<table>
<thead>
<tr>
<th>Contents</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
</tr>
<tr>
<td>People</td>
<td>Numbers</td>
</tr>
<tr>
<td>Our Team at the OVPR</td>
<td>Funding</td>
</tr>
<tr>
<td>UTM’s Research Council</td>
<td>Publications</td>
</tr>
<tr>
<td></td>
<td>Awards and Honours</td>
</tr>
<tr>
<td></td>
<td>Chair Positions</td>
</tr>
<tr>
<td></td>
<td>Support</td>
</tr>
<tr>
<td></td>
<td>New Initiatives</td>
</tr>
<tr>
<td></td>
<td>Internal Funding Programs</td>
</tr>
<tr>
<td></td>
<td>Core Facilities</td>
</tr>
<tr>
<td></td>
<td><strong>4</strong></td>
</tr>
<tr>
<td></td>
<td>Reach</td>
</tr>
<tr>
<td></td>
<td>Networks</td>
</tr>
<tr>
<td></td>
<td>Institutions and Centres</td>
</tr>
<tr>
<td></td>
<td>Institutional Strategic Partnerships</td>
</tr>
<tr>
<td></td>
<td>Community Partnerships</td>
</tr>
<tr>
<td></td>
<td>News and Achievements</td>
</tr>
<tr>
<td></td>
<td>Communications</td>
</tr>
<tr>
<td></td>
<td>Events</td>
</tr>
</tbody>
</table>

**STATEMENT ON ACKNOWLEDGEMENT OF TRADITIONAL LAND**

We wish to acknowledge this land on which the University of Toronto operates. For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island, and we are grateful to have the opportunity to work on this land.
It’s an exciting time for research at the University of Toronto Mississauga (UTM). UTM is a flourishing campus, generating research discoveries, innovation, and new knowledge from an impressive breadth of fields and collaborations that bridge many disciplines. Our research enterprise has been on a rapid rise; researchers continue to secure significant research revenue each year, reaching record levels in federal support, with funds supporting pioneering work in the humanities, natural and life sciences, as well as the social sciences — and this is a trend we aim to uphold.

Our vision in the Office of the Vice-Principal, Research (OVPR) is to support, promote, and inspire the research, scholarship, and creative activity of our community, and to enhance UTM’s research environment, reputation, and profile.

This past year has brought many welcome changes to our office, and we look forward to sharing our updates and successes, our outreach efforts, and additional support with the UTM community.

UTM’s Strategic Framework emphasizes the need to empower research discovery and impact. Its commitments — to attract, support, and retain world-leading researchers; to advance insight, innovation, creativity, and curiosity; and to catalyze research inquiry that enhances U of T’s reputation for inclusive excellence that benefits both the region and the world at large — have informed our work on campus and beyond.

UTM is investing in new buildings and renovations with research infrastructure, expanding core research facilities, continuing to invest in research through internal funding programs, and adding new staff and faculty leadership roles to the OVPR. As our research environment continues to thrive, I enthusiastically support and encourage these new developments and initiatives, and am eager to ensure that our campus remains an outstanding centre of creative pursuits and scholarly advancements.

As such, I am pleased to share with you Synergy: 2022 Annual Report, Office of the Vice-Principal, Research. In it, you’ll find evidence of the collaboration and partnerships taking place across UTM — the synergistic effects of leadership, faculty, staff, and students working together to support and empower research discovery and impact. Our sincere thanks go to artist Tal Bavli, a second-year student in the Biomedical Communications program at UTM, who designed the cover art for this report. Tal’s vibrant design captures just some of our many research strengths at UTM and highlights our position within the Mississauga community.

In our section People, you’ll meet the OVPR team and learn more about our office. Find important data details in Numbers, where we provide information on funding, new partnerships, awards, projects, and more. Support outlines UTM’s internal funding programs and initiatives and offers updates on our state-of-the-art core facilities. Finally, in Reach you’ll read about our networks, partnerships, events, and communication activities.

I warmly invite you to read our inaugural 2022 Annual Report to learn how we’re supporting the exciting research happening across the UTM campus — and to see where we’re headed in the year to come.

G.W.K Moore, PhD
Vice-Principal, Research
Professor, Department of Chemical & Physical Sciences
People

INSPIRE bootcamp at the University of Toronto Mississauga.
Photograph by Nick Iwanyshyn. Faculty leads: Josh Milstein & Scott Prosser, CPS.
Critical to supporting UTM’s research mandate is the OVPR team, and our office has increased its staffing complement over the past year. With the departure of Professor Steven Short in July, Josh Milstein, Associate Professor in the Department of Chemical & Physical Sciences joined our leadership team as Associate Vice-Principal, Research – Facilities. We welcomed a third Strategic Research Development Officer, Stefanie Bernaudo, PhD, who joins SRDOs Anastassia Pogoutse, PhD and Jessica Lapp, PhD in providing guidance and supporting research goals, funding opportunities, and the development of grant applications.

In the fall Raquel De Souza, PhD joined us as the Strategic Research Initiatives and Partnerships Manager and is responsible for designing and implementing programs and strategies that will increase UTM’s strategic initiatives and research partnerships. Digital Humanities Developer Matthew Lefaive joined our office as well; he is working with the Critical Digital Humanities Initiative (CDHI), aiding DH researchers in creating project websites and digital exhibitions. With the September
departure of Senior Research Associate Elizabeth Parke, PhD, Elisa Tersigni, PhD, joined us in November as the new SRA for the Collaborative Digital Research Space (CDRS).

Continuity in the office has been an important part of its success, and this includes Professor Elspeth Brown, who oversees UTM’s strategic initiatives; OVPR Director Payam Zahedi, PhD; and Tanya Rohrmoser, Communications Officer. Office Administrator Veron Fernandes is the main point of contact for the office and coordinates many OVPR efforts. Rong Wu, our Internal Competitions & Events Coordinator, continues to oversee internal funding competitions, internal awards, and event coordination.

Academic Workshop supervisor Peter Duggan takes projects from concept to reality, combining his innovative industry experience and knowledge in machining, wood working, mechanics, and electronics to support researchers across UTM and beyond.

Bringing with her strong lab-management skills and more than 13 years of research experience in molecular biology, cell culture, and imaging, Xin Zhao manages the Life Sciences Core Facilities and common research equipment including autoclaves, pure-water systems, fridges/freezers, and growth chambers, as well as the Honeywell remote alarm system.

The Research Council is made up of faculty members representing each of the departments on the UTM campus. It serves as a forum for information exchange and discussion of issues relevant to the research community at UTM. The Research Council also serves as an advisory board that supports the mission of the Vice-Principal, Research to promote and facilitate research, scholarship, and creative activity at UTM.

UTM’s Research Council 2022–2023

<table>
<thead>
<tr>
<th>Department</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>Jack Sidnell</td>
</tr>
<tr>
<td>Biology</td>
<td>Adriano Senatore</td>
</tr>
<tr>
<td>Chemical &amp; Physical Sciences</td>
<td>Voula Kanelis</td>
</tr>
<tr>
<td>Economics</td>
<td>Guerogui Kamburov</td>
</tr>
<tr>
<td>English and Drama</td>
<td>Larry Switzky</td>
</tr>
<tr>
<td>Geography, Geomatics and Environment</td>
<td>Alan Walks (Fall Term), Tenley Conway (Winter Term)</td>
</tr>
<tr>
<td>Historical Studies</td>
<td>Karen Ruffle</td>
</tr>
<tr>
<td>Institute of Communication, Culture, Information and Technology</td>
<td>Alessandro Delfanti</td>
</tr>
<tr>
<td>Institute for the Study of University Pedagogy</td>
<td>Tyler Evans-Tokaryk</td>
</tr>
<tr>
<td>Language Studies</td>
<td>Pascal Michelucci</td>
</tr>
<tr>
<td>Management</td>
<td>Dushyant Vyas</td>
</tr>
<tr>
<td>Mathematics and Computational Sciences</td>
<td>Spencer Unger</td>
</tr>
<tr>
<td>Philosophy</td>
<td>James Allen</td>
</tr>
<tr>
<td>Political Science</td>
<td>Janine Clark</td>
</tr>
<tr>
<td>Psychology</td>
<td>Erika Carlson</td>
</tr>
<tr>
<td>Sociology</td>
<td>Phil Goodman</td>
</tr>
<tr>
<td>Visual Studies</td>
<td>Elizabeth Wijaya</td>
</tr>
<tr>
<td>UTM Library</td>
<td>Yayo Umetsubo</td>
</tr>
</tbody>
</table>
Cellular neurobiologist Kathryn Harris-Howard, PhD, runs the Imaging Facility, using her expertise in a wide range of imaging tools and techniques — along with her valuable experience as an educator — to support and provide UTM researchers with training, consultation, workshops, and access to resources. Kristina Han is the Site Coordinator for the Amgen Biotech Experience Program at UTM (ABE@UTM). She oversees the daily operation of the program and is one of three Master Lab Technicians in the global ABE community, providing technical support to over 20 international program sites.

Dmitry Pichugin has long been fascinated with nuclear magnetic resonance (NMR) and runs UTM’s Nuclear Magnetic Resonance Centre.

UTM’s Growth Facilities are run by in-house plant physiologist Vera Velasco, PhD, who facilitates and supports interdepartmental plant and animal research at UTM. Researchers from Biology, Geography, and Chemical and Physical Sciences use the state-of-the-art research greenhouse and growth chambers to perform experiments on different aspects of biology.

Veterinary Director Shawn Davis, DVM, MSc, Dip (Path) boasts over 16 years of experience as a laboratory veterinarian in both industry and academic institutions. In her work in the Vivarium, she works with investigators to help establish humane refinements for their research animals, and ensures research is conducted following proper procedures.
Numbers

Single-molecule fluorescence spectroscopy employed to better understand disordered proteins and cell signaling receptors. Researcher: Claudiu Gradinaru, CPS.
**Funding**

**TOTAL RESEARCH FUNDING**

**FUNDING SOURCES**

- **Connaught Fund** $489,512
- **Private** $443,553
- **Other** $94,500
- **Not-for-profit** $1,459,774
- **Ontario Provincial Govt.** $335,615
- **Federal Govt., Other** $564,434
- **Research and Academic Sector** $1,056,984
- **Federal Granting Agencies** $10,591,391

*These values represent the amount of funding received by faculty in the 2022 calendar year, not the full values of the grants held by faculty.*

**Total** $15,035,763

**RESEARCH FUNDING SOURCES**

- **Grant Success**
  - **SSHRC INSIGHT DEVELOPMENT GRANT** (2022 competition)
    - National: 55.8%
    - UTM: 60.0%
  - **SSHRC INSIGHT GRANT** (2021 competition)
    - National: 51.7%
    - UTM: 66.7%
  - **NSERC DISCOVERY GRANT** (2021 competition)
    - National: 68.1%
    - UTM: 83.3%

**2022 Annual Report**

**Number of grants/awards held in 2022**

- **Total** 368
- **Sponsors** 225
- **Applications** 225
- **Pending** 124
- **Awarded** 83

**Applications**

- **Pending** 68.1%
- **Awarded** 31.9%

**Sponsors**

- **Pending** 55.8%
- **Awarded** 44.2%
MAJOR PARTNERED RESEARCH FUNDING AWARDED IN 2022

- $3,349,522 Total

- Race, Gender & Diversity Initiative $443,047
- Partnership Development Grant $122,348
- Alliance $341,800
- Accelerate $761,400
- Globalink $18,000
- Genomic Applications Partnership Program $1,364,324
- Global Challenge Award $228,603
- Business Strategy Internship $70,000

Subtotal:
- SSHRC: $565,395
- NSERC: $341,800
- MITACS: $849,400
- CONNAUGHT: $228,603
- ONTARIO GENOMICS INSTITUTE: $1,364,324
## Publications

### OUTPUT SUMMARY

**SCHOLARLY OUTPUT**

- **Total Scholarly Output: 601 documents**
- **48.6% in open access**

### DOCUMENTS BY TYPE

- **Article:** 80.8%
- **Conference Paper:** 6.7%
- **Review:** 5.0%
- **Book Chapter:** 2.9%
- **Erratum:** 1.6%
- **Editorial:** 1.3%
- **Note:** 0.8%
- **Book:** 0.7%
- **Letter:** 0.2%

*Data from SciVal and Scopus accessed January 2023*

### SUBJECT AREAS AND KEY PHRASES

#### PUBLICATION SHARE BY SUBJECT AREA

- **Computer Science:** 11.2%
- **Mathematics:** 9.3%
- **Engineering:** 5.5%
- **Environmental Science:** 8.0%
- **Earth and Planetary Sciences:** 6.3%
- **Agricultural and Biological Sciences:** 9.8%
- **Biochemistry, Genetics and Molecular Biology:** 15.3%
- **Medicine:** 14.1%
- **Neuroscience:** 7.3%
- **Arts and Humanities:** 16.0%
- **Psychology:** 14.3%
- **Social Sciences:** 33.9%
- **Business, Management and Accounting:** 4.0%
- **Economics, Econometrics and Finance:** 5.3%
- **Multidisciplinary:** 5.2%
- **Other:** 14.6%
*Data from Scival and Scopus accessed January 2023*
UTM FACULTY PUBLICATIONS RESULTING FROM INTERNATIONAL COLLABORATIONS IN 2022

*Data from SciVal and Scopus accessed January 2023
Awards and Honours

3M National Teaching Fellowship 3M Canada/Society for Teaching and Learning in Higher Education
Fiona Rawle, Professor, Department of Biology

AstraZeneca Chair in Biotechnology, University of Toronto/AstraZeneca
Scott Prosser, Distinguished Professor, Department of Chemical & Physical Sciences

Austin Robinson Memorial Prize, Royal Economic Society
Ruben Gaetani, Assistant Professor, Department of Management

Biological and Medicinal Chemistry Lectureship Award, Chemical Institute of Canada
Scott Prosser, Distinguished Professor, Department of Chemical & Physical Sciences

Desmond Morton Research Excellence Award, University of Toronto Mississauga
Yuhong He, Professor, Department of Geography, Geomatics, and Environment

Desmond Morton Research Excellence Award, University of Toronto Mississauga
Claudiu Gradinaru, Professor, Department of Chemical and Physical Sciences
E. A. Robinson Teaching Excellence Award for Senior Faculty, University of Toronto Mississauga
Lindsay Schoenbohm, Professor, Department of Chemical and Physical Sciences

Faculty Award for Student Involvement, University of Toronto Mississauga Students’ Union
Michael Lettieri, Professor, Department of Language Studies

Finalist, Young Economists’ Essay Award, EARIE
Andrew Steck, Assistant Professor, Department of Management

IMI Research Award, UTM Institute for Management & Innovation
Ningyuan Chen, Assistant Professor, Department of Management

John Charles Polanyi Prize, Council of Ontario Universities
Alana Ogata, Assistant Professor, Department of Chemical and Physical Sciences

President’s Teaching Award, University of Toronto
Kenneth Derry, Associate Professor, Department of Historical Studies and Institute for the Study of University Pedagogy

Responsible Research in Management Award, Fellows Group of the Academy of Management
Sonia Kang, Associate Professor, Department of Management

Roger Martin Award for Excellence in Research, Rotman School of Management
Ningyuan Chen, Assistant Professor, Department of Management

Rotman Outstanding Research Impact Award, Rotman School of Management
Sonia Kang, Associate Professor, Department of Management

Sloan Research Fellowship, Alfred P. Sloan Foundation
Michael Groechenig, Assistant Professor, Department of Mathematical and Computational Sciences

University of Toronto Early Career Teaching Award, University of Toronto
Sherry Fukuzawa, Assistant Professor, Department of Anthropology

UTM Annual Research Prize, University of Toronto Mississauga
Alison Smith, Assistant Professor, Department of Political Science

UTM Annual Research Prize, University of Toronto Mississauga
Loren Martin, Associate Professor, Department of Psychology

UTM Annual Research Prize, University of Toronto Mississauga
Daniel Wright, Associate Professor, Department of English and Drama

UTM Teaching Excellence Award for Junior Faculty, University of Toronto Mississauga
Steve Szigeti, Assistant Professor, Institute of Communication, Culture, Information and Technology
Canada Research Chairs

Joel Levine  
Professor, Department of Biology  
Tier 1 NSERC Canada Research Chair in Biological Determinants of Social Networks, 2014–2028

Jennifer Adese  
Associate Professor, Department of Sociology,  
Tier 2 SSHRC Canada Research Chair in Métis Women, Politics, and Community, 2020–2025

Patrick Gunning  
Professor, Department of Chemical & Physical Sciences  
Tier 2 CIHR Canada Research Chair in Medicinal Chemistry, 2013–2023

Maria Hupfield  
Assistant Professor, Department of Visual Studies  
Tier 2 SSHRC Canada Research Chair in Indigenous Digital Arts and Performance, 2019–2024

Elizabeth Johnson  
Professor, Department of Psychology  
Tier 2 NSERC Canada Research Chair in Spoken Language Acquisition, 2013–2023

Marc Johnson  
Professor, Department of Biology,  
Tier 2 NSERC Canada Research Chair in Urban Environmental Science, 2018–2023

Sonia Kang  
Associate Professor, Department of Management  
Tier 2 SSHRC Canada Research Chair in Identity, Diversity and Inclusion, 2019–2024

Vincent Kuuire  
Assistant Professor, Department of Geography, Geomatics and Environment  
Tier 2 SSHRC Canada Research Chair in Immigrant Well-being and Global Health, 2019–2024

Neda Maghbouleh  
Associate Professor, Department of Sociology  
Tier 2 SSHRC Canada Research Chair in Migration, Race, and Identity, 2019–2024

Loren Martin  
Associate Professor, Department of Psychology  
Tier 2 CIHR Canada Research Chair in Translational Pain Research, 2015–2025

Rhonda McEwen  
Professor, Institute of Communication, Culture, Information and Technology  
Tier 2 SSHRC Canada Research Chair in Tactile Interfaces, Communication and Cognition, 2016–2026

John Ratcliffe  
Professor, Department of Biology  
Tier 2 NSERC Canada Research Chair in Neuroethology, 2015–2025

Iva Zovkic  
Associate Professor, Department of Psychology  
Tier 2 CIHR Canada Research Chair in Behavioural Epigenetics, 2019–2024
Support

Pumping drinking water from sea ice melt pond during coralline algal sampling expedition in NW Greenland. Researcher: Jochen Halfar, CPS.
New Initiatives

UTM has recently introduced two initiatives to support grant development: the Grant Writing Cohort Program and the Funding Application Repository.

The Grant Writing Cohort Program was piloted in the summer of 2021 with the goal of supporting faculty members writing SSHRC Insight Grants and SSHRC Insight Development Grants. Participants in the program were divided into cohorts of 4-7 participants who had the option of writing together and supporting each other during the grant writing process. The program also offered monthly plenaries covering topics in grant writing and connected faculty members to peer reviewers of their choice who reviewed drafts of their applications.

The Funding Application Repository is made available to UTM faculty through SharePoint.

The repository was made possible through the generosity of many UTM faculty members who, upon request, donated their successful grant applications to the repository where they can be used as references by faculty members who are looking for examples of successful grants.

The repository currently holds 71 applications covering various NSERC and SSHRC funding programs as well as the CIHR Project Grant, the Connaught program, CFI, Mitacs, the Ontario Research Fund, and other types of applications.

Since the repository was launched in March, it has received 277 visits from 40 individuals. Encouragingly, several researchers have expressed enthusiasm and appreciation to the OVPR for this project. This repository is a work in progress, and we will continue to update and expand it going forward.
Since 2015, UTM has introduced several internal funding opportunities to address gaps in faculty funding and support. These mechanisms are provided by the OVPR and help to support researchers across UTM.

<table>
<thead>
<tr>
<th>Program</th>
<th>Recipients</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black, Indigenous, and Racialized Scholar Research Grant Program</td>
<td>6</td>
<td>$58,124</td>
</tr>
<tr>
<td>Bridge Funding Program</td>
<td>18</td>
<td>$260,000</td>
</tr>
<tr>
<td>Outreach, Conference and Colloquia Fund</td>
<td>6</td>
<td>$8,500</td>
</tr>
<tr>
<td>Research and Scholarly Activity Fund</td>
<td>18</td>
<td>$175,267</td>
</tr>
<tr>
<td>Research Infrastructure Support Program</td>
<td>6</td>
<td>$168,650</td>
</tr>
<tr>
<td>Research Planning Grants</td>
<td>7</td>
<td>$66,814</td>
</tr>
<tr>
<td>Tri-Council Postdoctoral Fellowship Top-up Program</td>
<td>7</td>
<td>$70,000</td>
</tr>
<tr>
<td>UTM Postdoctoral Fellowship Award</td>
<td>5</td>
<td>$226,000</td>
</tr>
<tr>
<td>UTM Postdoctoral Fellowship Travel/Conference Grant</td>
<td>15</td>
<td>$7,500</td>
</tr>
<tr>
<td>UTM Working Groups</td>
<td>1</td>
<td>$3,000</td>
</tr>
<tr>
<td>XSeed</td>
<td>3</td>
<td>$45,000</td>
</tr>
</tbody>
</table>
Launched in 2021, the Black, Indigenous, and Racialized Scholar Research Grant Program was established to address historical and contemporary effects of racism and racial disparities in all aspects of society. This funding mechanism has two streams:

- **Research Seed Funding** provides up to $10,000 per project and supports works of research, research creation, or program development implemented at the UTM campus and/or in a community setting.

- **Workshop/Outreach Grants** provide up to $2,000 and support organization of workshops, symposia, hosting of visiting scholars/artists, creative works; and/or community conversations addressing the themes of the program. Ten researchers received funding in the first competition ($97,950 dispersed total) and six received funding in the 2022 iteration of the program ($58,124 dispersed total).

Also launched in 2021, the First Book Manuscript Workshop Competition program is designed for faculty completing their first monograph and funds an external specialist reader to read the manuscript and provide supportive feedback in a small seminar environment of 6-8 faculty. Two researchers, both Indigenous, have been awarded this grant so far.

In 2021, UTM offered the Pandemic Impact Support Fund to faculty who incurred unanticipated costs and/or continued to fully fund graduate students and postdoctoral fellows during the COVID-19 pandemic. It provided up to $20,000 per faculty member to help offset some of the pandemic’s negative impact on researchers’ already limited research budgets.

The Bridge Funding Program provides funds to faculty who have applied for, but not been awarded, a tri-council grant and who demonstrate need. In the 2021–2022 fiscal year, the Bridge Funding Program supported 12 researchers to the amount of $213,000. Between 2016–2022, the Bridge Funding Program supported 33 researchers to a total amount of $400,000.

Also administered by the OVPR, the Research and Scholarly Activity Fund provides funding to increase the competitiveness of research proposals being submitted for external funding opportunities. To date, 95 applicants have been supported through the Research and Scholarly Activity Fund with the total amount dispersed equaling $1,569,104.

Focusing on outreach activities that enhance UTM’s research profile at the local, national, and international levels, the Outreach, Conference, and Colloquia Fund (OCCF) provides financial support to organize conferences and colloquia. Between 2017–2022, the OCCF funded 33 projects to the amount of $45,847.

ADDITIONAL INTERNAL FUNDING PROGRAMS:

- **The Research Infrastructure Support Program**, which supports units that require help with infrastructure-related needs, such as purchase/repair of research equipment and modifications of infrastructure;

- **Research Planning Grants**, which provide funds for UTM researchers to plan meetings to carry out grant development;

- Funding for the UTM/Jackman Humanities Institute Annual Seminar, which allows a faculty member in the humanities or social sciences to organize a series of events to address a topic of broad appeal; and

- **The UTM Working Groups**, which are led by UTM humanities and social sciences faculty members and tackle specific scholarly topics of interest.
Core Facilities

Core facilities are an integral part of the UTM research environment and are scheduled to grow with the completion of the New Science Building in summer of 2023. With the recent establishment of an Associate Vice-Principal - Facilities in the OVPR, this role is working in collaboration with each facility lead to ensure continued sustainability and growth.

Academic Workshop
The Academic Workshop, which has been in existence since the late 1960s, provides unique services to the UTM community in the design, manufacture, and repair of parts, materials, and products required by researchers, teaching operations, and Facilities Management & Planning. The facility is largely comprised of two components: the Machine and Electronics shops. The workshop has had steady growth in service orders over the years, and although COVID-19 had an impact, it is anticipated that requests will increase and exceed pre-pandemic levels.

Life Sciences Core Facilities
The Life Sciences Core Facilities consist of the Cell and Molecular Biology Facility and the Cell/Tissue Culture Facility and are open to faculty, staff, postdoctoral fellows, graduate students, and undergraduate research students. Equipment to enhance the facilities has been and will continue to be added over time based on the needs of the UTM community.

• The Cell and Molecular Biology Facility provides shared equipment related to DNA, RNA, and protein research.
• The Cell/Tissue Culture Facility provides researchers with a shared resource necessary to carry out cell/tissue culture-based experiments, and to maintain and store experimental cell lines.
Growth Facilities
The Growth Facilities, composed of a greenhouse and multiple growth chambers, cater to multidisciplinary research that requires specific environmental conditions for experiments and sample storage. The vision is to develop the UTM Growth Facilities as a smart phenomics facility with cutting-edge and sustainable equipment, capable of high-throughput phenotyping to address bottlenecks in plant and animal research.

Imaging Facility
The Imaging Facility is a shared resource providing instruction, support, and equipment for researchers performing optical microscopy. The facility is equipped with state-of-the-art instruments including a conventional confocal microscope, a spinning disc confocal microscope, a confocal system for multiphoton imaging, an epifluorescence microscope, and a tabletop scanning electron microscope. The facility also provides training, consultation, workshops, and access to software for data analysis.

Nuclear Magnetic Resonance Centre
The Nuclear Magnetic Resonance (NMR) Centre is equipped with modern spectrometers capable of a wide range of experiments. Through funding from the Canada Foundation for Innovation, the Ontario Government, UTM, and industrial partners, this facility focuses on small molecule structure characterization, fragment-based drug discovery, ligand-target interactions, and target structural dynamics. Staff and researchers combine extensive expertise in medicinal, and structural biology, and biophysical research.

Collaborative Digital Research Space
The Collaborative Digital Research Space (CDRS) is a hub for interdisciplinary research in the arts, humanities, and social sciences offering a range of research supports including 1:1 consultations, co-working sessions, co-presenting film screenings hosting visiting speakers, and coding workshops. CDRS works closely with the Institutional Strategic Initiatives (ISI)-funded Critical Digital Humanities Initiative (CDHI), and Humanities and Social Science programs in the OVPR such as the UTM/Jackman Humanities Institute (JHI) Annual Seminar, the SSHRC Summer Cohort Program, and the First Book Manuscript Workshop.

The CDRS physical space was established by six departments: Historical Studies, English & Drama, Political Science, Language Studies, Philosophy, and Sociology. It is a unique space — in both mandate and size — unmatched across the tri-campus.

From January to December 2022, CDRS organized over 90 virtual co-working sessions and a three-day writing retreat (December 2022) that was attended by over 20 faculty, researchers, Contractually Limited Term Appointments, sessional instructors, postdoctoral fellows and graduate students. CDRS also played a role in the organization of the two-day Media Camp in May 2022. From September to December 2022, CDRS was booked for over thirty in-person events, including weekly faculty seminars and meetings, two workshops and conferences, and several visiting speakers hosted by various departments at UTM.

Vivarium
The UTM Animal Care Facility works with researchers at UTM to facilitate research projects in which the use of animals is necessary, and to ensure the research is conducted following proper procedures. This facility is regulated by the Canadian Council on Animal Care (CCAC) and the Ontario government.

Other Facilities
Included under this category are High Performance Computing, Research Storage, the Department of Chemical & Physical Sciences core facilities, and the Department of Biology core facilities. These facilities are not under the purview of the OVPR, but all play an integral role in supporting the UTM research community.

Photographs by: Nick Iwanyshyn, Tanya Rohrmoser, Elizabeth Parke.
A palm leaf manuscript in Javanese or Balinese script, from the collection of Don Taylor. Photograph by Nicholas Iwanyshyn. Researcher: Old Books New Science (OBNS) lab, Alexandra Gillespie, fl.
INSTITUTES AND CENTRES

The OVPR continues to support and promote research at UTM, which is home to a range of centres and institutes that are sites of groundbreaking interdisciplinary research and training:

The Centre for Urban Environments (CUE), a transdisciplinary research centre directed by Marc Johnson, Professor in the Department of Biology, is committed to leadership in research, education, and outreach on urban environmental issues.

The Centre for Medicinal Chemistry (CMC) develops compounds with the potential to become cancer-fighting drugs and is led by Patrick Gunning, Professor in the Department of Chemical & Physical Sciences.

The Centre for Child Development, Mental Health, and Policy (CCDMP), directed by Tina Malti, Professor in the Department of Psychology, conducts research that advances a holistic understanding of children and generates service and practice solutions to enhance their potential and healthy development.

The Centre for South Asian Civilizations is a multidisciplinary centre directed by Ajay Rao, Professor in the Department of Historical Studies and Vice-Dean Graduate & Postdoctoral Affairs. Led by Historical Studies, Language Studies, and Political Science, the centre educates students in history, religion, languages, and cultures.

ICUBE, led by Faculty Lead and Acting Director Ann Armstrong, is part of U of T’s Innovation network and home to Social Entrepreneurship and early-stage startups at UTM, offering resources, programs, workshops, and mentorship for students and researchers alike.

The Institute for the Study of University Pedagogy (ISUP), led by Ruth Childs, Professor and Director, is a centre for research on teaching and learning which strives to make learning inclusive and accessible.

The vision of the Centre for NonLinear Analysis & Modeling (CNAM) is to enable researchers in nonlinear analysis and modelling at UTM, and the larger U of T, to strengthen and establish new connections outside of their traditional disciplinary networks.

INSTITUTIONAL STRATEGIC INITIATIVES

UTM is also home to several interdisciplinary research clusters funded through the Institutional Strategic Initiatives (ISI) program. Two are led by UTM researchers:

The Critical Digital Humanities Initiative (CDHI) is led by Elspeth Brown, Professor in the Department of Historical Studies and Associate Vice-Principal, Research - Strategic Initiatives, and enables transdisciplinary collaborations that emphasize questions of power, social justice, and critical theory in digital humanities.

Beth Coleman, Associate Professor, Institute of Communication, Culture, Information and Technology, directs the Black Research Network, which promotes Black excellence at U of T and enhances the research capacity of Black scholars within the university and on the world stage.

Additionally, The Mobility Network, Robotics Institute, and Data Sciences Institute all have UTM hubs headed by Mississauga-based Associate Directors — Shauna Brail, Associate Professor, Institute for Management & Innovation, Jessica Burgner-Kahrs, Associate Professor in the
A cornerstone of UTM’s Strategic Framework is ‘Embracing our Place,’ which highlights the importance of incorporating Mississauga’s history, culture, and regional priorities into campus activities. The Framework details the centrality of community-engaged teaching, learning, research, and service, and the impact of community-engaged efforts on Mississauga and the wider Peel region. The following are some community collaborations involving UTM faculty:

- **Tenley Conway**, Professor in the Department of Geography, Geomatics and Environment, partners with local municipalities, including the City of Mississauga, in a research program that seeks to understand the social impact of urban tree loss.

- The **Indigenous Action Group (IAG)** includes UTM researchers **Sherry Fukuzawa**, Assistant Professor in the Department of Anthropology, and **Nicole Laliberte**, Associate Professor in the Department of Geography, Geomatics and Environment, alongside members of the Mississaugas of the Credit First Nation (MCFN).

- The **Amgen Biotech Experience at UTM (ABE@UTM)** is the result of a partnership between the University of Toronto Mississauga and the Amgen Foundation. The program operates under the OVPR banner and offers a hands-on introduction to biotechnology for high school students, allowing them to get a head start on the kinds of lessons typically taught in undergraduate biology courses. ABE provides free access to professional equipment and trains teachers to impart core concepts to inspire students and serve them in their postsecondary education.

- The **Riverwood Junior Naturalist Club (RJNC)**, directed by Dr. **Marc Johnson**, Professor in the Department of Biology, is a joint initiative between the Centre for Urban Environments and the Riverwood Conservancy that aims to connect children with nature by providing them with hands-on experience and skills related to natural history and science.

- Based at UTM, the **Novo Nordisk Network for Healthy Populations** initiative was launched in 2021 with a $40-million investment from Novo Nordisk A/S and the University of Toronto. This new network is a partnership between UTM, the Dalla Lana School of Public Health, and the Temerty Faculty of Medicine. The initiative is led by **Lorraine Lipscombe**, Associate Professor in the Department of Medicine, U of T, and will focus on new ways to support healthier urban populations and draw on U of T’s leading expertise in public health research and education programs to impact the global fight against diabetes and other serious chronic diseases.
News and Achievements

UTM has a strong culture around celebrating the achievements of its researchers. Internal awards sponsored by UTM are the Teaching Excellence Awards for Faculty, the Teaching Excellence Awards for Teaching Assistants, the Desmond Morton Research Excellence Award, which recognizes outstanding career achievement; and the Annual Research Prizes, which recognize outstanding early career faculty members, one each from the Humanities, Social Sciences, and the Sciences.

In addition to internal awards, UTM researchers continue to receive recognition at the provincial, national, and international levels. From 2015 to 2021, UTM faculty members received 39 internal awards, 33 international awards, 7 national awards, and 4 provincial awards. The OVPR is currently developing a strategy to increase the number of award nominations and applications, which includes the recent hiring of a third Strategic Research Development Officer who is focusing on supporting honours and awards, and is working with individual units to identify potential nominees and relevant award opportunities. In identifying potential nominees, we strive to be systematic to identify all eligible researchers, particularly those who may not self-nominate or those who may normally be overlooked.

Social media saw changes as well: platforms have been updated with OVPR headers and profiles in line with the U of T brand, and the OVPR is now on LinkedIn. We continue to grow our Twitter following and to establish a more active presence on Instagram. In the coming months, we look forward to telling the stories of UTM researchers and supporting their efforts across our channels.

Communications

2021–2022 saw some exciting changes in our communications efforts. In October, we welcomed our Communications Officer, Tanya Rohrmoser, who set to work streamlining communications processes, setting up analytics and reporting systems, and developing a plan to support our strategic objectives. We designed a suite of branded materials that present a clean and cohesive look across office activities, and improved our website with a simpler sitemap that functions with users in mind. We also redesigned our newsletter and implemented new strategies to increase our subscriber list, which grew this past year by more than 70%.

Social media saw changes as well: platforms have been updated with OVPR headers and profiles in line with the U of T brand, and the OVPR is now on LinkedIn. We continue to grow our Twitter following and to establish a more active presence on Instagram. In the coming months, we look forward to telling the stories of UTM researchers and supporting their efforts across our channels.

<table>
<thead>
<tr>
<th>NEWSLETTER</th>
<th>Subscribers</th>
<th>219</th>
<th>+69.4%</th>
<th>371</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Open Rate</td>
<td>50.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWITTER</td>
<td>Followers</td>
<td>1,955</td>
<td>+12.8%</td>
<td>2,206</td>
</tr>
<tr>
<td>Impressions</td>
<td>374K</td>
<td>Clicks</td>
<td>1,878</td>
<td>Shares</td>
</tr>
<tr>
<td>INSTAGRAM</td>
<td>Followers</td>
<td>714</td>
<td>+27.3%</td>
<td>909</td>
</tr>
<tr>
<td>Impressions</td>
<td>49.5K+</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| WEBSITE | Page Views | 52,368 | Users | 16.5K | Sessions | 26.9K |
| Top Viewed Pages | Homepage Excellence Award | SURF | 3,343 | 2,828 | 2,441 |
Events

Whether online or on campus, this past year we welcomed faculty, staff, and students alike to join us in celebrating the outstanding research happening across UTM.

In January, early career researchers introduced attendees to their research at our Annual Research Prize Symposium. Prize-winners Andrew Beharry, Assistant Professor in the Department of Chemical & Physical Sciences, and Bailey McMeans, Assistant Professor in the Department of Biology, were both recognized for their contributions to the Sciences; Cosmin Munteanu, Assistant Professor, Institute for Communication, Culture, Information, and Technology (ICCIT) for his work in the Social Sciences; and Owen Ware, Associate Professor in the Department of Philosophy, for his work in the Humanities.

Professor Martin Revermann was awarded the 2021 Desmond Morton Research Excellence Award, recognized for his contributions to Classics and Theatre Studies. He delivered his virtual lecture, “The Theatre of Science,” in February at the Desmond Morton Research Excellence Lecture.

Co-hosted with UTM Library, our Annual Celebration of Books celebrated UTM’s diverse and vibrant scholarship in April. The virtual event featured 24 titles from 19 authors and editors, who together represented 10 departments at UTM.

In the summer, Smarti Gras was rebranded and replaced by SURF — UTM’s Summer Undergraduate Research Fair. Featuring new logos, designs, and promotional activities, the lively August event took place on campus and welcomed more than 200 attendees. Students from across disciplines shared their summer research via posters and oral presentations; keynote speakers Negin Dahya, Assistant Professor, ICCIT, and Iva Zovkic, Associate Professor in the Department of Psychology, inspired the crowd with notes from their own research; and the gathering offered the perfect opportunity to come together in person and look toward the school year ahead.

Presentation winners included Peter (Haoxuan) Ge (GGE), Sandra Zhitkova (CPS), Sherry Du (Biology), Scott Ford (Biology), Jonathan Waugh (GGE), and Isabella Vessio (Biology).