

SYNERGY

2024 Annual Report



A Message from the Vice-Principal, Research and Innovation

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LAND ACKNOWLEDGEMENT

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.



A Message from the VP Research and Innovation

This year marked an important milestone for the research office: In early spring, we officially became the Office of the Vice-Principal, Research and Innovation (OVPRI) at the University of Toronto Mississauga (UTM). Adding 'innovation' to the OVPRI mandate expands our commitment to supporting UTM's researchers, who are generating research discoveries and new knowledge across a breadth of fields, geographies, disciplines, and collaborations.

2024 was a year of growth and a rewarding final year as your VPRI. This past fall, we opened the New Science Building, a beautiful, state-of-the-art facility that provides researchers with much-needed space and resources; we expanded our programming for trainees, seeking to inspire a new generation of researchers to explore the many career pathways available to them; we developed a suite of partnerships resources to help foster meaningful collaborations across our ecosystem; and we continued to support our community by way of our outstanding core facilities, dedicated funding programs, and staff and faculty expertise.

We also launched SpinUp, currently incubating 15 early-stage startups in biotech, chemistry, and cleantech right on our campus. It has been incredibly rewarding to watch this initiative grow and support entrepreneurs who have become an important part of our community: they participate in student programming, employ our graduates and student interns from across the University, host students to shadow their companies, and collaborate with faculty researchers.

You can learn more about SpinUp's first year in its inaugural annual report.



As we turn the page on 2024, I leave the OVPRI in good hands, knowing it will evolve with the needs of our community and keep working to support and inspire the research taking place across disciplines, geographies, and generations."

With our strategic pillars at the foundation of everything we do, our office continues to play a foundational role in aiding research excellence, across this campus and beyond. And as we turn the page on 2024, I leave the OVPRI in good hands, knowing it will evolve with the needs of our community and keep working to support and inspire the research taking place across disciplines, geographies, and generations.

I offer my sincere thanks to our team for their work this past year and to the UTM community for your ongoing commitment to the people, communities, and economies we serve. It has been my distinct honour to serve as your VPRI. I look forward to watching alongside you as UTM continues to thrive.

With a productive year behind us and a new one stretching out ahead, I warmly invite you to learn about the exciting research, innovations, and activities taking place across campus in Synergy, our annual report for 2024.

Please enjoy.



G. W. K. Moore, PhD, FRSC

Vice-Principal, Research and Innovation

Distinguished Professor of Theoretical Geophysics of Climate Change

Department of Chemical and Physical Sciences



From the Incoming VP Research and Innovation

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Over these past weeks, I have met so many warm and generous people across this beautiful campus and have remarked on more than one occasion how quickly UTM already feels like home. It is a special place.

As I write this note, a new term is already well underway here at UTM. I cannot believe how the time has flown! I began this year ready to take on an exciting new challenge — and 2025 has not disappointed. Over these past weeks, I have met so many warm and generous people across this beautiful campus and have remarked on more than one occasion how quickly UTM already feels like home. It is a special place.

I also recognize that this is in large part due to the preparations that took place in advance of my arrival, and I would like to thank Kent Moore both for his thoughtful planning and for his many, many contributions over the past six years. Under Kent's leadership, the OVPRI has steadily evolved and brought together an incredible team of experts; each member of our office is passionate about what they do and dedicated to supporting UTM's rich and diverse research and innovation community.

And as we worked to compile this report for 2024, I've had the opportunity to look back at all that was accomplished during that year: the promising partnerships and exciting innovations, new programs, new spaces, and the many wins, stories, collaborations, and celebrations. I am so pleased and proud to be here as your new Vice-Principal, Research and Innovation.

I look forward to getting to know more of you as time goes by, and to learning how we can continue to support the research, scholarship, and creative activities of this community.



France Gagnon, PhD

Vice-Principal, Research and Innovation Professor, Dalla Lana School of Public Health

MEET THIS YEAR'S COVER ARTIST

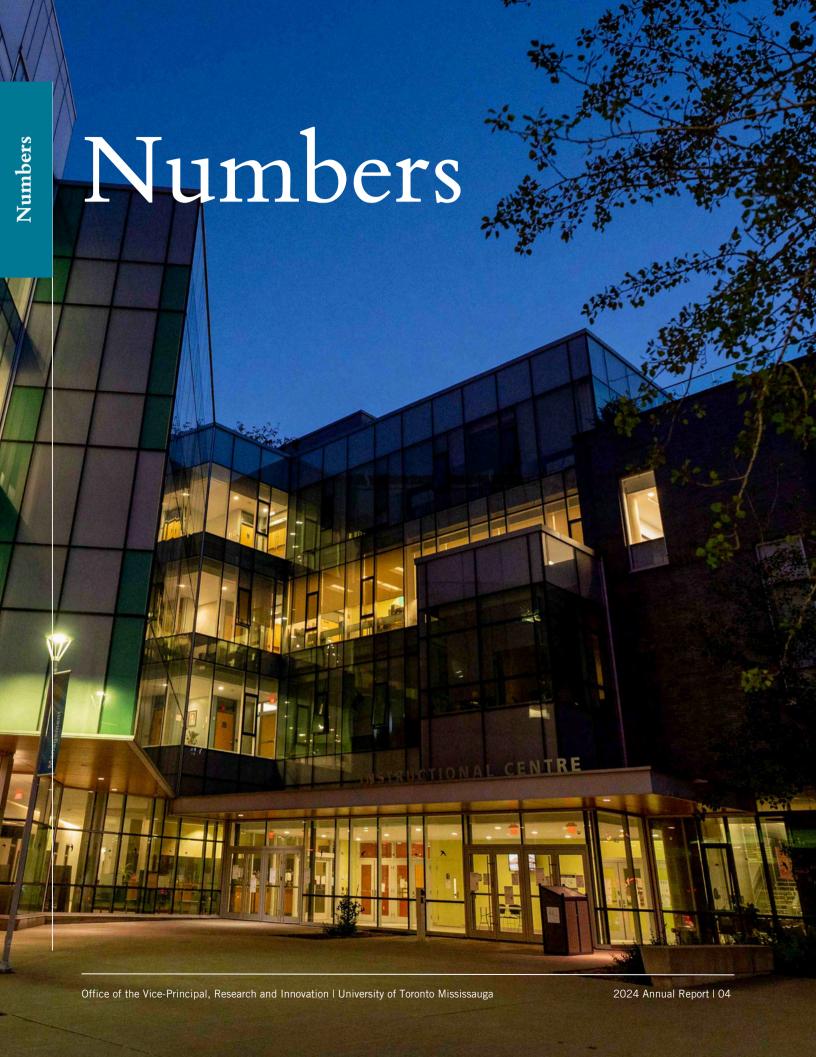


Naomi Marie Wee, biomedical illustrator and animator, UTM Biomedical Communications class of 2T4

Artist's Statement: This cover captures the dynamic and diverse spirit of research at UTM across the changing seasons and reflects the ongoing cycle of discovery, recognition, and growth that defines UTM's commitment to research and academic excellence.

Each level highlights the events the OVPRI hosts to celebrate our scholarly community. Summer is all about students: The INSPIRE program helps prepare top science students for graduate school, and the Summer Undergraduate Research Fair showcases the vibrant contributions of undergraduate research and learning during the summer term. In the fall, the OVPRI and the UTM Library co-host the Celebration of Books, recognizing the authors and editors of recent scholarly works. In winter, the OVPRI celebrates the achievements of UTM award recipients at the Research Prize Symposium and Research Excellence Lecture.

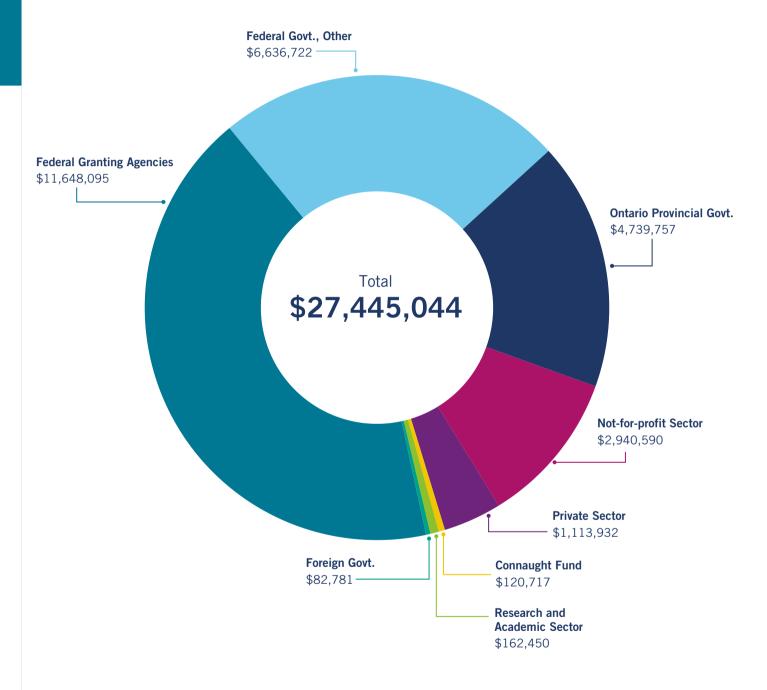
To see more of Naomi's work, visit www.naomiwee.com.



External Funding

Total Research Funding

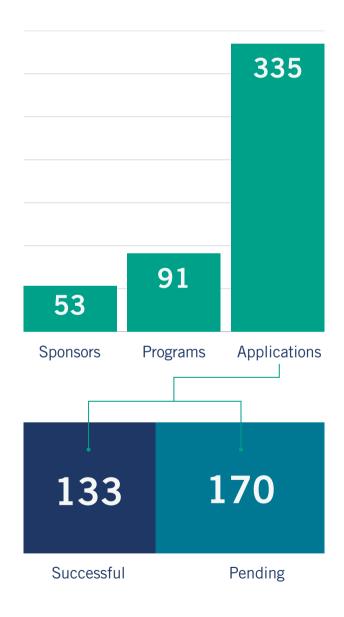
Research Funding by Source



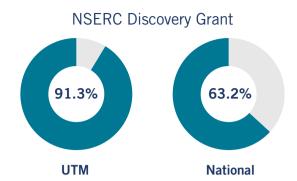
Number of Grants Held in 2024

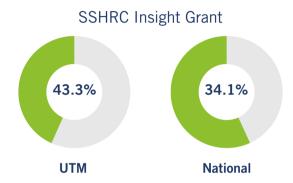
418

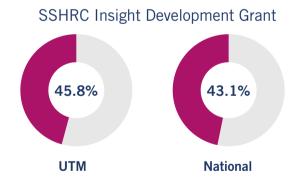
Applications



Grant Success







Publications

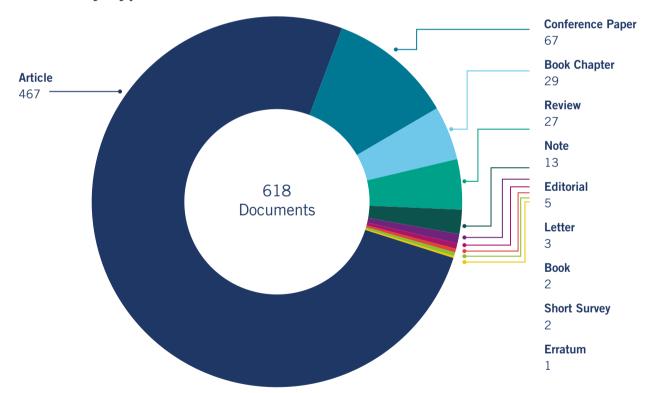
Output Summary

Scholarly Output

618

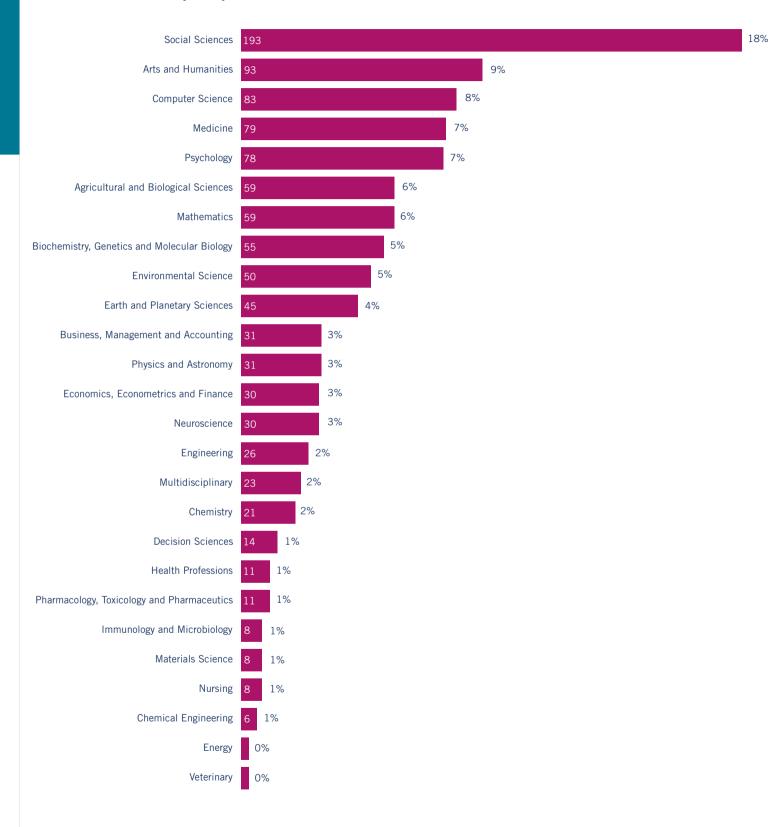


Documents by Type



Subject Areas and Key Phrases

Publication Share by Subject Area



Collaborations Resulting in Publications

International Collaborations



National-only Collaborations

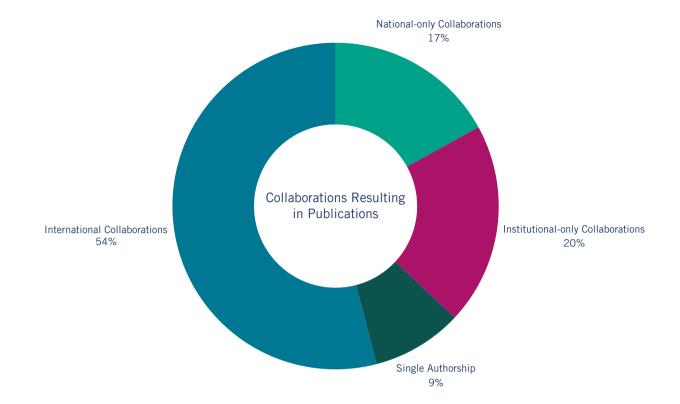


Institutional-only Collaborations



Single Authorship (no collaborations)



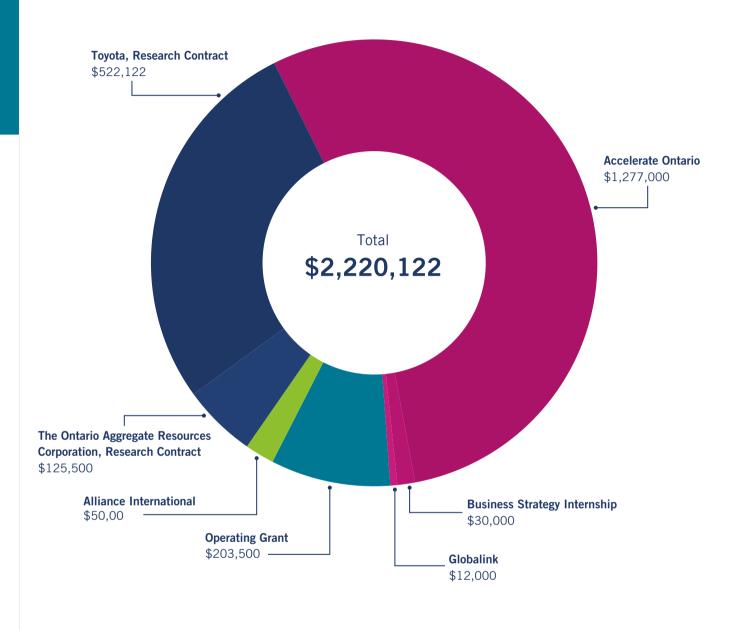


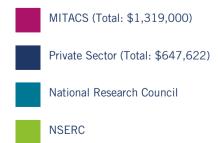
UTM Faculty Publications Resulting from International Collaborations in 2024



Partnerships

Partnered Research Funding Awarded in 2024











Amgen Biotech Experience at UTM

The <u>Amgen Biotech Experience at UTM</u> (ABE@UTM) is a collaboration between UTM and Amgen Canada, with funding from the Amgen Foundation. ABE provides high school teachers with professional development and technical training and loans of research-grade equipment and supplies at no cost. ABE@UTM hosted ABE's 1 Millionth Student Celebration on September 9, 2024, in collaboration with the UTM Office of Advancement. UTM and Amgen Canada staff and local community stakeholders joined in this milestone celebration.

ABE@UTM Site Coordinator Kristina Han served as Master of Ceremonies; guest speakers included Alexandra Gillespie (Vice-President, University of Toronto, and Principal, University of Toronto Mississauga), Ugur Gunaydin (General Manager, Amgen Canada), and Sheref Sabawy (Member of Provincial Parliament, Erin Mills), and Euginia Nicoletti, who spoke about her experience as the first teacher to implement ABE in her classroom in Canada and the impact ABE labs have had on her students.

"

The Amgen Biotech Experience inspired and solidified my choice of pursuing a post-secondary degree in medicine-biotechnology-related fields [at U of T]. It was an amazing experience being able to work with technologies that are used in labs and sparked a real interest in working in a research lab."

 Ellie Tsiopelas, ABE alumna (published on the ABE Blog)

UTM-City of Mississauga Collaboration

Spearheaded by UTM's Office of the Vice-President and Principal, *Memorandum of Understanding—Collaborating for the Future*, a partnership between the City of Mississauga and UTM, was signed in June 2023, with a focus on innovation and research (supporting city policymaking and leveraging UTM's urban research strengths), economic development and entrepreneurship (via SpinUp and ICUBE), and creating experiential learning opportunities for students with the city. In 2024, the city and UTM's Novo Nordisk Network for Healthy Populations worked together to leverage expertise and data for an evidence-informed approach to build the city's Healthy City Strategy. The collaboration spurred ten community-based research projects and engagement with policymakers for research knowledge mobilization purposes.

UTM's Centre for Urban Environments (CUE) collaborated with the city on various research questions to inform on the existing city challenges outlined in the Stormwater Master Plan and the Climate Change Action Plan. Through this collaboration, UTM faculty and students connected with policymakers to devise research projects addressing urban environmental priorities. Five student researchers took part in the collaboration through CUE's Research Awards Program.

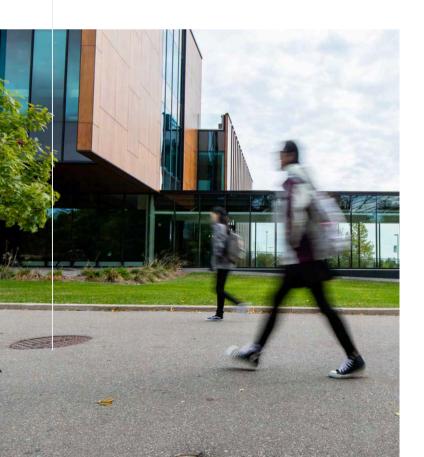
To develop and support a vibrant innovation ecosystem in Mississauga, Invest Mississauga (the Mississauga Economic Development Division) continued its ongoing collaboration with UTM's accelerators, ICUBE and SpinUp. One of the outcomes in 2024 was the collaboration between these three entities, together with Sheridan EDGE, to co-host the Sauga Pitch competition to award and recognize startups with innovative solutions aimed at meaningful social impact.



Research Tenant Partners Initiative

An essential part of the OVPRI's efforts in supporting research excellence is the implementation of innovative, strategic, and mutually beneficial partnerships aligned with the University's policies. The co-location of select, strategically chosen research partners alongside UTM's researchers and trainees provides a unique opportunity to efficiently drive UTM's research and education priorities while creating value for our partners. In 2024, the OVPRI launched a new initiative based on this concept, called Research Tenant Partners (RTPs), with BIC Inc. as its inaugural partner.

Like all activities at UTM, collaborations with RTPs are rooted in UTM's core campus priorities set forth by its <u>Strategic</u> Framework.



Three specific campus priorities that apply to such partnerships are:

Foster Student Success

Partners generate experiential learning opportunities for UTM students, employment opportunities for alumni, mentorship for student entrepreneurs, and in-class learning opportunities directly from industry experts through seminars, workshops, and professional development events.

Empower Research Discovery and Impact

The OVPRI fosters mutually beneficial research partnerships between RTP partners and UTM faculty members through sponsored research that may leverage matching funding opportunities (e.g. Mitacs, Ontario Centre for Innovation, NSERC Alliance). They also share their equipment with the UTM research community. Partners contribute to UTM's entrepreneurship initiatives by supporting startups incubated in UTM's lab-based startup incubator, SpinUp, and those supported via UTM's social entrepreneurship accelerator, ICUBE, as well as by sharing commercialization knowledge with the UTM community via mentorship, seminars, workshops, and professional development events.

Embrace our Place

Through this initiative, UTM leverages partnerships to support entrepreneurship and sustainable economic development in our region, generating new, high-quality jobs and enabling industry growth and prosperity. Partners' sharing of resources and industrial expertise enriches UTM's culture of innovation and commercialization and propels the growth of new startups supported by UTM's entrepreneurship programs.

Inaugural RTP: BIC Inc.

BIC, a global multinational company, has a significant R&D presence, including over 120 scientists and engineers across four global locations. BIC expanded its footprint in Toronto following the acquisition of Inkbox in 2022. Inkbox, founded in 2015, aimed to revolutionize the tattoo industry with painless, semi-permanent tattoos, supported by a partnership with **Christopher Caputo**, who holds a Canada Research Chair at York University.

BIC's acquisition of Inkbox for \$65M USD in 2022 spurred the creation of a new R&D division to support this acquisition. BIC's partnership with UTM aims to provide unique equipment access and research opportunities for UTM faculty and mentorship to startups incubated at UTM, while also offering experiential learning for UTM students through co-op and internship programs. This collaboration seeks to create a talent pipeline, facilitate knowledge transfer, and inspire students and entrepreneurs through seminars and workshops. BIC values academic and industrial collaborations, particularly with UTM researchers, and sees potential for interdisciplinary partnerships. The on-campus presence at UTM fosters informal interactions and supports spontaneous collaborations with researchers, startups, and trainees within the campus.



The RTP program has been an incredible opportunity for our research team, and we couldn't be more thrilled. Beyond access to world-class facilities, we were warmly welcomed as part of this dynamic and innovative ecosystem on campus. This environment has enabled us to transform fundamental scientific discoveries into commercially viable solutions while promoting research partnerships and experiential education opportunities with students and faculty.

We look forward to continuing this collaborative journey to drive innovation and create real-world impact."

 Christopher Caputo, Chief Science Officer, Skin Compatible Technology, BIC



Internal Support

Program	Recipients	Amount Awarded
Black, Indigenous, and Racialized Scholar/Research Grant Program	7	\$61,184.00
Bridge Funding Program	26	\$265,000.00
First Book Manuscript Workshop Competition	1	\$4,618.61
Outreach, Conference, and Colloquia Fund (OCCF)	12	\$44,326.36
Pedagogical Research Fund	7	\$59,974.18
Research and Scholarly Activity Fund (RSAF)	15	\$212,381.00
Tri-Council Postdoctoral Fellowship Top-up Program	3	\$36,000.00
U of T Provost's Postdoctoral Fellowship Program	2	\$1,100.13
UTM/Jackman Humanities Institute Annual Seminar	1	\$7,500.00
UTM Annual Research Prize	3	\$6,000.00
UTM Postdoctoral Fellowship Award	5	\$300,000.00
UTM Postdoctoral Fellowship Travel/Conference Grant	13	\$6,500.00
UTM Working Groups	3	\$8,540.00
XSeed	2	\$45,000.00



First Book Manuscript Workshop Competition



Carrie Atkins is an Assistant Professor in UTM's Department of Historical Studies and is cross appointed with the Classics Department at U of T. Her work deals with mobility in the ancient world — the people who traveled and how, travel networks, as well as the social and cultural implications of mobility.

Professor Atkins explores this through maritime remains, such as shipwrecks and remnants of harbours and anchorages, and is currently looking into how digital technology, such as photogrammetry, can be used to record remains underwater.

Atkins is about to publish her first monograph, which focuses on the concept of Roman luxury and how it was transported in the first century BCE. When her book was in its early stages, her colleagues suggested she apply for the First Book Manuscript Workshop competition. This internal competition, which launched in 2021, funds and helps organize a workshop that includes one expert external reader along with six to eight faculty participants. They read the manuscript in advance, and the author receives constructive and informed feedback during the workshop, which takes place during the winter semester.

Atkins was thrilled to learn she would be the 2023–24 recipient. U of T faculty from Historical Studies, Art History, and Classics joined the workshop to provide feedback, and

Greg Woolf, Ronald J. Mellor Professor of Ancient History at University of California, Los Angeles (UCLA), joined as the external reader.

"Reading a manuscript is no small time commitment," says Atkins. "I feel honoured to have colleagues devote so much time to something like this. To have them all here for the day – it was mind-blowing."

Now, Atkins is working on revisions based on their suggestions along with notes from her editor. *Shipping Roman Luxury: Shipwrecks, Networks, and Cultural Exchange (c. 200 BCE–200 CE)* is forthcoming from Oxford University Press.

Next summer, with support from the OVPRI's <u>Research and Scholarly Activities Fund</u> (RSAF), she will be taking a graduate student to Cyprus to start the next phase of her field project, which is on an anchorage off the coast of south-central Cyprus.



It was terrifying to have colleagues and an external reviewer read something that wasn't polished and finished, but they were all so supportive, and the seminar was really effective. They had suggestions for things I had been struggling with, and it was such a positive experience."

— Carrie Atkins, Assistant Professor, Historical Studies Recipient of the First Book Manuscript Workshop Competition

Read the full story.

UTM/JHI Annual Seminar: The Theatre of Science







The Theatre of Science Seminar Series is in full swing, and attendees are coming to the University of Toronto Mississauga from across disciplines, campuses — and even generations — to explore some of the many modes in which the sciences and theatre interact.

Launched in September, Theatre of Science modules cover topics including the relationship between theatre and the environment; Indigenous science, and mobility and disability; and key areas of contact among theatre, math, medicine, physics, and more. Student participation is built into the series at every level, and the organizers have designed eight flexible seminars that encourage cross-disciplinary, transdisciplinary discussion.

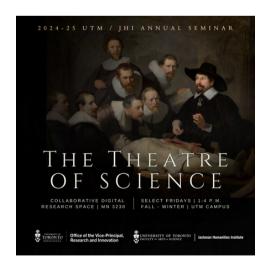
Organized by **Martin Revermann** (Historical Studies) and **Madeleine Mant** (Anthropology), the series is made possible with funding from the <u>UTM/JHI Annual Seminar</u>, which was developed in partnership between the OVPRI and the Jackman Humanities Institute (JHI). "The support you receive is excellent," says Revermann, "and you have a lot of freedom for creativity and experimentation. These seminars are about quality and not quantity — so, I say, be entrepreneurial and take risks."

The program is designed to bring experts and community members to U of T's west campus and to inspire collaboration between our diverse researchers here at UTM. <u>Previous recipients</u> include Seminar leaders from Language Studies, Political Science, Visual Studies, and English and Drama.

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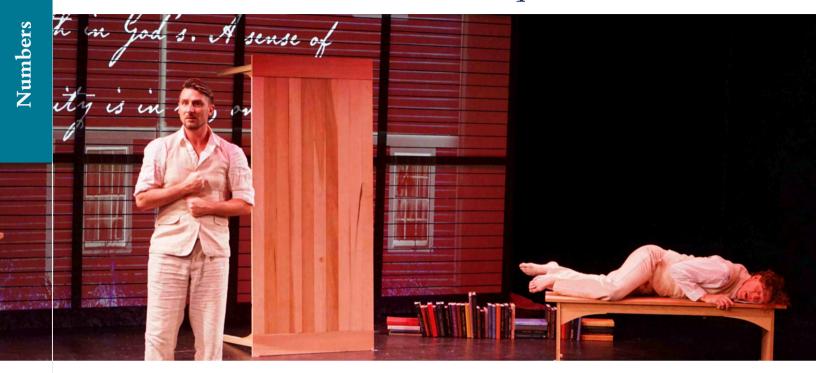
The UTM/JHI Seminar is a powerful and flexible funding tool that can be used to build friendships, scholarly collaborations, public partnerships, and enhanced disciplinary power. It offers a generous and flexible structure for leaders in the humanities and qualitative social sciences to design programming that meets their needs as researchers, sparking lively conversations, and often resulting in continuing research in the years that follow."

Kimberley Yates, Associate Director
 Jackman Humanities Institute



Read the full story.

Outreach, Conference, and Colloquia Fund



In fall 2024, an innovative new course was offered in the Department of English and Drama, a collaboration that blended traditional literary analysis with student-led research creation, explored embodiment and movement in community, and inspired conversations on the complexities of biographical intent.

ENG366: Melville and Hawthorne ReWritten was organized by English professor **Melissa Gniadek**, a scholar of nineteenth-century American literature, in partnership with **Tom Truss** and **Matthew Cumbie**, co-creators of the ReWritten performance project, which weaves together dance, music, visual art, projection, and text, and reimagines an intergenerational queer love story.

The course focused on the intimate relationship between nineteenth-century American writers Herman Melville and Nathaniel Hawthorne — a mysterious topic that's been studied in various ways by scholars over the years.

ENG366 was two years in the making. Gniadek received funding from the OVPRI's <u>Outreach, Conference, and Colloquia Fund</u>, and the artist's residency and events tied to the course were supported by the Centre for the Study of the United States Bissell-Heyd Research Fellowship, the Jackman Humanities Institute Program for the Arts, and the UTM and St. George departments of English.

Read the full story.

"The most daunting thing about something like this isn't the idea of it," Gniadek explains. "The ideas are fun. The teaching is fun. The hardest thing is logistics, and finances are a huge part of that. I couldn't have done any of this without financial support."



Knowing there is support available within UTM for these types of projects is a big motivator. It's a huge boon to have these funding opportunities because they enable you to entertain creative ideas. Rather than just putting the idea back in the box, you feel like you're able to do what you're supposed to do as a faculty member—to come up with ideas and implement them."

 Melissa Gniadek, Associate Professor, English and Drama Recipient of the OCCF Competition





Achievements



Awards & Honours

40 Under 40 | Association of Junior Leagues International

Nicole Novroski, Associate Professor Forensic Science Program, Department of Anthropology

Annual Research Prize | University of Toronto Mississauga

Nilanjan Das, Associate Professor Department of Philosophy

Annual Research Prize | University of Toronto Mississauga

Nicole Novroski, Associate Professor Forensic Science Program, Department of Anthropology

Annual Research Prize | University of Toronto Mississauga

Menaka Philips, Assistant Professor Department of Political Science

Canadian Academy of Health Sciences, Fellow Canadian Academy of Health Sciences

Tina Malti, Professor Department of Psychology



Tina Malti, Professor and Canada Research Chair in Child Development and Mental Health, Department of Psychology, UTM, has been elected as a Fellow of the Canadian Academy of Health Sciences (CAHS). This prestigious distinction recognizes individuals who have made outstanding

contributions to the health sciences in Canada and internationally. Professor Malti's election is particularly significant, as it marks the first time such an honour has been conferred at UTM.

This achievement underscores Professor Malti's exceptional leadership and pioneering research in the fields of child development and mental health. Her work continues to shape the understanding of psychological well-being in children and adolescents, with a lasting impact on both scholarly discourse and public health practice.

Read the Fellowship announcement.

C. B. Macpherson Prize | Canadian Political Science Association

Menaka Philips, Assistant Professor Department of Political Science

Cheryl Regehr Early Career Teaching Awards | University of Toronto

Spyridon Kotsovilis, Assistant Professor Department of Political Science

Desmond Morton Research Excellence Award | University of Toronto Mississauga

Elspeth Brown, Professor Department of Historical Studies

Desmond Morton Research Excellence Award | University of Toronto Mississauga

Sarah Sharma, Professor
Institute of Communication, Culture, Information and Technology

Distinguished Professor in Economics of Education Policy | University of Toronto

Philip Oreopoulos, Professor Department of Economics

Distinguished Professor of Global Environmental and Sustainability Governance | University of Toronto

Steven Bernstein, Professor Department of Political Science

E. A. Robinson Teaching Excellence Award | University of Toronto Mississauga

Tyler Evvans-Tokaryk, Professor Institute for the Study of University Pedagogy

Early Career Researcher Award | Canadian Linguistic Association

Derek Dennis, Associate Professor Department of Language Studies

Faculty Research Award | Forensic Science Program, University of Toronto Mississauga

Rasmus Larsen, Assistant Professor Department of Anthropology

Kendrick Prize | International Association for Research in Income and Wealth

Gordon Anderson, Professor Emeritus Department of Economics

Melinda S. Meade Distinguished Scholarship Award in Health and Medical Geography | American Association of Geographers

Kathi Wilson, Professor Department of Geography, Geomatics and Environment



Kathi Wilson, Professor in the Department of Geography, Geomatics and Environment at UTM, has been awarded the Melinda S. Meade Distinguished Scholarship Award in Health and Medical Geography. This esteemed recognition celebrates individuals whose research has made a significant and lasting

contribution to the field of health and medical geography, particularly in understanding how geographic factors influence health outcomes.

Professor Wilson's award honours her trailblazing work in health geography, focusing on the complex interactions between geography, health disparities, and social factors. Her research has had a profound influence on the discipline, contributing to both academic knowledge and real-world applications in public health policy and planning.

Read the Award announcement.

Meritorious Service Award | Canadian Geophysical Union

Laura Brown, Associate Professor Department of Geography, Geomatics and Environment

Patterson Distinguished Service Medal | Environment and Climate Change Canada

G. W. K. Moore, Distinguished Professor of Theoretical Geophysics of Climate Change Department of Chemical and Physical Sciences

Read the Fellowship announcement.

Public History Award | Heritage Toronto

Lilia Topouzova, Assistant Professor Institute of Communication, Culture, Information and Technology

Research Excellence Award | Institute for the Study of University Pedagogy, University of Toronto Mississauga

Zhaozhe Wang, Assistant Professor Institute for the Study of University Pedagogy

Royal Society of Canada, Fellow | Royal Society of Canada

G. W. K. Moore, Distinguished Professor of Theoretical Geophysics of Climate Change

Department of Chemical and Physical Sciences

Scientific Exchanges Award | Swiss National Science Foundation

Ingo Ensminger, Professor Department of Biology

Teaching Excellence Award | MD Program, University of Toronto

Judith Anderson, Associate Professor Department of Psychology

Teaching Excellence Award | Institute for the Study of University Pedagogy, University of Toronto Mississauga

Sheila Batacharya, Assistant Professor, Institute for the Study of University Pedagogy



G. W. K. Moore, Vice-Principal, Research and Innovation and Distinguished Professor of Theoretical Geophysics of Climate Change, Department of Chemical and Physical Sciences, has been awarded the <u>Patterson Distinguished Service Medal</u> for Meteorology in Canada and has been elected a <u>Fellow of the Royal Society of Canada</u> (RSC). Fellowship in the RSC is a prestigious honour granted to

individuals who have made extraordinary contributions to various branches of learning and to Canadian public life.

These recognitions highlight Professor Moore's exceptional scholarship and leadership in advancing atmospheric and climate science on a global scale. His achievements stand as a testament to his influence in the scientific community and his enduring impact on the field of climate research.

Canada Research Chairs



Jennifer Adese

Associate Professor, Department of Sociology Tier 2 SSHRC CRC in Métis Women, Politics, and Community, 2020–2025



Loren Martin

Associate Professor, Department of Psychology Tier 2 CIHR CRC in Translational Pain Research, 2015–2025



Maria Hupfield

Assistant Professor, Departments of English and Drama and Visual Studies

Tier 2 SSHRC CRC in Indigenous Digital Arts and Performance, 2019–2024



Rhonda McEwen

Professor, Institute of Communication, Culture, Information and Technology

Tier 2 SSHRC CRC in Tactile Interfaces, Communication and Cognition, 2016–2026



Marc Johnson

Professor, Department of Biology
Tier 2 NSERC CRC in Urban Environmental
Science, 2018–2028



John Ratcliffe

Professor, Department of Biology Tier 2 NSERC CRC in Neuroethology, 2015–2025



Sonia Kang

Professor, Department of Management Tier 2 SSHRC CRC in Identity, Diversity and Inclusion, 2019–2024



Iva Zovkic

Associate Professor, Department of Psychology Tier 2 CIHR CRC in Behavioural Epigenetics, 2019–2024



Vincent Kuuire

Associate Professor, Department of Geography, Geomatics and Environment

Tier 2 SSHRC CRC in Immigrant Well-being and Global Health, 2019–2024

Research Spotlight

From exciting scientific discoveries to new research on AI, disability protests, Alzheimer's Disease, and how art and language bring us together, our researchers made headlines in 2024! Browse just some of the stories from the University of Toronto Mississauga this past year.



Timothy Bryan (Sociology) | UTM sociologist spotlights perceptions of street safety in rural and urban Halifax (Photo: Tim Krochak / AFP via Getty Images)



Nadège Compaoré (Sociology) | UTM political scientist inspired by lifelong interest in African agency and power dynamics (Photo supplied)



Ron Buliung (Geography, Geomatics, and Environment) | Prof honoured as Distinguished Professor makes disability and accessibility research his life's work (Photo: Romi | evine)



Bryan Stewart (Biology) | Researchers mark new chapter in fight against muscular dystrophy with latest federal grant (Photo: Johnny Guatto)



Lauren Schroeder (Anthropology) | UTM anthropologist provides a richer understanding of human evolution (Photo: Blake Eligh)



Beth Coleman (ICCIT) | Octavia Butler, aliens and more: UTM prof wants you to see the beauty in AI (Photo supplied)

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The idea behind my research is: let's just make things work. Let's try to shape things in such a way that people who are disabled, and their families, have to do less work to basically access the same kinds of things that many other people do."

 — Ron Buliung, Distinguished Professor in Geographies of Disability and Ableism, Department of Geography, Geomatics and Environment

"

I wanted to take fictional being seriously, and find a way to describe what novels are doing when I as a reader feel as if I'm entering a world that's like my own, but also somehow distinct and detached from it."

Daniel Wright, Associate Professor,
 Department of English and Drama



Daniel Wright (English and Drama) | Grounded in its own reality: exploring what happens when we step into the fictional worlds of novels (Photo: Nick Iwanyshyn)



Laura Bolt (Anthropology) | UTM primatologist observes how monkeys adapt to survive deforestation (Photo: Wolfgang Kaehler via Getty Images)



David Pettinicchio (Sociology) | UTM sociologist chronicles 60 years of visible protest in the disability movement (Photo: Tom Williams/CQ Roll Call)



Lisa Kramer (Management) | Race-based police violence impacts wealth of Black families, new study finds (Photo: Jane Tyska/Digital First Media/East Bay Times via Getty Images)



Ai Taniguchi (Language Studies) | Drawing connections: UTM linguistics prof explores how art and language bring us together (Photo: Carmen Cheung)



Alex Nguyen Ba (Biology) | U of T Scientists launch new podcast on genetic variants and rare diseases (Image: Al-generated)



Iva Zovkic (Psychology) | UTM psychologist seeks to identify new therapeutic target in dementia research (Photo: Artem Podrez via Pexels)

"

We're probably one of the only labs going after histone variants at this moment in Alzheimer's disease. We think that understanding histone variants is really important—in Alzheimer's and in all age-related dementia and conditions associated with neurodegeneration."

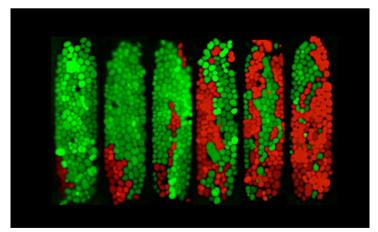
Iva Zovkic, Associate Professor,
 Department of Psychology



Anna Kosovicheva (Psychology) | UTM psychologist studies the way people view the world (Photo: Angelia Baccarella)



Samuel Ronfard (Psychology) | Open to Change: UTM Psychologist Building Developmental Science of Intellectual Humility (Photo: Arthur Krijgsman via Pexels)



Josh Milstein (Chemical and Physical Sciences) | In Formation: Confined bacteria communities strengthened by spontaneous ordering (Photo: Tianyi Ma)



Bree McEwan (ICCIT) | Virtual reality, real-life lessons: UTM researcher studies how to effectively use VR in education (Photo: Katherine Barcsay)



Lilia Topouzova (ICCIT) | UTM professor's work at Venice Biennale invites visitors to "bear witness" to the horrors of the past (Photo: Krasimira Butseva/Studio The Neighbours)



Zoë Wool (Anthropology) | UTM anthropologist looks beyond the frontlines to uncover war's hidden scars (Photo: Chloë Ellingson)



Alicia Hawkins (Anthropology), Sarah Hazell, Sheila Madahbee, Naomi Recollet, Allen Toulouse I In Ontario's north, an Indigenous community digs into its history (Photo: Nick Iwanyshyn)



Before we begin understanding these stories, we actually need to hear them and feel them. And so I think that academic discourses that exist today, academic practices as they exist today, are a little empty of the ability to allow people to feel things."

> Lilia Topouzova, Assistant Professor, Institute of Communication, Culture, Information and Technology

Events

INSPIRE 2024

Organized under the theme "Quantitative Biosciences and Research Translation," the Interdisciplinary Science Program in Research and Entrepreneurship (INSPIRE) took place in June. Students came to campus to learn about the various career paths available to them in the life sciences. For its third year, INSPIRE partnered with Visions of Science, a local organization committed to advancing STEM equity by engaging Black and other racialized youth from low-income communities across the GTA.

For the 2024 program, INSPIRE also joined forces with SpinUp, which brought in startups, speakers, and sponsors to support the program's entrepreneurship goals. Programming included shadowing opportunities with entrepreneurs, seminars, a tour of the SpinUp lab, and a pitch competition.

Read the full story.

"

Entrepreneurship in the life sciences can be exciting but daunting. This is a fantastic program for students to understand what's needed to begin their journey in bio entrepreneurship in a hands-on manner."

Lucas Penny, Co-Managing Director,
 Nucleate Canada, and INSPIRE guest speaker

Celebration of Books

Authors and editors of recently published monographs and collections gathered in the Collaborative Digital Research Space (CDRS) in October for the Annual Celebration of Books, which the OVPRI co-hosts each year with the UTM Library. The event featured four talks and a lively Q&A, 12 books from seven departments, and included the work of ten faculty members and one postdoctoral fellow.



To see INSPIRE students shadow and learn from our on-campus startups and then so proficiently represent those startups at the pitch competition was to witness one of the OVPRI's main goals for SpinUp materialize: to provide enriching and unique experiential learning opportunities for students right on the UTM campus."

— Raquel De Souza, Director, Partnerships and Innovation, UTM OVPRI



SURF 2024

The Summer Undergraduate Research Fair (SURF) took place in August. More than 340 attendees came to the Instructional Building for the popular annual event, which showcased the research conducted by undergraduate students over the summer term and included 104 posters and 10 oral presentations.

This year's keynote speakers were **Anna Kosovicheva** of the Department of Psychology and **Semechah Lui** of the Department of Chemical and Physical Sciences.





















Annual Research Prize Symposium

We announced the recipients of the UTM Annual Research Prizes in September and quickly got to work organizing the Research Prize Symposium, which recognizes the contributions of early career researchers and scholars. Nilanjan Das (Philosophy) was awarded the research prize in the Humanities. Nicole Novroski (Forensic Science Program, Anthropology), was selected for her work in the sciences. Menaka Philips (Political Science) was recognized for her contributions to the social sciences.

→ F

Read the full story.



I am humbled and grateful to receive the UTM Annual Research Award. UTM—and U of T more broadly—is an amazing place to be teaching and pursuing research in philosophy! I am lucky to be surrounded by amazing colleagues and students who have been a constant source of new ideas and questions for me within the classroom and beyond."

 Nilanjan Das, Associate Professor, Department of Philosophy "

I am so honoured to have received this award. My research has always been interdisciplinary, and my objects of study — from photographs to cash machines to couture gowns — have rarely been conventional for historians. My methodologies are queer, as are most of the people I write about these days (and/or, trans)! It's wonderful to be recognized for my achievements by my campus."

Elspeth Brown, Professor,
 Department of Historical Studies





Desmond Morton Research Excellence Lecture

The Desmond Morton Research Excellence Award recipients were announced in fall as well, and we finished off 2024 putting plans in place to celebrate award recipients **Elspeth Brown** (Historical Studies) and **Sarah Sharma** (ICCIT) at our Desmond Morton Research Excellence Lecture.





SpinUp

In operation since May 2024, SpinUp is a unique startup incubator dedicated to nurturing early-stage startups that require wet lab capabilities, filling a critical gap in our innovation ecosystem. SpinUp's mission is to empower innovators with the resources, programming, and ecosystem connections necessary to thrive — and to do so in a way that addresses the challenges many early-stage startups face — all while maximizing benefits to the UTM community.

In 2024, we welcomed 15 early-stage startups to UTM and launched various programs that increase commercialization fluency and create opportunities for students and faculty. Our numerous partnerships — from lab supply partners like Millipore Sigma and Thermo Fisher to programming partners like Deloitte and Toronto Innovation Acceleration Partners (TIAP), funders like Ontario Centre of Innovation (OCI) and Mitacs, ecosystem partners like Ontario Genomics and OBIO, and big pharma partners like Merck and AbbVie — are engaging with SpinUp as a gateway to larger partnerships with UTM's researchers, students, and beyond.

Entrepreneurship Programming

SpinUp has collaborated with partners to create a comprehensive, one-year curriculum aimed at preparing startups for the next steps in their entrepreneurial journey while also fostering commercialization and entrepreneurship fluency within U of T (the majority of this programming is available to the entire U of T community). Through webinars, workshops, and 1:1 office hours, the program's content includes intellectual property strategy, product development, legal strategy, regulatory considerations, dilutive and non-dilutive funding, pitching, technology considerations, and more.



The lab space itself is great, but it's so much more than that: SpinUp is a highly supportive and fun community, the programming is excellent, and being part of the U of T ecosystem is a gift in itself. The sense of community and the tangible excitement for innovation being undertaken at SpinUp is exactly why biotech and Canadian startups are thriving, and we can't wait to see what this inaugural cohort achieves."

— Jane Lapon, CEO, Atorvia Between July and December, we hosted 15 webinars, 100 inperson workshops, six sets of office hours, and 19 ecosystem partners. During that time, 485 people registered for our 15 webinars, 36% of whom were affiliated with a U of T accelerator program, 24% of whom were current U of T students and postdoctoral fellows, and 17% of whom were recent U of T graduates.

SpinUp also hosts pitch competitions and networking events. In November, SpinUp joined IDEA Mississauga, UTM's ICUBE, and Sheridan Edge to co-host the Sauga Startup Pitch and Showcase. SpinUp startup Xatoms went on to win the STEM pitch category and received \$5K in non-dilutive funding, plus free access to CDD Vault's data management platform for one year.

Did you know? SpinUp's webinars are open to the wider University of Toronto Entrepreneurship and IDEA Mississauga communities of entrepreneurs, as well as students, staff, faculty, and recent graduates of the University of Toronto.

In fact, we've had U of T students participate in every webinar offered by SpinUp to date!

Learn about SpinUp's programming and events.

Trainee Engagement and Research Partnerships

The OVPRI actively fosters connections between SpinUp startups and UTM researchers to catalyze research partnered projects, which can leverage funding from Mitacs, NSERC, and other programs aimed at funding partnered research.

SpinUp is also strongly committed to creating opportunities for students to learn about entrepreneurship, commercialization, research innovation, and industry. This is achieved via U of T's Work Study Program, various internship programs, and outreach programs. Our Work Study students gain hands-on entrepreneurial experience working alongside SpinUp staff and startup founders. SpinUp also provides a unique pathway for student interns to immerse themselves in the world of research-driven startups and gain hands-on experience in an industry-focused environment. In 2024, SpinUp welcomed nine interns — eight from U of T — across multiple startups.

Blue Ticket Program

Our Blue Ticket Program involves partnerships with established companies to sponsor an incoming startup that aligns with the sponsor's priority areas. The sponsorship also supports the SpinUp program. The Blue Ticket is a cornerstone of our commitment to empowering early-stage innovators by providing them with access to research and development resources, expertise, and partnerships to help them reach their next inflection point. This program offers an avenue to attract new partners to U of T. The Blue Ticket provides partners with an entry point and opportunity for much deeper, expanded partnerships that enrich the University's research and educational priorities.



Our time at SpinUp has been nothing short of transformative. The support we've received from the team, and UTE has been instrumental in our growth and achievements. We will forever credit the University of Toronto and the SpinUp community for playing a pivotal role in our journey this year."

— Stephanie Lipp, CEO, MycoFutures



Startups

In 2024, SpinUp accepted 15 startups into the program: 11 from within the U of T ecosystem, eight spun out of U of T research, eight led by recent U of T alumni, one led by current U of T undergrads, and one led by current U of T faculty member.

Metrics with Meaning

Our startups exemplify the diversity for which U of T is known. Forty-eight percent of SpinUp startup founders identify as a woman, 14% identify as Black, 7% identify as part of the LGBTQ+ community, and 10% identify as a person with a disability. The University is well represented in our startups' demographics, with 40% of SpinUp startup teams consisting at least in part of current U of T students. 60% of teams include at least one recent U of T graduate.

Meet the Startups

Acanthus ImmunoBiochem
Ardra Liven Proteins
Arma Biosciences Maman Biomedical
Atorvia Mesosil

Bough Biosciences MycoFutures

Diaminopharm QurCan Therapeutics
Epiloid Biotechnology Xatoms

Epiloid Biotechnology
HDAX Therapeutics

Learn more about SpinUp's startups.



Our Team in the OVPRI

2024 was a busy year for our team. New titles reflected the changing needs of the office. We welcomed some members and bade farewell to others. And what was once the Office of the Vice-Principal, Research, officially became the Office of the Vice-Principal, Research and Innovation.

Elspeth Brown, Associate Vice-Principal, Research — Strategic Initiatives, and Josh Milstein, Associate Vice-Principal, Research — Facilities, both completed their terms in July. In August, Daniel Wright took up the role of Associate Vice-Principal, Research and Innovation — Special Initiatives, and, in September, Yuhong He took up the role of Associate Vice-Principal, Research and Innovation — Facilities. Both terms run until June 30, 2025.

In January, **Elisa Tersigni** returned from leave to manage the Collaborative Digital Research Space (CDRS) as Senior Research Associate, and we said goodbye to CDRS Senior Research Associate **Tia Sager**, who left her position to pursue postdoctoral studies.

The SpinUp team saw a number of changes this past year. In March, New Science Building Research Facilities Manager **Lubna Abu-Jazar** went on leave, and **Quang Huy To** joined us as the New Science Building Research Facilities Manager. **Hayley McKay** joined us as SpinUp's Program Coordinator in May.

Also in May, **Tanya Rohrmoser** took on a new role as the OVPRI's Senior Communications Officer. Tanya is also the Communications Lead for SpinUp and was in charge of developing and launching SpinUp's communications strategy this past year.

Strategic Research Development Officer Jessica Lapp left us in June to take up a faculty position in the Faculty of Information. Kate Steinmann accepted a permanent position with our team as Strategic Research Development Officer in the weeks that followed. In the fall, she and our other two Strategic Research Development Officers each received new titles. Kate is now Research Development Specialist, with a focus on the social sciences and humanities, as well as the health sciences.

Anastassia Pogoutse is Research Development Specialist, specializing in the natural, health, computational, and mathematical sciences. Stefanie Bernaudo is now Partnerships and Awards Specialist, with a portfolio that includes academic honours as well as university-industry partnerships.

In September, **Veron Fernandes** accepted a position as Placement Assistant in the Master of Biotechnology program. **Rebecca Odionye**, the OVPRI's new Executive Assistant, joined our team in October.

We are grateful for the assistance of **Ranjith Muhandiram**, who joined us in April and filled in as the Nuclear Magnetic Resonance (NMR) Centre's Facility Coordinator this past year.



As 2024 came to a close, we said goodbye to OVPRI Director **Payam Zahedi** and to **Kent Moore**, who led UTM's research portfolio as Vice-Principal, Research and Innovation for the past six years. We thank them both for their leadership and wish them well in their next chapters.

Connect with our team.

Team Members

Leadership



Kent Moore, FRSC Vice-Principal, Research and Innovation

Distinguished Professor of Theoretical Geophysics of Climate Change

Department of Chemical and Physical Sciences



Elspeth BrownAssociate Vice-Principal,
Research – Strategic

Initiatives
Professor, Department

of Historical Studies



Raquel De Souza

Director, Partnerships and Innovation



Yuhong He

Associate Vice-Principal, Research and Innovation – Facilities

Professor, Department of Geography, Geomatics and Environment



Josh MilsteinAssociate Vice-Principal,
Research – Facilities

Associate Professor, Department of Chemical and Physical Sciences



Daniel Wright

Associate Vice-Principal, Research and Innovation
– Special Initiatives

Associate Professor, Department of English and Drama



Payam Zahedi

Director

Administrative Staff



Stefanie BernaudoPartnerships and Awards
Specialist



Veron FernandesOffice Administrator



Jessica LappStrategic Research
Development Officer



Hayley McKay SpinUp Program Coordinator



Rebecca Odionye
Executive Assistant



Anastassia Pogoutse Research Development Specialist



Tanya Rohrmoser Senior Communications Officer



Kate Steinmann Research Development Specialist



Rong Wu Internal Competitions and Events Coordinator



Shaun Young
Manager of Research
Administration and
Operations

"

The CDRS space is a jewel within the U of T infrastructure. Its smart layout and generous design have enabled innovative modes of intellectual engagement from the very start. In this unique environment people work better, think better and collaborate better. As an academic community we are fortunate to have CDRS at our disposal, and we should continue to use it with pride and gratitude."

— Martin Revermann, Professor Historical Studies

Core Facility Support



Lubna Abu-JazarResearch Facilities Manager,
New Science Building



Shawn DavisVeterinary Director,
Animal Care Facility



Robert DickCraftsperson,
Academic Workshop



Peter DugganSupervisor,
Academic Workshop



Kristina HanSite Coordinator, Amgen
Biotech Experience at UTM



Kathryn Harris-Howard Senior Research Associate, Imaging Facility



Tracy McCookSupervisor,
Animal Care Facility



Ranjith Muhandiram
Temp Facility Coordinator,
Nuclear Magnetic Resonance
(NMR) Centre



Quang Huy ToResearch Facilities Manager,
New Science Building



Tia Sager Senior Research Associate, Collaborative Digital Research Space



Mirek Szreder Microelectronics Specialist, Academic Workshop



Elisa Tersigni Senior Research Associate, Collaborative Digital Research Space



Vera VelascoSenior Research Associate,
Growth Facilities



Xin ZhaoLife Sciences Core Facilities
Manager, Life Sciences Core

"

The support I received throughout my MSc from the Growth Facilities and Dr. **Vera Velasco** was incredibly helpful. My research involved a sophisticated instrument we used to measure various parameters of algal photosynthesis. Having never worked with the instrument, the learning curve was steep, but my understanding and comfort level rapidly improved because of Vera's assistance; she was patient, knowledgeable and consistently available when I needed her help."

- Sophie Anderson, MSc Student, Short Lab, Ecology and Evolutionary Biology & Steven Short, Chair, Biology

"

CDRS has played a vital role in facilitating and promoting my research this past year. It is hard to imagine a more welcoming space with the resources necessary to facilitate discussions."

Carrie Atkins, Assistant Professor
 Historical Studies









UTM's Research Council 2023–2024

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 and Innovation to promote and facilitate research, scholarship, and creative activity at the University of Toronto Mississauga.

Anthropology (Fall Term)

Madeleine Mant

Anthropology (Winter Term)

David Samson

Biology

Adriano Senatore

Chemical and Physical Sciences

Ulrich Fekl

Economics

Gueorgui Kambourov

English and Drama

Terry Robinson

Geography, Geomatics and Environment

Andrea Olive

Historical Studies (Fall Term)

Julie MacArthur

Historical Studies (Winter Term)

Elspeth Brown

Institute of Communication, Culture,

Information and Technology

Tero Karppi

Institute for the Study of University Pedagogy

Wanja Gitari

Language Studies

Derek Denis

Management

Dushvantkumar Vyas

Mathematical and Computational Science

Ke Zhang

Philosophy (Fall Term)

Diana Raffman

Philosophy (Winter Term)

Phil Clark

Political Science

Janine Clark

Psychology

Melissa Holmes

Sociology

Akwasi Owusu-Bempah

Visual Studies

Louis Kaplan

UTM Library

Dany Savard

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