclusive application process for prospective Black students.
- The Spiritual Care and Learning Centre officially opened in Fall 2022, offering pluralistic spiritual care. Students can attend programming or schedule opportunities with scholarly spiritual leaders across religious, secular and spiritual identities.
- The Office of the Registrar is participating in a data-sharing project that makes information about Hamilton students' academic pathways available to researchers and policymakers. In November, the partnership released a paper that tracked the educational pathways of Hamilton students and a blueprint for the community data infrastructure.

**Employing approximately 17,000 people annually**, McMaster is one of the largest employers in the Greater Hamilton area, driving increased talent attraction and retention.

# Community building to develop attitudes, knowledge and skills to foster positive interpersonal and intergroup relations

- The Black Student Success Centre has initiated several opportunities to foster connections for Black students across various programs and academic levels, including:
- Hosting a welcome event for Black students at the beginning of the school year.
- Organizing the inaugural Black graduation ceremony.
- Establishing the Empowered Program, a support group tailored for Black males focused on building connections and culturally situated discussions about mental health.
- An Intersections of Blackness and Disability event with Disability Justice Ontario and the ASE foundation for Black Canadians with Disabilities.
- The Faculty of Humanities' leadership certificate (open to all students) has been redesigned and renamed with a focus on EDI: it is now the Concurrent Certificate in Leadership, Equity & Social Change.

- To remove barriers and facilitate opportunities for international students, the Student Success Centre hosted "lunch-and-learns" and other educational sessions for Faculty career offices, community partners and employers. Topics included work permits, logistics and Ministry requirements.
- In winter 2023, the Student Wellness Centre (SWC) became a pickup location for the 'I'm Ready: HIV Self-Testing Program,' a national program that is implementing, scaling up and evaluating low-barrier options for access to HIV self-testing. The goal is to reach the undiagnosed and give people choices about connecting to the care they need.
- Supported by funding from the McMaster Okanagan Committee, the Student Wellness Centre introduced the Home Cooked at Mac program. This program features four cooking instructional videos highlighting a dish from their culture. Up to 30 meal kits per video were made available for pick-up.

## Promote diversity by engaging a campus community that reflects local and national demographic diversity

- In 2020, McMaster established the Black Excellence Faculty Cohort hiring initiative aimed at hiring emerging and established academics and scholars to advance Black academic excellence at McMaster. To date, 18 Black scholars have been hired across all Faculties, supporting a new generation of innovative scholars and students with diverse backgrounds and lived experiences.
- In recognition of McMaster's dedication to employment equity, the
  university earned the distinction of being named one of Canada's
  Best Diversity Employers in 2023 for the fifth year in a row.
  Additionally, for the eighth year in a row, McMaster was recognized
  as one of Hamilton-Niagara's top employers, driving increased talent
  attraction and retention. Employing approximately 17,000 people
  annually, McMaster is one of the largest employers in the Greater
  Hamilton Area.
- Human Resources Services is piloting the use of Vidrecruiter, a
  digital interviewing and screening technology, to achieve a more
  structured and streamlined approach to recruitment with an
  emphasis on elevating candidate and hiring manager experiences
  and reducing potential instances of bias during candidate
  assessments. More than 54 positions representing over 10
  departments have been processed through Vidcruiter resulting in
  more than 28 hires as of March 2023.
- The Department of Family Medicine launched a Racialized Community of Support to provide confidential peer support to Indigenous, Black and/or racialized faculty and staff. The department also established a multi-faith and spiritual space at the David Braley Health Sciences Centre.

- Indigenous Student Services completed the four-week pilot
  of the Gaodadeihwahni:ya:s Summer Transition Program,
  welcoming four participants and five Indigenous student mentors.
  Gaodaeihwahni:ya:s programming provides incoming Indigenous
  students with a culturally safe environment to enhance their skills
  in four key areas: culture, relationships, knowledge, and health and
  well-heing
- The Student Success Centre's Access Program worked to address barriers for equity-deserving students through the following initiatives:
- Hosting the Access Dinner for equity-deserving students during Welcome Week.
- Piloting Ontario Universities' Application Centre (OUAC) fee waiver for equity-deserving students.
- Dedicated recruitment and outreach support for equity-deserving high school students in the Greater Golden Horseshoe region, in partnership with the Recruitment Office.
- Expanded capacity for Access Awards to offer up to 20 Awards for 2023–2024 (up from 15 last year).
- Offering inclusive employment support and opportunities in collaboration with Career Access Professional Services (CAPS).
- The Office of the Registrar has launched and developed several initiatives to promote diversity and engage a variety of backgrounds:
- Developed the Extraordinary Housing and Commuting Cost Bursary as a response to the needs of undergraduate learners facing the inflated cost of rental accommodations and transportation. This fund allowed over 1,000 undergraduate students with high financial need to access additional financial support.
- Implemented digital dashboards to efficiently access OSAP data quickly and efficiently.
- Launched a new digital tool, Funds Finder, to help students find funding opportunities. Funds Finder is a database of financial opportunities from across campus that students can filter based on their need and eligibility.
- The Faculty of Engineering has reached significant milestones in advancing equity and inclusion including:
- Tripling the number of Black faculty members.
- Making substantial progress toward gender parity, with women making up 40 per cent of first-year engineering students.

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# **PRIORITY 2:** Teaching and Learning

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.





Engage in partnered and interdisciplinary learning, exemplifying an environment that is inclusive of diverse perspectives across disciplines and embracing global insights to explore beyond traditional disciplinary boundaries

- The Bachelor of Health Sciences in Integrated Rehabilitation and Humanities has been approved and will welcome its first cohort in September 2024. The program is the first of its kind in Canada.
- The Faculty of Humanities has emphasized the development of curriculum to support the interdisciplinary minor in African and Black Diaspora Studies, including partnering with the Faculty of Engineering to offer two new courses in the Interdisciplinary Minor in Africa and Black Diaspora Studies.
- McMaster Continuing Education has achieved the following milestones:
- Launched 13 microcredentials across the spectrum of business, health, technology and professional development, including in the areas of project management, sustainability, privacy, mindfulness, caregiving, open-source intelligence, cloud foundations, and leadership essentials.
- Expanded its no-cost caregiving program, now offering two open access online courses called "Caregiving Essentials" and "Les soins essentiels." These courses were made possible through funding by the Ontario government and developed in collaboration with Collège Boréal and l'Université Laurentienne.
- Organized free webinars on an ongoing basis supporting students, staff, faculty and the public on a range of topics that include mindfulness, health and wellness, caregiving, sustainability, business and data management.
- The DeGroote School of Business launched the inaugural sessions
  of its third and fourth year Undergraduate Commerce Student
  Experience and Development courses, which provide opportunities
  for students to engage in real-world consulting projects, social
  hackathons, and mentorship opportunities with community partners.

- The Faculty of Health Sciences has developed a number of innovative initiatives:
- The Marnix E. Heersink School of Biomedical Innovation and Entrepreneurship, in collaboration with the Department of Surgery at McMaster University, is launching a Master of Biomedical Innovation (MBI) program in September 2023.
- The Health Leadership Academy (HLA), a joint venture of the Faculty of Health Sciences and the DeGroote School of Business, has two new innovative programs:
  - The National Health Fellows Program is focused on helping senior leaders enact improvements and learn from healthcare innovators and disruptors across the country and internationally.
  - The HLA offers a Collaborative Health Governance program that addresses challenges facing both health and social sector boards.
- The Midwifery Education Program launched Canada's first Master of Science (MSc) degree for midwives to build both scholarship and leadership in the profession.
- The Department of Medicine's Communities of Practice created inter-divisional and interdisciplinary opportunities for Faculty collaboration with an eye to making a global impact on areas of focus.
- The Postgraduate Medical Education program of the School of Medicine was part of a provincial expansion of medical school education, with 28 new medical residents for McMaster.
- The MacPherson Institute has undertaken several initiatives and programs to support partnered and interdisciplinary learning including:
- A monthly blog series titled "Spotlight on Scholarship of Teaching and Learning" that offers a summary of a research articles published by a McMaster educator, or a national or international scholar. This content aims to support educators in learning about research on teaching and learning across disciplines.



- Over \$340,000 in funding awarded to the inaugural cohort of Partnered in Teaching and Learning Seed and Garden grant recipients for the 2022-23 academic year. Funds were awarded in partnership with the Office of the Provost.
- The Faculty of Science Associate Dean EDII Office developed the first course in the Anti-Racism, Inclusion and Equity in the Science undergraduate curriculum. In this course, students will be exposed to curriculum that examines the intersections of equity, justice and anti-racism with science.
- The School of Labour Studies in the Faculty of Social Sciences introduced an interdisciplinary concurrent certificate in Work and Labour Relations, partnering with the DeGroote School of Business, allowing students the opportunity to specialize their studies to align with their interests and career aspirations.

Development of holistic, transformational and personalized student experiences intended to promote personal growth, support health and well-being, and enhance a sense of belonging and connectedness in our community

- A committee of members from the Faculty of Engineering and the Office of the Registrar, has been working to transition McMaster's digital diplomas to the new Verifiable Credentials and Decentralized Identifiers standards. McMaster was the first Canadian university to implement digital credentialing technologies in 2019. Impacts include:
- Better student experience, enhanced privacy and radically improved student data security.
- Improved physical and digital mobility.

- Elimination of the need for third-party verification, which will greatly enhance privacy and security.
- Protection of McMaster's brand and reputation by reducing fraud and illegal practices with McMaster's credentials.
- McMaster Continuing Education (MCE):
- Launched a "Community Corner" section on their website dedicated to student supports and services. Students can access mental health information, information for newcomers, register for a free writing support and learn about financial supports including bursaries and awards.
- Delivered, in partnership with McMaster Student Success Centre, a free writing service, including individual advising and coaching services, allowing students to improve their academic and professional skills.
- Partnered with Biotalent Canada to provide students and graduates increased access to job opportunities and resources in biotechnology.
- In partnership with McMaster Association of Part-time Students, MCE launched a new award for equity deserving students wishing to take courses and programs.
- The DeGroote School of Business is undertaking a multi-year transformation project to build applied learning experiences within its curriculum. Curriculum redevelopment is underway to align McMaster's MBA program with evolving market needs that include experiential and interdisciplinary managerial curriculum and workintegrated learning.
- The Faculty of Humanities has enhanced access to experiential learning and career opportunities for both current and newly graduated students, including:

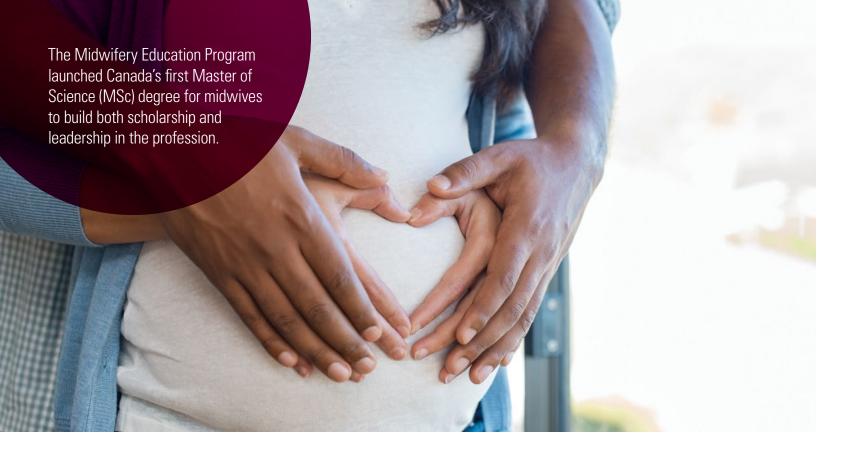
- An internship program for current students providing access to paid positions for part- or full-time work terms of four, eight, 12 or 16 consecutive months.
- Increased positions available through the Humanities Career Apprenticeship Program, a partnership between the Faculty of Humanities, the Rottenberg Family Foundation and the City of Hamilton, providing one year of salary subsidies to Hamilton businesses to hire new Humanities graduates.
- A new staff position dedicated to supporting experiential education courses.
- The School of Nursing expanded learning methods to enhance learning in mental health, addiction, sexuality and gender orientation, and Indigenous ways of knowing.
- McMaster University Library, University Technology Services and the Health Sciences Library have spearheaded an initiative to offer site license access to Endnote, a bibliographic citation management tool used to support research. Over 1,600 students and staff users have taken advantage of the service in less than a year. By centralizing the purchase price within the library, the project has saved McMaster almost \$200,000 in individual licensing costs.
- The Global Health Program is supporting the personalization of experiences by:
- Encouraging graduate programing that leverages the Doctoral Skills and Competencies Learning Resource Portal, which links students with resources to build skills and competencies to enhance their doctoral learning and equip them for a wide range of careers.
- Fostering interdisciplinary learning through partnerships with the Faculties of Social Sciences and Health Sciences, the School of Business, and with the Global Health Consortium made up of a growing collaborative network of global health educators and practitioners
- Offering the capstone Learning Symposium course in the Global Health master's program – normally offered in Manipal, India – in an online environment to accommodate students for whom travelling presents an undue burden.
- McMaster's Student Success Centre has maintained its commitment to offering programming and special events to foster holistic, transformational and personalized student experiences.
   Some initiatives include:
- Providing students access to the Challenge Cards tool, a resource designed to support career reflection, discovery, and planning.
- Introducing "Level Up: A Second-Year Academic and Career Program" in Fall 2022. This eight-week program creates a nurturing peer-to-peer learning environment for participating students.
- The Student Wellness Centre and Athletics & Recreation hosted Mactivate, a program with a proactive mental health approach that promotes regular physical activity. The eight-week program focuses on general goal setting, action planning and coping strategies.

- The Office of Academic Integrity worked alongside the MacPherson Institute in the adaptation of "Academic Integrity for Undergraduate STEM students, six online modules developed to enhance their understanding of academic integrity topics and challenges. The modules will be available to all instructors in early Winter 2023.
- The Faculty of Science Career and Cooperative Education Office introduced several new projects and initiatives including:
- Hosting the Co-op Symposium with 150 co-op students sharing their experiences.
- The inaugural Graduate Career Programming which included 10 different workshops and alumni panels.
- Introducing the Advancing Tomorrows Actuaries individual development plan pilot program. Working with the Co-operators General Insurance Company, this program closes knowledge and skills gaps for Actuarial and Financial Mathematics students, streamlining their transition into their first co-op work-term with Co-operators Insurance.
- The Faculty of Social Sciences launched three new co-op program
  options for students pursuing economics, political science, and work
  and labour studies. To facilitate these new options, the Faculty
  doubled the size of their experiential learning staff complement to
  offer co-op support, career advising and employer support.
- The Faculty of Engineering introduced a three-year pilot program, "Talk Spot," aimed at providing students with immediate first contact with a mental health professional and help to prevent crises by removing barriers to accessing mental health support.

Inclusive and scholarly teaching that values creativity, risk taking and originality as a foundational aspect of the McMaster educational experience

- A new collaborative anatomy class between the Faculty of Humanity's School of the Arts and the Faculty of Health Sciences' Education Program in Anatomy and its Program for Interprofessional Education, Practice and Research allows art and health sciences students to learn anatomy alongside each other to foster a sense of collaboration, mutual education and curiosity.
- The Health Sciences Library has a narrative medicine and health project underway. It includes elements of storytelling, graphic arts, and art therapy to enhance learner communication skills and help mitigate stress and anxiety. A student art therapy program entitled "Expressions" will launch in fall 2023.
- The Health Sciences Library provides institutional access to Covidence, software designed to support knowledge synthesis and systematic review research. As of March 2023, over 5,500 projects were registered in Covidence, representing the work of 2,300 McMaster faculty, staff, and student authors.

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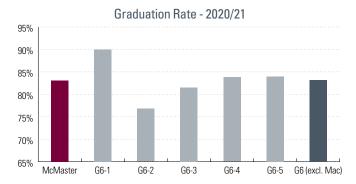
- The MacPherson Institute has undertaken several initiatives to support excellence in teaching and learning including:
- The development of resources to support Peer Observations of Teaching. This includes reframing teaching portfolios to emphasize reflection and development, adapting end-of-term student evaluations of teaching to be focused on student experience, refining the Record of Activities form to include reflection and goals, and engaging in conversations with Chairs about the challenges of evaluating teaching.
- The launch of the "Research Squares" program which connects recipients of teaching and learning grants with peer support.
- The redesign of Teaching and Learning Certificates of Completion, which offer flexible, self-directed opportunities for educators to explore principles of university instruction, scholarly teaching, and digital.

Active and flexible learning spaces to ensure that our physical and virtual spaces support learning outcomes and ensure accessibility and inclusivity to meet the needs of our community

 The Faculty of Health Sciences Office of Continuing Professional Development, partnering with the Health Leadership Academy, has developed Health Improvement and Faculty Innovation, a new senior academic health leadership program. Through simulation and problem-based learning, participants engage in a blended learning experience focused on complex and multi-stakeholder leadership and management issues.

- McMaster is launching Canada's most comprehensive leadership college, the Wilson College of Leadership and Civic Engagement. McMaster's Wilson College programming will feature a unique curriculum nested in the Faculties of Humanities and Social Sciences and crossing multiple fields of study. Every student will take part in experiential learning opportunities, including internships and other placements, where they will work with public and private sector leaders. It will be home to Canada's only Honours Bachelor of Arts degree and minor in Leadership and Civic Studies, which is scheduled to launch in the 2025/26 academic year.
- The Faculty of Health Science has also developed several initiatives to support inclusive excellence:
- The Department of Family Medicine launched an online openaccess course called "Primary Care Research: A Pathway for Learning," in which learners can work through modules sequentially starting with the foundations of primary care research, or select modules based on their specific learning needs.
- The Michael G. DeGroote School of Medicine opened a facilitated pathway for Black-identifying students, known as the Black-Equity Stream. The MD program is welcoming 20 students to the class of 2026.
- Midwifery first implemented a Facilitated Black Admissions Pathway (FBAP) in 2021 and is now in the midst of its third cycle of admissions. Several students in each of the past two cohorts of Midwifery students participated in FBAP.

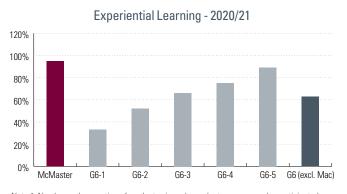
- Indigenous Student Services, Six Nations Polytechnic and Mohawk College piloted the Pop-Up Study Hall in Six Nations of the Grand River. Funded by the Canadian Internet Registration Authority, it provided an alternative learning space with reliable internet for community members.
- The Fireball Academy in the Faculty of Engineering offered initiatives such as the New Faculty Orientation and Leadership Academy to support new and emerging leaders in academic administrative roles and equip them with tools to stay current with technological advancements in teaching, especially during the transition to virtual and hybrid learning environments.



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., 2020-21 data represents the percentage of 2013 entering cohort graduated as of 2020 calendar year).

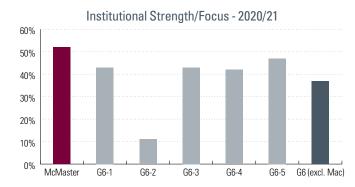


Note 1: Number and proportion of graduates in undergraduate programs who participated in at least one course with required Experiential Learning (EL) component(s).



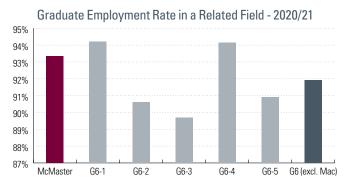
Note 1: Data sourced from Education and Labour Market Longitudinal Platform (ELMLP), Statistics Canada.

Note 2: Median employment earnings of university graduates, two years after graduation (e.g., 2019-20 data represents earnings of 2017 graduates in 2019 calendar year).



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.



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., 2020-21 data represents employment rate of 2018 graduates in 2020 calendar year)

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# **PRIORITY 3:** Research and Scholarship

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.





Global leadership and impact that continues to redefine how McMaster engages in research and scholarship, while exploring human knowledge and understanding

- Sixteen McMaster researchers representing the top one per cent of citations in a given year were featured on the Clarivate Analytics 2022 list of highly cited researchers.
- The Global Nexus School for Pandemic Prevention & Response builds upon McMaster University's long history of teaching and learning innovation and infectious disease research to prepare students to work across disciplines and become leaders who can bridge gaps, solve problems, and find equitable solutions to the complex challenges that infectious diseases pose to society. In 2022/23 Global Nexus:
- Received more than \$8 million in funding from the Canadian Institutes of Health Research (CIHR), enabling researchers to proceed with Phase 2 human trials for a next-generation, aerosolborne COVID-19 vaccine.
- Co-led a new federal initiative designed to protect Canadians against future pandemics and emerging threats through the Canadian Pandemic Preparedness Hub (CP2H).
- Received \$8.6 million from the Canada Foundation for Innovation's Biosciences Research Infrastructure Fund, which will be used to expand a laboratory at McMaster where an internationally renowned team of experts in infectious disease and immunological research are developing new antimicrobials, antivirals, vaccines, and diagnostics to combat some of the world's most consequential pathogens, including influenza virus, West Nile virus, tuberculosis, and SARS-CoV-2.
- Launched an interdisciplinary minor for undergraduate students called 'The Impact of Infectious Disease on Individuals and Society' in the fall of 2023.
- Hosted a Symposium on Antimicrobial Resistance (AMR) in October 2022. Researchers from around the world gathered at McMaster to

- discuss the need for a multidisciplinary and cross-sector response to complex infectious disease threats such as AMR.
- Established the Robert Alan Kennedy Global Nexus Research Excellence Awards valued at \$7,500 for two undergraduate students to conduct research into pandemic preparedness.
- In 2022, six McMaster researchers were named Canada Research Chairs and five had their chairs renewed. Also in 2022, two researchers were named Fellows in the Royal Society of Canada's (RSC) Academy of Science, two were elected to the RSC's College of New Scholars, Artists and Scientists and one was named a member of the Order of Canada. Other awards presented to McMaster researchers in 2022-2023 include the 2022 Canada Gairdner Wightman Award, the 2022 Einstein Foundation Award, the Blaise Pascal Medal, the Dorothy Killam Fellowship, the Canadian Association for Clinical Microbiology and Infectious Diseases' 2023 John G. FitzGeraldAward and the Canadian Society for Immunology 2023 Hardy Cinader Award.
- Fifteen McMaster researchers were awarded over \$2.4 million from
  the Social Sciences and Humanities Research Council (SSHRC) to
  support research on the influence of tech companies on policy and
  public services, the self-care practices of post-secondary students,
  the origins and prevention of racial biases and the ways we detect
  and engage with cybercrime threats.
- Nearly \$1.8 million from the Krembil Foundation will support research to craft a new paradigm in the understanding and treatment of neurodegenerative diseases, using Huntington's disease (HD) as a model. Researchers are developing methods of assessing the earliest events of these diseases, potentially decades before disease onset, to shift the focus from treatment to prevention.
- A health sciences researcher is leading a \$37 million international, multi-center trial investigating a potential new treatment regimen for diabetic macular edema using Vabsymo (faricimab), a medication already approved for use in Canada. The collaboration with F.
   Hoffmann-La Roche Ltd brings together the pharmaceutical industry and academia to enhance patient care for retinal diseases.



- \$1.8 million from the Azrieli Foundation is supporting the creation
  of a Hamilton-based Pediatric Learning Health System (LHS) for
  Neurodevelopment. Housed at the Ron Joyce Children's Health
  Centre, part of McMaster Children's Hospital, it will embed
  research, resources, skill sets, expertise and patient and family
  perspectives directly into the care process, allowing for continuous
  communication, improvements and implementation of best practices
  in real time.
- Two McMaster researchers received more than \$800,000 from SSHRC to pursue research projects that will inform action and address disparities related to race, gender, and other forms of diversity.
- McMaster ranked second in research intensity and ninth overall in the top 50 research universities in Canada (Research Infosource Inc., 2022).
- Seven McMaster-led research projects received a total of \$61 million from the Canadian Institutes of Health Research to advance medical research, training and innovation. The Pan-Canadian Accelerating Clinical Trials Consortium hosted by the Population Health Research Institute (PHRI) received \$39 million to expand its clinical trial networks, support clinical trial units and improve collaboration and knowledge sharing, as well as the number, efficiency and quality of clinical trials in Canada.
- Supported by a \$2.5-million SSHRC Partnership Grant (2021-2026), Participedia, housed within the Centre for Human Rights and Restorative Justice, is a global network and crowdsourcing platform dedicated to democratic innovations that includes almost 900 organizations in 158 countries across the world.
- The Institute on Ethics & Policy for Innovation (IEPI) most recently contributed to the development of the "WHO Guidance on the Ethical Conduct of Controlled Human Infection Studies" and partnered with Malawi's national medical school to develop joint educational programs in bioethics and global health.
- Twelve McMaster researchers received a total of \$18.5 million in CIHR Project Grants to advance studies in medicine, pediatrics, psychiatry and rehabilitation.

- A \$9-million investment from the Public Health Agency of Canada will help a team of McMaster researchers develop official guidelines for Post-COVID-19 Condition (PCC), commonly known as Long COVID. These guidelines, to be published early in 2024, aim to cover identification, prevention, assessment, management, follow-up and monitoring of people with PCC.
- Federal and provincial governments invested \$6.8 million each
  to increase medical isotope production at the McMaster Nuclear
  Reactor. The investments support the university's \$25 million project
  to optimize operations of the nuclear reactor to 24 hours a day, five
  days per week, and increase the diversity and amount of isotopes
  produced. The added capacity will also enable more research in
  clean energy and small modular reactors (SMRs).
- Led by McMaster and the University of Saskatchewan, 15 Canadian
  universities have come together to incorporate a new not-forprofit research organization, Neutrons Canada. The new agency's
  purpose is to govern, manage and represent Canada's infrastructure
  program for research and development with neutron beams. This
  program will include international partnerships that secure access to
  world-leading neutron laboratories, operation of Canada's domestic
  neutron beam facilities, and national initiatives for future neutron
  source each of which enable Canadians to address major social
  and economic challenges.
- McMaster and adMare BioInnovations have partnered to advance research and technology commercialization in the life sciences sector. adMare is a Canadian non-profit organization that provides industrial scientific expertise, research infrastructure and critical funding for innovative research and development projects with strong commercial potential. With adMare's support, critical experiments and studies will be performed at McMaster to develop a targeted therapy and approach that could prevent the formation of metastases in patients with brain cancer.
- A team of McMaster researchers from the Population Health Research Institute received \$1.3 million from Boston Scientific to lead a study on a new cardiac defibrillator that is safer for patients. While highly effective, traditional defibrillators involve placing a

- wire through a vein into the chest and the heart itself. The wires can cause complications, including perforations in the heart muscle or lungs and blood clotting in veins. The study has demonstrated that a new type of cardiac defibrillator, called a subcutaneous ICD (S-ICD), reduced patient complications by more than 90 per cent compared to the traditional defibrillator.
- A \$2.6-million investment from the Mitacs Accelerate program
  will support two research projects focused on developing positron
  emission tomography tracers used to image activated immune cells
  and exploring rapid diagnostics for viral and bacterial pathogens.
- A major Canadian study of the diverse and changing paths for children with autism, led by McMaster researchers, is being broadened across the country through a \$1.14 million grant from CIHR. The Pediatric Autism Research Cohort (PARC) study will be one of the world's largest studies aimed at finding out the care needs of children with autism. PARC is broadening the study to include 1,000 children across all its sites. These include its four existing locations in Hamilton, Ottawa, Kingston, and Sudbury, as well as new participants from autism clinics in Winnipeg, Edmonton, and Victoria.
- McMaster researchers, primarily in the Faculties of Humanities and Social Sciences, ranked first in Ontario for funding per researcher from the Social Sciences and Humanities Research Council (SSHRC), an important indicator of research strength in the liberal arts.
- Seven McMaster researchers received more than \$2 million from the Canada Foundation for Innovation's John R. Evans Leaders Fund. McMaster's funded projects span a variety of research topics, including studies on the mental health impacts of long-COVID, the creation of a new quantum materials lab, and the development of ultrasound tools for assessing muscle health in breast cancer patients.
- The Canadian Research Data Centre Network, headquartered at McMaster, received \$17.4 million from the Canada Foundation for Innovation's Major Science Initiatives Fund. The investment will provide vital support for CRDCN's soon-to-be-launched virtual Research Data Centre (vRDC). As a nationwide data access platform, the vRDC will provide the Network's social science and health researchers with secure remote access to Statistics Canada confidential microdata.
- A team of McMaster researchers received nearly \$2.5 million from Global Affairs Canada to lead a project that aims to improve maternal and neonatal healthcare across Guyana's hinterland regions.
- McMaster researchers received \$1.8 million from CIHR to explore solutions for expanding midwifery services in Canada and improving equitable access to sexual and reproductive healthcare.
- A \$1.1 million investment from CIHR is allowing researchers to conduct a randomized control trial to test whether a non-opioid medication called ketorolac is as effective as morphine in treating children with appendicitis.
- A team of McMaster researchers received \$1.1 million from CIHR to address food insecurity in Nunavut and advance Inuit food sovereignty by developing solutions to rebuild communities' capacity to harvest locally and share food abundance.

- An investment of \$1.2 million from the University of Oxford will support research to scale up solutions for the prevention of child sexual abuse, exploitation and family violence.
- A \$1.1 million investment from CIHR is supporting research to uncover the role of the gut microbiome in unhealthy aging and frailty.
- Research partnerships between the Centre for Advanced Research in Experimental and Applied Linguistics (ARiEAL) and Indigenous communities are working to support language revitalization through innovative projects, including one supported by SSHRC's New Frontiers Research Exploration Grant that connects "infant-oriented speech" with language revitalization efforts.
- McMaster researchers and a group of scholars from Canada, Africa, Poland, UK, and the US have received close to \$700,000 to work with refugee NGOs in Poland and Kenya to develop social entrepreneurs in vulnerable communities. The team leverages innovative technology such as blockchain community currency and a peer-to-peer online portal. The research is funded by Canada's New Frontiers in Research Fund and the International Development Research Centre.

### Be a driver of economic prosperity and social innovation

- Three McMaster startups received a combined \$1.27 million in the second round of McMaster Seed Fund investments. AIMA Laboratories received funding to advance its blood-testing technology that can be used for at-home screening of endometriosis. LLIF Healthcare received funding to further its cloud-based platform which provides doctors and hospitals with data to improve patient care and reduce healthcare costs. 20/20 OptimEyes Technologies received funding to de-risk their patented mucoadhesive micelle nanoparticle technology, initially targeted for the treatment of glaucoma.
- Over its eight-year history, The Forge has incubated 285 companies
  that have gone on to raise over \$46.5M in funding. Since it opened
  its doors in 2015, The Forge has been a driver in engaging with
  students to foster a culture of entrepreneurship and a strong
  supporter to accelerate the growth of early-stage start-ups. Through
  its workshops and in collaboration with ecosystem partners, this
  year the Forge:
- Reached 2654 students in the past year alone.
- Provided support to 30 start-ups founded by McMaster students, alumni, and entrepreneurs across Southwestern Ontario in the 2023 fiscal year. This support has enabled the companies to collectively raise \$2.7M in financing, build strong intellectual property portfolios (20 patents total) and grow sales globally selling products and services in all continents and generating \$2.54M in annual revenues.
- Created more than 176 volunteer and job opportunities in our region of which nearly half were filled by McMaster students and alumni.
- In 2022, the McMaster Industry Liaison Office (MILO) recorded 87 invention disclosures and 32 patents issued.
- VoxNeuro, a trailblazing brain health assessment technology developed in the Faculty of Humanities' Department of Linguistics

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& Languages, continues to test and expand the application of its groundbreaking Cognitive Health Assessment Management Platform with medical device approval from the FDA and Health Canada, more than \$8 million in venture funding, and new partnerships with Boston University and the Canadian Armed Forces.

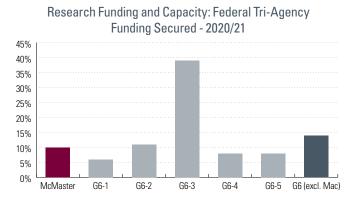
- Between September 2022 to April 2023, 56 undergraduate and graduate students attached to the Office of Community Engagement's co-curricular Research Shop program contributed approximately 4480 student volunteer hours to address 12 research projects developed with community partners.
- McMaster received \$3.8 million in federal funding to provide upskilling and reskilling training programs to aerospace employers and employees. The Federal Economic Development Agency for Southern Ontario (FedDev Ontario) announced the investment in McMaster's Aerospace Regional Recovery Initiative (ARRI), an industry-led initiative spearheaded by the Faculty of Engineering. The McMaster Manufacturing Research Institute will serve as a primary location for the McMaster Certificate of Completion (MCC) program team to deliver targeted training and upskilling programs to small and medium enterprises from across Southern Ontario.
- RepelWrap a self-cleaning plastic wrap developed by McMaster engineers that protects surfaces from dangerous bacteria as well as viruses – is now moving toward scaled-up production through FendX Technologies, Inc. The start-up company began listing and trading on Canadian Securities Exchange in March 2023.
- The largest and one of only three SSHRC Imagining Canada's
   Future Ideas Lab grants is led by a McMaster researcher in
   collaboration with scholars in Memorial and Trent universities.
   The research proposes an inclusive circular economy framework for
   Canada's remote Indigenous and local communities and pioneers
   the integration of traditional ecological knowledge and community
   voices into repair and reuse design practices.
- Since 2020, research leaders in the departments of Pediatrics, Psychiatry & Behavioural Neurosciences, and Obstetrics & Gynecology have been developing a collaborative network called

Towards a Brighter Path for Every Child in Hamilton to address issues of child health equity and work in partnership with patients, families, and communities to co-design interventions to reduce disparities and improve health and wellbeing.

 In 2022, the McMaster Education Research, Innovation and Theory (MERIT) program supported 10 scientists conducting world-class health professions education research, supported by more than \$3.7 million in active peer-reviewed grants. That same year, MERIT's community of practice grew to more than 75 students, staff and faculty engaged in education scholarship, providing research programming and consultations.

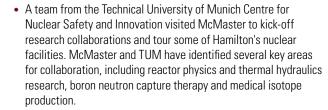
Collaborations and partnerships that expand our international outreach, influence and impact through research partnerships, collaborations and exchanges

- In November 2022, McMaster partnered with Canadian Nuclear Laboratories (CNL) and Atomic Energy of Canada Limited (AECL) to advance nuclear research, education and training. The partners will use their highly specialized infrastructure — including the McMaster Nuclear Reactor and other nuclear facilities on campus — to pursue research collaborations focused on small modular reactors, materials characterization and medical isotopes. The partners also launched the CNL Nuclear Undergraduate Research Experience program to enrich learning and real-world experience in nuclear research for McMaster Engineering and Science undergraduate students.
- McMaster has partnered with Halton Healthcare, Drone Delivery Canada, Air Canada Cargo and DSV Canada to develop a drone delivery system that will revolutionize how medical goods including medical isotopes made at McMaster — reach hospitals and patients across Halton Region. The first program of its kind in Canada, Care by Air is leveraging existing drone technology to ensure that hospitals, healthcare professionals and patients receive the life-saving medical supplies they need in a safe, reliable and efficient manner.

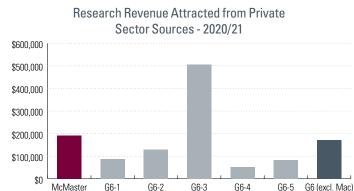


Note 1: Data sourced from Research Support Program, The Tri-Agency Institutional Programs Secretariat (TIPS)

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



- In partnership with Ultra Safe Nuclear Corporation and Global First Power, McMaster's Small Modular Reactor feasibility study is currently underway and is expected to wrap-up by Fall 2023. The study is evaluating the potential of deploying an SMR on the McMaster campus or an affiliated site.
- McMaster has partnered with Terumo and AtomVie Global Radiopharma Inc. (AtomVie) to produce two medical devices used for the treatment of cancer. Composed of radioactive holmium-166 microspheres, QuiremSpheres™ and QuiremScout™ are used in Selective Internal Radiation Therapy to treat liver cancer. The McMaster Nuclear Reactor will increase production capacity and expand logistics coverage for the devices to patients in need.
- A new five-year partnership between McMaster, Mitacs and Canadian biotech company Fusion Pharmaceuticals has created a unique training ground for graduate students pursuing leading-edge experience using radiopharmaceuticals for cancer detection and treatment. McMaster's Faculty of Science launched the Fusion Pharmaceuticals Training Program with students working in the renovated state-of-the-art \$22 million facilities at the Nuclear Research Building and at Fusion's leading-edge R&D facilities in Hamilton. The new training program is an important step in advancing the depth and breadth of the biotech sector in Hamilton.
- The Global Health Program organized and ran the 12th annual Global Health International Learning Symposium together with consortium partners Maastricht University (The Netherlands), Manipal Academy of Higher Education (India), Universidad del Rosario (Colombia), Thammasat University (Thailand). Held online due to continued pandemic restrictions, this annual symposium brings together over



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

- Note 2: Total research revenue attracted from private sector and not-for-profit sources.
- Note 3: This metric is calculated based on the rolling average of the three most recent years.

300 students, faculty, and staff to discuss and share research on pressing global health topics.

- McMaster and Lund University have joined forces to advance health research, education and training in Canada and Sweden.
   The universities will use their combined strengths in virology and immunology to aid in the fight against the COVID-19 pandemic and advance global pandemic preparedness.
- McMaster and the University of Birmingham have partnered to establish the BIRMAC Project and Ideas Fund - a new seed fund that will support collaborative research projects at both institutions.
- Researchers at McMaster's Smart Freight Centre, in collaboration
  with scholars at Toronto Metropolitan, Toronto and York universities,
  are developing innovative last-mile delivery technology to enhance
  online shipping experiences and decrease the impact on the
  environment and communities. This includes the Smart Mobile
  Locker that runs in tandem with city transit and Crowdfeeding, a
  shared economy platform that brings together stakeholders from
  the food rescue ecosystem to simultaneously reduce waste and
  increase accessibility of fresh food to food bank clients.
- Researchers in the Department of Greek and Roman Studies
  partnered with the Superintendency of Archaeology, Fine Arts and
  Landscape in Basilicata, Italy to excavate, catalogue, and study
  archaeological artifacts that provide information and insight into the
  interactions between the indigenous population and Greek settlers
  from the 8th to 6th centuries BCE, bringing a voice to a population
  that has been previously overlooked in the histories of the area.
- FHS librarians spearheaded the PLOS waiver initiative, allowing all researchers, including graduate students, medical residents, and underfunded researchers, to publish in high-impact open-access journals at no additional cost.
- The Department of Psychiatry & Behavioural Neurosciences has expanded the partnership with the Pasteur Institute, including the joint development of a patent for a new molecule, along with collaborative educational activities and conferences which have now restarted.

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# PRIORITY 4: Engaging Local, National, Indigenous and Global Communities

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.





Principles of community engagement that serve as the foundation of community-campus partnerships and connections between the university and the communities around it

- Since the 2021-22 update, work on the Online Community-Based
  Hate Reporting platform has continued. The platform, known as
  WeSupport, is being developed in partnership with the Hamilton
  Anti-Racism Resource Centre, Hamilton Centre for Civic and the
  Office of Community Engagement's Academic Director, Community
  Engaged Research and Relationships.
- With the support of Research Impact Canada, the McMaster Office
  of Community Engagement is piloting the expansion of the Yaffle
  partnership platform. This platform has been designed to facilitate
  connection and collaboration between campus and community
  members.
- The Faculty of Health Sciences is expanding MRI capacity for imaging disease in humans and laboratory models, by investing in the Centre for Integrated and Advanced Medical Imaging with Mohawk College, as well as developing a core for imaging small animals in the Central Animal Facility.
- A World Health Organization Collaborating Centre in Primary
  Health Care Nursing and Health Human Resources renewal is
  underway within the School of Nursing. The School of Nursing is
  also expanding new undergraduate BScN bi-directional student
  exchanges with Lund University in Sweden and continues to build
  and strengthen partnerships with local clinical partners.
- The Department of Pediatrics and the Department of Family
  Medicine established a new community-based general pediatrics
  clinic in the David Braley Health Sciences Centre. This clinic
  addresses a gap in community care, provides career opportunities
  for McMaster trainees, offers a landscape to research optimization
  of community-based healthcare delivery and establishes a novel
  learning environment for Pediatrics and Family Medicine residents.

• The Faculty of Engineering successfully launched its Early Engineers program in Fall 2022. The first of its kind in Canada, the program was developed to support families of children (aged two to Grade 12) in exploring engineering concepts and building engineering mindsets to reduce gender bias and barriers. To date the program has reached 614 individuals. This program is foundational to the work the Faculty does in Community Outreach and complements the Black youth programming, all-girl programming, 2SLGBTQAI+ programming and other socio-economical barrier-free program offerings. Last year the Community Outreach program reached over 22,000 youth across Canada and has reached over half a million youth since inception.

Community engaged and globally connected educational offerings that develop our students as engaged and thoughtful global citizens

- Two McMaster courses highlight community-engaged academic programming to develop our students as engaged and thoughtful global citizens:
- The CityLAB Semester in Residence is a project-based experiential class in which undergraduate students work in interdisciplinary teams and with Hamilton community members.
   The 2022-23 cohort worked on projects focused on the theme of housing, and had the opportunity to present alongside City staff to the Emergency & Community Services Committee at City Hall.
- The Art of Change is a community engagement course equipping students to support and lead change-based initiatives. In 2023, the course included community partnerships with Acorn Hamilton, Hamilton Trans-Health Coalition, Bay Area Restoration Council, Environment Hamilton, Hamilton Community Benefits Network, and the City of Hamilton. Students planned and hosted a community dialogue addressing issues relevant to partner organizations.



- Students in the Global Health Program worked with global health organizations in 11 countries, spanning five continents to complete their practicums, including the Pan-American Health Organization, Médecins sans Frontières, and World Vision. Global health students also continue to engage with local community organizations.
- The McMaster Health Forum continues to lead the Global Skills
   Opportunity for Developing Future Leaders in Strengthening Health
   and Social Systems, as well as the Queen Elizabeth Scholarships in
   Strengthening Health and Social Systems, working closely with 12
   international organizations in nine countries to place outgoing and
   inbound students in positions where they can contribute and further
   develop their skills in policy, political and systems analysis, evidence
   synthesis and stakeholder engagement.
- The Office of the Registrar worked closely with campus partners
  to enhance the convocation experience by hiring local Indigenous
  musicians, strengthening the Land Acknowledgement, adding
  a Thanksgiving Address by the Chancellor and promoting and
  supporting the inclusion of culturally specific apparel during the
  celebration.

The Office of the Registrar supported nine students through the WUSC Undergraduate Refugee Sponsorship Program, the Aid and Awards Office administered

\$58,292.79

to support the cost of tuition, residence, meal plans, books, supplies, as well as an additional \$45,189 in work program funding.

Indigenous education and research strategy that recognizes the unique position of Indigenous peoples within our community and society

- The Indigenous Education Council recruited two new full-time staff members including an administrator of Indigenous initiatives and a communications officer to support the growth and coordination of Indigenous education initiatives at McMaster.
- In January 2023, the McMaster Indigenous Research Institute's
   Prison Education Project launched its first Walls to Bridges
   course, "Indigenous Studies 2IR3: Indigenous Resurgence." The
   Walls to Bridges initiative introduces university courses into
   prisons where university students and incarcerated individuals
   study as peers, earning the same university credit. The tuition for
   incarcerated students is sponsored by the hosting university.
- Members of the Indigenous Studies Department participated in the 2023 United Nations Water Conference side table event, "Kayanní:yo 'a good path' – Working with Indigenous ecological knowledge to advance resiliency."
- The Health Sciences Library co-developed new initiatives in partnership with Indigenous communities, on and off campus:
- An inaugural meeting with the Health Sciences Library, the Indigenous Health Learning Lodge, Six Nations Health Services, and the Six Nations Public Library was held to craft a project to improve library services and access to information to healthcare practitioners at Six Nations.
- The creation of an Indigenous health focus within the Health Sciences Library includes the Indigenous Health Collection which continues to grow and includes print, electronic, and video materials.

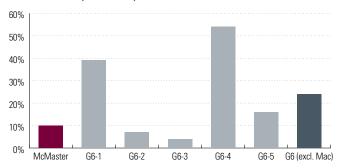
- The Physics and Astronomy department in the Faculty of Science has developed several initiatives related to Indigenous Astronomy including:
- Purchasing a portable planetarium to bring that experience to communities who face barriers to coming to campus, including Indigenous communities.
- New planetarium shows developed in conjunction with Indigenous elders and storytellers.
- A second-year course based on Indigenous and Euro-centric perspectives on Astronomy, developed in consultation with McMaster's Indigenous Education Council.
- Since launching in 2021, several graduate students have been awarded the DeGroote School of Business Graduate Award for Indigenous Learners, which covers the full cost of tuition and provides up to \$15,000 per year for additional expenses.

Engagement with the global community guided by principles of integrity, reciprocity, sustainability and transformation through course offerings, exchanges, collaborations and interactions

- The Co-Design Hub, an interdisciplinary initiative dedicated to
  exploring equity-based approaches to co-creation, co-design and
  co-production, held a series of events that engaged 618 participants
  locally and internationally, a 53 per cent increase over the previous
  year. These included six online events featuring speakers from
  Sweden, Norway, Italy, and the UK who spoke about inclusive
  design, understanding equity-based co-production, design thinking,
  power and relationships in co-design, evaluation of co-design, and
  creativity in co-production.
- The Department of Psychiatry & Behavioural Neurosciences has been working closely with colleagues in Uganda, Ghana, and Somaliland to provide support in developing training programs for psychiatry residents.
- The Department of Linguistics and Languages is supporting the work of a linguist and scholar who has been displaced by the war in Ukraine and speaks an endangered Turkic language. This research aims to develop a successful language policy aimed at the revitalization of Crimean Tatar.
- The Health Sciences Library established the COVID Stories project to document and create a historical record of the experiences of healthcare providers during the pandemic.
- Over the past year, the McMaster Family Health Team provided primary care and obstetrical care to Ukrainian refugees and collaborated with primary care partners to set up and run an intake clinic.

- The McMaster Health Forum continues to serve as the secretariat for two significant global initiatives:
- The COVID-19 Evidence Network to support Decision-making (COVID-END), engaged more than 50 of the world's leading evidence-synthesis, technology-assessment and guidelinedevelopment groups, covering the full spectrum of pandemicresponse decisions. More than 270 products (rapid syntheses, living evidence syntheses, plain language summaries and infographics) were produced between November 2021 and March 2023.
- The Global Commission on Evidence to Address Societal Challenges, which engaged 25 commissioners from all six world regions, and from 10 of the 12 most populous countries. The Forum has been overseeing the strategy and implementation of the Evidence Commission's key priorities: 1) formalizing and strengthening domestic evidence-support systems; 2) enhancing and leveraging the global evidence architecture; and 3) putting evidence at the centre of everyday life.
- This year, 4,529 students received a job opportunity through the Office of the Registrar's Work Program.
- The Office of the Registrar supported nine students through the WUSC Undergraduate Refugee Sponsorship Program. This year, the Aid and Awards Office administered \$58,292.79 to support the cost of tuition, residence, meal plans, books, supplies, as well as an additional \$45,189 in work program funding.
- The Department of Political Science established a certified international experience with three partner institutions in the United Kingdom for students pursuing an Honours Political Science Specialization in Public Law and Judicial Studies or Global Citizenship. The exchange offers Canadian undergraduate students an opportunity to immerse themselves in a different academic approach and become exposed to a broader curriculum than those offered at Canadian institutions.





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

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# **PRIORITY 5: Operational Excellence**

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.





# Integrated planning between administrative and academic leadership to ensure the optimization of operational policies and processes

- McMaster is launching a new digital student experience hub that seamlessly integrates various digital resources, services, and tools in one place, enhancing the overall student experience. This initiative will also streamline administrative processes and provide better information sharing across university departments, enhancing operational excellence.
- Human Resources digitized the MacID procurement process by launching the Pre-Hire MacID eForm, which has improved the onboarding process for new hires. HR continues to deploy enhancements to existing HR eForms to drive continuous improvement, improve accuracy of data, and enable increased operational efficiency.
- McMaster's University Technology Services (UTS) continued to make progress on technological advances across the university in 2022-23:
- As part of an overall Oracle roadmap for McMaster, Institutional Research & Analysis and UTS are partnering to deliver on a project to migrate components of the Business Intelligence platform from the on-premises infrastructure to Oracle cloud infrastructure
- Migration of faculty and staff email and calendar data from the current Exchange on-premises solution to the 365-cloud solution is continuing.
- The DeGroote School of Business has developed an integrated teaching and faculty resource planning model which uses trends in student demand for business courses to optimize course offerings and inform faculty hiring needs.

 The Department of Pediatrics centralized all education program administration, moving away from a generalist staffing model to concentrate support within a unit of subject matter experts who support education program directors and enhance learner experiences.

# Transformative IT structure that will deliver a foundation of core information technologies and services

- McMaster is implementing a three-year Information Security
  Roadmap aimed at strengthening McMaster's information security
  risk posture. In 2022/2023, several enhancements to existing
  security measures and new solutions have been introduced to
  strengthen the university's ability to prevent, detect, and respond to
  an ever-changing cyber security threat landscape.
- The Faculty of Health Sciences' Finance 2 Go project streamlines high-volume, low-complexity financial tasks by assigning them to a team of specialists, relieving research and education staff from the administrative burden of entering financial transactions. In 2021-22, more than 800 people delegated their expense claims to Finance 2 Go and rejection rates dropped more than 50 per cent. This is partly due to adopting a JIRA ticketing system, allowing them to track requests, turnaround time, errors, and reprocessing.
- McMaster Continuing Education is working with UTS, the Registrar, Finance and other units to implement a dedicated student registration and administration system called Destiny One. This system will better serve adult learners, internal and external partners.
- The Faculty of Health Sciences' Computer Services Unit has developed a new database to replace the antiquated MacFacts. This tool will be used across the Faculty to track and report on the activities of faculty members and will bring substantial improvements in both efficiency and accuracy of information.



- Housing & Conference Services (HCS) launched several programs and tools to deliver core technology and services to the McMaster community:
- The Marketing & Communications unit within HCS launched summer virtual residence tours, enabling students to receive personalized one-on-one virtual tours.
- HCS implemented PRIME BPM, a cloud-based, end-to-end business process management tool that allows all units to accurately map, analyze, improve and view processes to save time and costs.
- The IT unit in HCS launched the QReserve room-booking service.
   This cloud-based service creates efficiencies by allowing staff in HCS to view and book rooms and resources in HCS offices.
- HCS updated its dashboard design in StarRez for early checkins. This includes identifying early check-ins with improved technology from guest to Service Centre, resulting in savings on labour costs and greater time efficiencies for staff.

### Cultivate human potential by enabling university strategy in a manner which is responsive to the evolving needs of our diverse community

- McMaster is working to unify student and staff activities onto a single identification card, simplifying tasks and creating a more seamless campus experience. The foundational groundwork needed to allow for greater integration has been completed, and several smaller phased integrations are currently in progress.
- A Hire to Pay task force, co-sponsored by the Office of the Provost and Office of the Vice-President (Operations &Finance) was launched to identify short and long-term recommendations to administrative processes across the university and ensure the accurate and timely processing of hiring and payroll for all Faculties, departments, and Human Resources Services.

- In partnership with Institutional Research and Analysis, Human Resources has developed the HR Workforce Dashboard, which equips Faculty and department leaders with dynamic employee data needed to analyze workforce data for trends and compliance, and to inform better business decisions. Most recently, HR was able to integrate the data cookbook, an authoritative source for answering questions about McMaster data elements or common terms about data processes and systems, with HR reporting Hub to make these reports more accessible and transparent for users.
- Human Resources continued to offer internal leadership programs
  with a focus on professional development including Personal
  Leaders, Knowledge Leaders and Strategic Leaders. The programs
  cover topics including skill development, cultivating human
  potential and collaborative relationship building, and integrate
  three key themes leading self, leading others and leading at the
  university. As of April 2023, 143 leaders have complected leadership
  programming this year.
- The Health Leadership Academy, a partnership between McMaster's Faculty of Health Sciences and the DeGroote School of Business developed a senior leadership program, Health Improvement and Faculty Innovation, targeted at academic and administrative leaders aspiring to senior leadership positions. The first cohort will begin in fall 2023.
- Human Resources, in partnership with the Indigenous Health
  Learning Lodge, designed and launched a new course "The Social
  Injustice of Sameness Shape Shifting Leadership within the
  Academy" for people managers. This session is expected to provide
  leaders with an opportunity to learn more about the Indigenous
  experience related to higher education and to critically reflect on key
  elements of Indigenous allyship and a self-determining approach to
  systemic change.

- Human Resources Services continues to promote and contribute to a healthy and safe community at McMaster through systemic change and improvements in supports to enhance the psychological health and safety of faculty and staff:
- In the fall of 2022, portfolios in Human Resources Services were realigned to create a Health, Safety, Well-Being & Labour Relations portfolio.
- In 2022, a new role was introduced to enhance psychological health and safety and overall health and well-being in the workplace.
- In 2023, McMaster revised its Risk Management Manual, publicly
  affirming the university's dedication to promoting psychological
  health and safety. The updated manual now encompasses both
  physical and psychological aspects within the health and safety
  policy. Additionally, the mandatory health and safety training is
  undergoing updates to include language and essential components
  related to psychological health and safety:
- As part of this commitment, a joint pilot project with Student Affairs has been initiated to provide new training for frontline staff responsible for supporting and caring for students facing distress and difficulty. The training, set to launch in May 2023, will focus on effectively handling difficult situations in real-time and fostering self-care after such interaction.
- McMaster has launched a set of flexible work guidelines. Developed by the Workplace and Employee Experience committee, the guidelines were designed to assist managers and employees in navigating flexible work arrangements, the guidelines establish a standard process for employees and managers to propose and approve a flexible work arrangement, and ensure consistency as these arrangements are made across Faculties and departments.
- To enhance operational excellence across departments and foster continuous learning and improvement, the Student Success Centre leadership team completed their Green Belt certification as part of Lean Six Sigma. The Faculty of Social Sciences sponsored 17 staff members to complete Lean Six Sigma Green Belt certification.
- The Student Wellness Centre introduced a walk-in clinic providing same-day access to a counsellor for students seeking support.
   More than 325 students accessed the walk-in clinic within the first four months of opening. This stepped-care approach allows the counsellor to assess the needs in short, same-day appointments and then direct students appropriately to their required level of intervention.

Provide a campus environment that is functional, accessible, sustainable and attractive, and promotes and supports learning, teaching, research and community

- Several construction and renovation projects started or continued in 2022-23:
- Construction continues on the McLean Centre for Collaborative Discovery with a target opening date of early 2025.
- Athletics & Recreation is finalizing the McMaster Student Activity Building and Fitness Expansion at David Braley Athletic Centre and Ivor Wynne Centre. The expanded facilities will improve access and flexibility with capital investments over the next several years.
- Housing & Conference Services is building the new 10 Bay graduate residence in downtown Hamilton. When completed, the 30-story building will add approximately 600 bed spaces for graduate students and their families to the HCS residence portfolio
- The Residence Life unit in Housing & Conference Services (HCS)
  worked extensively with the Sexual Violence Prevention and
  Response Office to deliver an enhanced training program for staff.
  The training provides the necessary tools to effectively respond to
  disclosures of sexual and gender-based violence on campus.
- During Summer 2022, Housing & Conference Services hosted 21 conference groups from May 1 to August 13, 2022, and held 4,170 events on-campus between May 1, 2022, and March 15, 2023.
- Housing & Conference Services expanded its Signature Venues portfolio, adding Crescent House and Alumni Memorial Hall.
   Available for events, executive retreats, and corporate receptions, these unique venues are open to students, staff and McMaster community members.

McMaster set a goal of reducing the carbon exposure of its investments by 45 per cent by 2030. As of 2023, McMaster has surpassed this goal, reducing the carbon exposure of its investments by 49 per cent.

[29]



Engage our community as we work to transform our campus into a living laboratory for sustainability, focusing on a green and carbon free campus

- McMaster unveiled its University Plan, outlining the vision for the
  institution's growth and development over the next decade. The
  plan serves as a comprehensive framework that will influence the
  design of buildings, outdoor spaces, infrastructure and the overall
  experience of being at McMaster. The formulation of the University
  Plan involved active participation from numerous members of the
  university and the broader community. Notably, the final phase of
  public engagement saw a remarkable response, with a total of 1,100
  voices contributing their insights and ideas to shape the future of
  McMaster.
- McMaster continues to set and surpass aggressive targets to decarbonize its investment portfolio that are aligned with those of other Canadian universities:
- In 2018, McMaster set a goal of reducing the carbon exposure of its investments by 45 per cent by 2030. As of 2023, McMaster has surpassed this goal, reducing the carbon exposure of its investments by 49 per cent.
- McMaster is committed to reducing the carbon exposure of investments by 65 per cent by 2025 and 75 per cent by 2030 and is actively examining ways to accelerate that reduction further.
- High fossil fuel emitting companies now make up 2.7 per cent of McMaster's investment portfolio, down from 4.5 per cent in 2018.
- Twenty-four per cent of McMaster's investments are in clean technology companies, a number the university intends to increase markedly over the next several years.

- A study by the CD Howe Institute saw McMaster tie for first place in Canada with the University of British Columbia for its endowment emission reduction plan, governance and disclosure of its plan and progress.
- McMaster announced the installation of geothermal technology to heat and cool McMaster's new greenhouse, which is currently under construction. Facilities Services is also exploring multiple locations on campus for future geothermal sites.
- McMaster hired its inaugural Director of Sustainability. This position
  will play an essential role in executing important initiatives including
  developing ambitious targets; defining key metrics related to
  McMaster's inaugural, campus-wide Sustainability Strategy; and
  helping to steer the university's Net Zero Carbon Roadmap.
- McMaster and other members of the "Cootes to Escarpment EcoPark System," including the Royal Botanical Gardens, received \$3.5 million from Parks Canada to support several projects aimed at restoring and protecting the wetlands, plants, and wildlife in the 2,200-hectare corridor that makes up the EcoPark System located, in part, on McMaster's campus. Projects include:
- Engaging Private Landowners on how their natural lands can be ecologically stewarded and improved while creating cooperative relationships with the landowners.
- Cootes Drive Wetland Remediation to improve habitat in McMaster's west campus.
- Indigenous relationship-building that invites Indigenous communities and Knowledge Holders to share insight about the land in the Cootes—Dundas Valley EcoCorridor and participate in its stewardship.

- McMaster Academic Sustainability Programs continue to engage students through various curricular and co-curricular programs in the area of sustainability. According to its report released in fall 2022:
- The Sustainable Future Program saw expanded enrolment capacity that resulted in 5,000 students, representing all Faculties and the Arts & Science Program.
- This past year, students worked on 36 projects with more than 450 collaborators to advance our collective sustainability goals.
- The Sustainability Internship Program has supported 57 students to date in their self-directed learning.
- Student Sustainability Ambassador Program Student Coordinators facilitated six events, engaged over 150 students, and collaborated with 13 clubs from across campus.
- Hundreds of campus and community members planted 1,000 trees
  in the McMaster Carbon Sink Forest. As part of this academic and
  research initiative led by the McMaster Centre for Climate Change,
  students, post-doctoral researchers and faculty are addressing
  climate change by monitoring the growth and health of each tree,
  and measuring the amount of carbon dioxide each tree is pulling out
  of the atmosphere. This data will be freely available to researchers
  around the world who are planting similar forests.
- Students from a third-year Academic Sustainability Program course collaborated with Facility Services and University Technology Services to coordinate ACCESS Tech, a reuse technology donation drive that took place on campus. Empowerment Squared, a local charitable organization that supports newcomer, racialized, and marginalized communities with the tools and opportunities to thrive, distributed the donated technology to local families.
- A working group of students, faculty and staff developed the Bring Your Own Bottle campaign to reduce single-use plastic water bottles by encouraging the McMaster community to use the water bottle filling stations located throughout campus. The campaign, made possible through McMaster Okanagan special project funding, includes a website, campus-wide signage and a digital map of all the 200-plus water refilling locations across campus and in residence.

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### Financial stewardship and risk mitigation to develop and steward the university's financial assets securely and effectively

- McMaster's ability to structurally balance and fund strategic and capital priorities demonstrates prudent financial management enabled by McMaster's transparent budget model that places fiscal accountabilities with area leaders who initiate one-time investments to advance the university mission, vision, and strategic priorities.
- A review of the budget model will provide recommendations for better strategic funding allocations in the face of a rapidly changing higher education landscape and resourcing challenges.
- In 2022/2023, McMaster attained a significant milestone by achieving its 2025 goal of reducing the Investment Pool's weighted average carbon intensity (WACI) by more than 65% two years earlier than originally targeted.
- McMaster achieved a significant milestone in its plans to invest in the clean economy. In March 2022, the Board of Governors approved a commitment of US\$24 million (C\$32 million) to invest in the Brookfield Global Transition Fund (BGTF), a fund which invests in clean infrastructure investments. In 2023 McMaster, through its investment in the BGTF, achieved a significant milestone funding over C\$10 million in infrastructure investments that support the transition to a global clean economy.
- McMaster's credit profile and financial position which is viewed as very strong by the credit rating agencies. Standard and Poor's (S&P) and Dominion Bond Rating Service (DBRS) rate McMaster as AA, which is among the strongest in the higher education sector.
- Multiple initiatives to simplify financial processes and enhance reporting will improve efficiency to reduce expenses and improve stewardship of assets. Projects include transaction workflow authorization in line with policies, implementation of internal billings for research activity, integration with human resources and student systems, improving payment card security, and enabling electronic delivery of donor trust fund statements.
- Administrative areas across McMaster are proactively using insights
  from UniForum to improve our processes and services. UniForum
  at McMaster is a program that provides McMaster with data on
  how support services are delivered across the university. Results
  from the past five years have shown that not only has satisfaction
  with McMaster services gone up in every measured service,
  but satisfaction scores across many operational functions at the
  University are among the highest of the Canadian universities that
  submit data.
- Working in partnership with MIP, the University made significant progress on MIP's major development initiative, providing an additional 2.8 million square feet of new and renovated life sciences and biomanufacturing space. Work on this strategic initiative is continuing and expected to conclude in 2023/24.

<sup>i</sup>Compared to a 2018 baseline

