SIRATEGIC SESEARCH

Toronto Metropolitan University

2025-2030

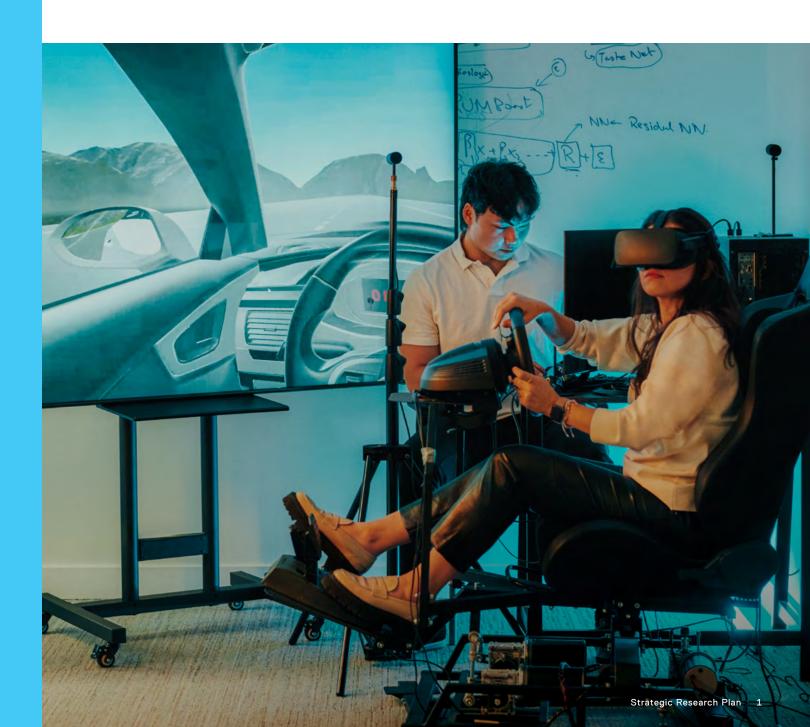
Toronto is in the "Dish with One Spoon Territory."

Collaborative engagement with Indigenous individuals and communities is integral to Toronto Metropolitan University's (TMU) dedication to Truth and Reconciliation in our SRC activities. We strive to advance Indigenous knowledges and perspectives, build on Indigenous leadership, and strengthen scholarly, research and creative (SRC) relationships, drawing on Indigenous ways of knowing and being. We are dedicated to supporting, empowering, and championing Indigenous people's rights within our society, and the leadership of Indigenous research methodologies at our institution.

TMU's campuses in Toronto and Brampton operate on the Treaty Lands of the Mississaugas of the Credit. These lands have been part of the traditional territories of the Anishinaabe, Huron-Wendat and Haudenosaunee. They are now home to many Inuit, Métis and First Nations Peoples from across Turtle Island. We honour and uphold the Dish With One Spoon Treaty. We commit to valuing the Two Row Wampum, and we vow to treat the land and people of our community with understanding built on mutual respect.

CONTENTS

- 03 Introduction
- 04 Pathways to Excellence
- 04 Strategic Research Plan Objective
- 06 Community-Engaged Focus
- 09 International Focus
- 11 Guiding Principles and Values
- 12 Strategic Themes
- 28 Cultivating Success Encouraging Bold Ideas
- 31 Implementing the Strategic Research Plan





For an accessible version of this document, please visit torontomu.ca/research/themes

Cover image: Interactive tabletop visualization of migration data at the Synaesthetic Media Lab (Synlab). **Right:** Conditionally Automated Vehicle testing at the Laboratory of Innovations in Transportation (LiTrans).

- 33 SRC Physical and Digital Infrastructure
- 34 Success Measures
- 39 Role of the OVPRI in Cultivating Success
- 40 Strategic Research Plan Progress Review
- 42 Appendices
- 43 Appendix A
- 44 Appendix B

TORONTO METROPOLITAN UNIVERSITY IS A HUB FOR WORLD-LEADING RESEARCHERS WORKING TO **SOLVE COMPLEX, REAL-WORLD PROBLEMS.**

Introduction

Led by intellectual curiosity and a desire for sustainable change, TMU researchers are creating evidencebased solutions for real-world transformation. Toronto Metropolitan University leverages the energy of our location in the heart of Toronto and Brampton, one of the fastest-growing and most diverse communities in Canada, to foster bold thinking, collaborative partnerships, innovation, and entrepreneurship. Our Scholarly, Research and Creative (SRC) engagement is strengthened by a willingness to cross disciplinary boundaries, break down barriers, build alliances, and take risks to advance inquiry, discovery, knowledge, and creative works. Forging local, national, and international networks and communities of practice, TMU researchers are generating and applying knowledge across a broad range of disciplines, fields, professions, and private, public, and non-profit sectors.

TMU's distinctive core mission - to serve societal needs — responds to the demand for highly skilled creative and critical thinkers who address increasingly interconnected, complex problems and work towards effective solutions. Driven by rigorous inquiry and supported by discovery-based research, our faculty, staff, and students are willing to defy convention as they advance new knowledge and seek solutions to make the world a better place for all.

As a globally connected city university, we believe that inclusive, creative, and collaborative approaches are essential to great research. To that end, Toronto Metropolitan University is committed to cooperation and partnerships with diverse communities, industry, stakeholders, and government. TMU researchers are building on the success of these partnerships as we continue to develop new ones.

Left: The Sheldon & Tracy Levy Student Learning Centre.

Pathways to Excellence

Research is strengthened by a willingness to cross disciplinary boundaries, break down barriers, develop partnerships, and take risks. At TMU, our SRC activities transcend disciplinary perspectives and extend beyond the traditional realms of academia to catalyze transformative change. Through relationship building and collaboration that spans from grassroots initiatives to multi-institutional international endeavours, our researchers and their teams and partners contribute meaningfully to the advancement of inquiry, discovery, knowledge, and creative works.

Central to TMU's success is a focus on SRC excellence and impact through a combination of investment by faculties and schools, researchers, and the institution. Striving for the highest standards of SRC excellence, TMU encourages SRC growth by supporting strategic hiring priorities, driving multidisciplinary SRC initiatives, growing graduate programming and training, and recognizing distinction in SRC activity. Success also includes a commitment to the full spectrum of community engagement and knowledge translation towards improving the quality of life for the world's citizens through sustainable social, physical, and technological innovation.

TMU's strengths and priorities in SRC activity, innovation, and entrepreneurship are reflected through named research chairs, recognized research centres, and commercialization activity with industry. Together, they highlight TMU's national and international leadership.

Top: Top: NOVA pavilion at Winter Stations 2024. Photo Credit: Jake Levy. **Right:** Mixed-Reality Immersive Motion Simulation (MIMS) Laboratory.



Strategic Research Plan Objective

TMU's Strategic Research Plan (SRP) is a dynamic roadmap that drives the scaling and acceleration of SRC endeavours and aligns them with institutional goals and societal needs. The objective of the Strategic Research Plan is to describe how TMU will increase SRC excellence, intensity, and impact.

The Strategic Research Plan identifies and prioritizes key areas of institutional SRC strength that have the potential for growth, generating new knowledge, and contributing to societal progress. These areas of strength, expressed as themes and sub-themes, are where TMU will:

- grow externally funded SRC revenue;
- enhance multidisciplinary collaborations;
- expand international partnerships; and,
- promote knowledge translation, dissemination, mobilization, and commercialization.



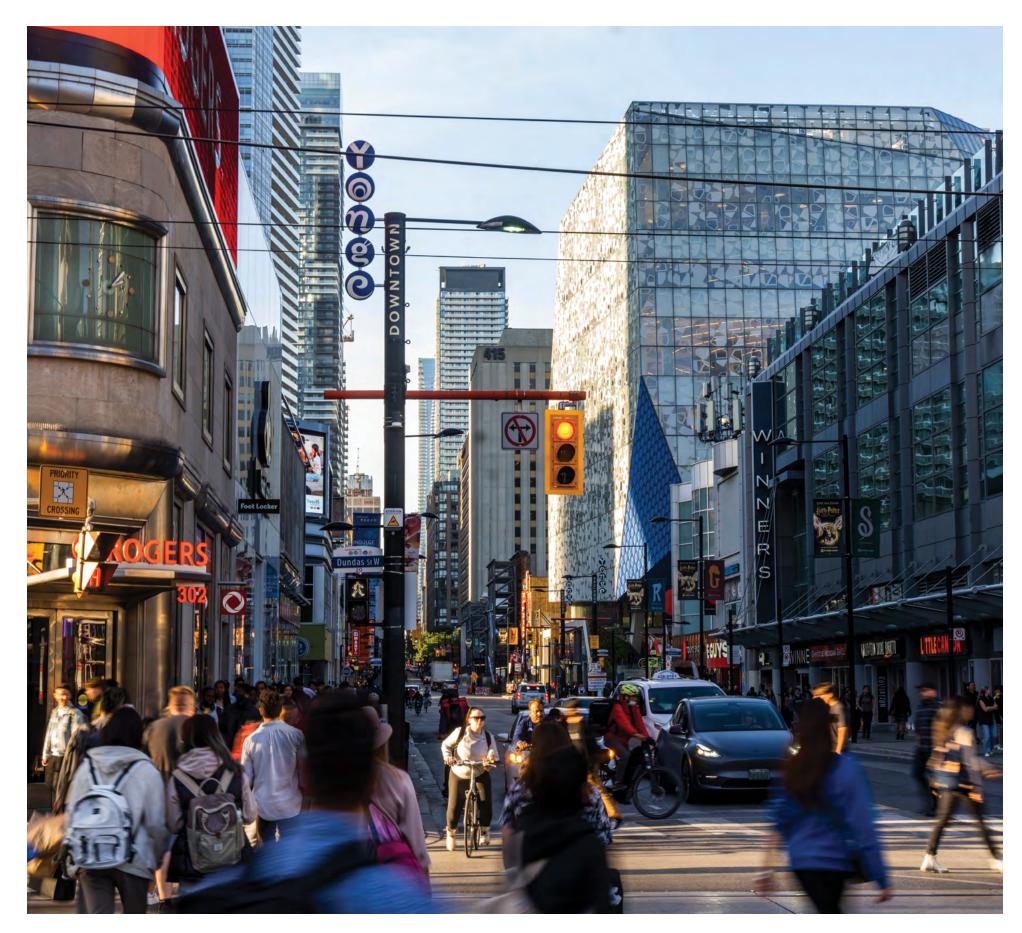
Community-Engaged Focus

Community-engaged research bridges academic inquiry with real-world needs and aspirations, cultivating respectful, reciprocal relationships and driving sustainable societal impact. TMU's researchers actively engage a diversity of perspectives and lived experiences, recognizing that complex challenges exceed any singular vantage point and require collective engagement. TMU's inclusive and collaborative research practices extend beyond traditional academic boundaries by partnering with community organizations, businesses, and industry associations, government, and policymakers. This holistic approach ensures research outcomes have practical applications and benefit the communities involved.

Whether through groundbreaking discoveries, innovative projects, peer-reviewed publications, or arts-based research methods and inquiry, every SRC contribution enriches the broader intellectual and cultural landscape. At TMU, we celebrate the creativity, passion, and dedication that underpin these contributions, recognizing that the impact of community engagement and creativity cannot be measured solely by traditional quantitative metrics.

Our commitment to valuing all SRC contributions underscores our belief in the inherent worth and significance of scholarly and creative endeavours. By fostering partnerships between researchers and communities, we can enhance the relevance and applicability of SRC outcomes, ensuring they address real-world challenges and contribute positively to societal wellbeing.





International Focus

In an increasingly interconnected world, TMU recognizes that the challenges and opportunities we face extend beyond the borders of Canada. Addressing complex global challenges requires a concerted effort that transcends national boundaries. TMU researchers are not only advancing knowledge within Canada but also actively engaging with global issues and opportunities. In alignment with TMU's International Strategy, the university strives to foster mutually beneficial international research collaborations to mobilize knowledge and build partnerships involving faculty members, research centres, and programs around the world.

In our commitment to fostering global research excellence, TMU is well positioned to connect to the significant funding opportunities and strategic advantages presented by expanding hubs and centres of excellence in international settings such as Europe and Southeast Asia. International collaborations position our researchers at the forefront of global innovation and provide access to funding through initiatives like the European Union's Horizon program, allowing TMU to contribute to and benefit from the collective expertise of leading institutions worldwide.

TMU seeks to deepen mutually beneficial research and learning partnerships with leading universities around the world. International SRC collaborations provide a foundation for exchange, new lines of inquiry, and scaling contributions. Through strategic partnerships with international organizations, governments, and research institutions, we seek to leverage our expertise and resources to make a positive difference on a global scale.

TMU's SRC strengths are inherently connected to the United Nations' Sustainable Development Goals (SDGs) and related targets for 2030. They encompass a range of interdisciplinary topics and issues relevant to promoting sustainable development across economic, social, and environmental dimensions in response to pressing global challenges.

Through our SRC activities, TMU researchers contribute to the achievement of the SDGs by leveraging our expertise, resources, and partnerships to generate innovative solutions, inform policy and practice, and drive meaningful impact at local, national, and global levels. By aligning our research strengths with the SDGs, we demonstrate our commitment to making a tangible difference in the world.

In extending our focus beyond Canada and embracing our role as global citizens, our researchers maximize the relevance and impact of TMU's SRC efforts and contribute to building a more sustainable and equitable world for future generations.



Guiding Principles and Values

TMU is deeply committed to fostering SRC excellence, innovation, and creativity across all disciplines through increased equity, diversity, inclusion, and accessibility. TMU's Strategic Research Plan is aligned with the <u>institution's</u> <u>values</u>, which shape our approach and guide decisions related to the SRC enterprise.

Truth and Reconciliation are fundamental to our foundational values and TMU is committed to the Calls to Action for postsecondary educational institutions. Change and transformation begin with acknowledging historical injustices and ongoing impacts of colonization and using our position as an institution to centre the voices and lifeways of Indigenous peoples. One demonstration of our commitment to Reconciliation is the work of the Standing Strong (Mash Koh Wee Kah Pooh Win) Task Force and responding to community calls for change. Our new name, Toronto Metropolitan University, is one example of how we are living our foundational values, namely collaborative respect.

TMU upholds our responsibilities to support a renewed relationship with Indigenous peoples. We are dedicated to supporting, empowering, and championing Indigenous people's rights within our society, and the leadership of Indigenous research methodologies at our institution. We are committed to transformation at an individual and societal level that fosters a research environment that is anti-racist, equitable, and inclusive. The future success of our university's community depends on identifying and removing barriers that exclude or discourage participation in knowledge production. By centring antiracism in our SRC activities. TMU aims to contribute meaningfully to

dismantling systemic inequities and fostering a more just and inclusive society.

Drawing on social justice and anti-oppressive practice, we take an explicitly anti-racist perspective, with particular sensitivity to the unique historical and ongoing contexts of anti-Black racism and anti-Indigenous racism, to acknowledge, understand, and challenge systems of power that privilege some groups over others. This practice requires attention to intersectionality, which refers to the ways different social categories interact to create overlapping systems of discrimination and inequality. In alignment with the Cultivating Black Flourishing Report (2024) and Anti-Black Racism **Campus Climate Review Report** (2020), we reject deficit-based approaches to advancing equity, diversity, inclusion, and accessibility and instead work to understand and remove the structural roots of inequality to amplify research and innovation opportunities, dismantle barriers, foster multiple worldviews, and cultivate an enriched environment for SRC success.

Meaningful change requires more than a stated commitment: it requires action. That is why we strive to advance Indigenous knowledges and perspectives, build on Indigenous SRC leadership, and strengthen SRC relationships in a reciprocal and respectful manner, such as through the allocation of Canada Research Chairs and the creation of internal funding programs to support Indigenousled SRC activities. Indigenous-led SRC scholarship spearheads the decolonization of academic spaces, champions Indigenous rights and sovereignty, and generates greater respect for Indigenous knowledges. Collaborative engagement with Indigenous individuals and

communities is integral to TMU's dedication to model Truth and Reconciliation in our SRC activities. We recognize that this work is a long-term process of relationship and trust building that demands we surpass performative gestures and prioritize initiatives, such as Indigenous data sovereignty, that drive systemic change.

Through our Dimensions Program,

the Office of the Vice-President, Research and Innovation (OVPRI) worked collaboratively with the Office of the Vice-President, Equity and Community Inclusion (OVPECI) to foster a community of practice that shares promising practices and resources. Dimensions Faculty Leads work to engage in peer-led learning and researcher-to-researcher conversations among students and faculty at all career stages in all areas of research and creative practice to champion equity, diversity, inclusion, and accessibility; identify and address systemic barriers; counter ableism; amplify under-represented voices; and promote diversity in research practices, perspectives, and outcomes. Equity, diversity, and inclusion work is ongoing and never fully complete, as the work itself teaches what must be addressed — and improved year by year through evaluative tools and data analysis. Gathering and analyzing both qualitative and quantitative data is critical to supporting our evidence-based work.

Our commitments to these guiding principles and values are expressed and promoted through a multiplicity of perspectives, experiences, and methodological approaches to the SRC work undertaken at the university. Together, the principles underscore our commitment to and expression of social justice and are essential to our integrated approach to SRC activity as they cross-cut TMU's strategic research themes and objectives.

STRATEGIC THEMES

The strategic themes highlight where TMU is driving SRC intensity, impact, and excellence through institutional investment. They are neither exhaustive nor prescriptive. Each strategic theme is aligned with the priorities outlined in the Canadian federal government's Science, Technology, and Innovation (STI) strategies, the United Nations' Sustainable Development Goals (SDGs), and the Horizon Europe clusters. While each strategic theme stands independently, these themes are not siloed entities; rather, they are meant to complement and intersect with one another, enhancing interdisciplinary collaboration and innovation. SRC activities may often transcend a single theme, embodying a multifaceted approach that drives inclusive, holistic solutions to complex societal challenges.

The sub-themes outlined within each theme are indicative of areas of strategic clustering, signifying a concentration of SRC activities that have achieved critical mass and are poised for accelerated growth. These sub-themes reflect institutional priorities, highlighting areas of enhanced opportunity for national and international collaboration, industry and community partnerships, increased funding, broader recognition, and amplified impact. The examples provided within each thematic area serve as illustrative snapshots of the diverse and dynamic SRC landscape at TMU.

With a focus on local, national, and international engagement and cooperation, as well as partnerships with academic institutions, government, industry, and non-profit and community-based organizations, the themes — and the confluence of activities they represent respond to societal needs and advance transformative knowledge.



 $\mathcal{C}\mathcal{D}$

৫৩

E P

 \mathcal{F}

 \bigcirc

Health and Wellbeing

Transformative Technology

Resilient, Inclusive Communities

Climate, Environment, and Sustainability

Future of Work

Democracy, Justice, and Governance

Arts, Culture, and Creativity



Health and Wellbeing

Healthcare systems around the world are undergoing major transformations to address challenges around access to care, integration, prevention, and complex care needs. TMU embraces a person-centred vision of health and wellbeing that focuses on quality of life and promoting wellbeing for all across the life course. In advancing health-related SRC activities, our multidisciplinary and multisectoral researchers work across a range of disciplines and perspectives to address personal, social, economic, legal, technological, and environmental factors impacting health and wellbeing at the individual, community, national, and global levels. Our collaborative approach recognizes the diverse needs of all Canadians and includes health research with, for, and by disabled people, 2SLGBTQ+, Indigenous, Black, immigrant, and other equitydeserving groups. Together, we can develop effective interventions and policies to address the array of physiological, psychological, social, and environmental factors that collectively influence an individual's health and wellbeing. At TMU, our community-focused approach and strategic partnerships with key health service organizations aim to make health and health care accessible to all.

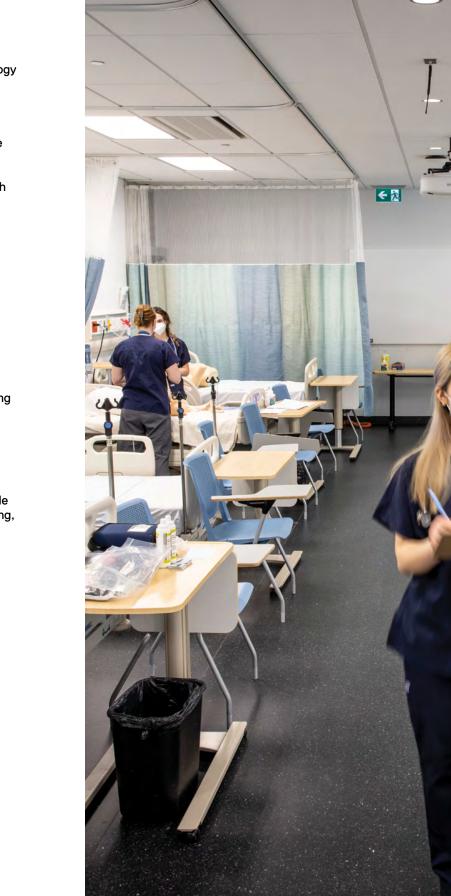
Sub-themes

- Biotechnology and Synthetic Biology
- Environmental Impacts on Health
- Healthy Aging
- Health Equity
- Health Innovation
- Health Professionals of the Future
- Medical Imaging
- Mental Health and Wellbeing
- Migration and Transnational Health
- Molecular Mechanisms for Health and Disease
- Targeted and Precision Medicine

Examples of Related Research Centres / TMU Entities

- Canada Excellence Research Chair in Health Equity and Community Wellbeing
- Centre for Global Health and Health Equity
- Daphne Cockwell School of Nursing
- Health Law and Innovation Research Group
- Healthcare User Experience (HUE) Lab
- Health Outcome Promotion and Engagement (HOPE) Centre for Sexual and Gender Minority People
- Institute for Biomedical Engineering, Science and Technology (iBEST)
- Institute for Stress and Wellbeing Research
- National Institute on Ageing
- Psychology Research and Training Centre
- School of Health Services Management
- School of Medicine
- TMU-MaRS Biomedical Research Facilities

Right: Daphne Cockwell School of Nursing lab and simulation centre.





ତ୍ତୁ ତିତି

Transformative Technology

In today's rapidly advancing technological landscape, the transformative impact of intelligent systems, social media, and networked devices continues to disrupt and reshape numerous sectors, including communication, construction, manufacturing, transportation, aerospace, security, and retail. From the proliferation of the Internet of Things (IoT) to the increasing sophistication of artificial intelligence (AI), from the emergence of autonomous systems to the pursuit of process optimization, robotics, and cybersecurity, technological innovation is driving unprecedented change across industries. Advancements in engineering and information technology, combined with cutting-edge design principles, are revolutionizing how businesses operate while redefining societal norms and expectations in light of the considerable ethical and rights challenges. As organizations strive to stay competitive and relevant in this dynamic environment, TMU researchers have adopted a systems and multidisciplinary approach to deepen our understanding and harness the power of these disruptive technologies to navigate and create new possibilities.

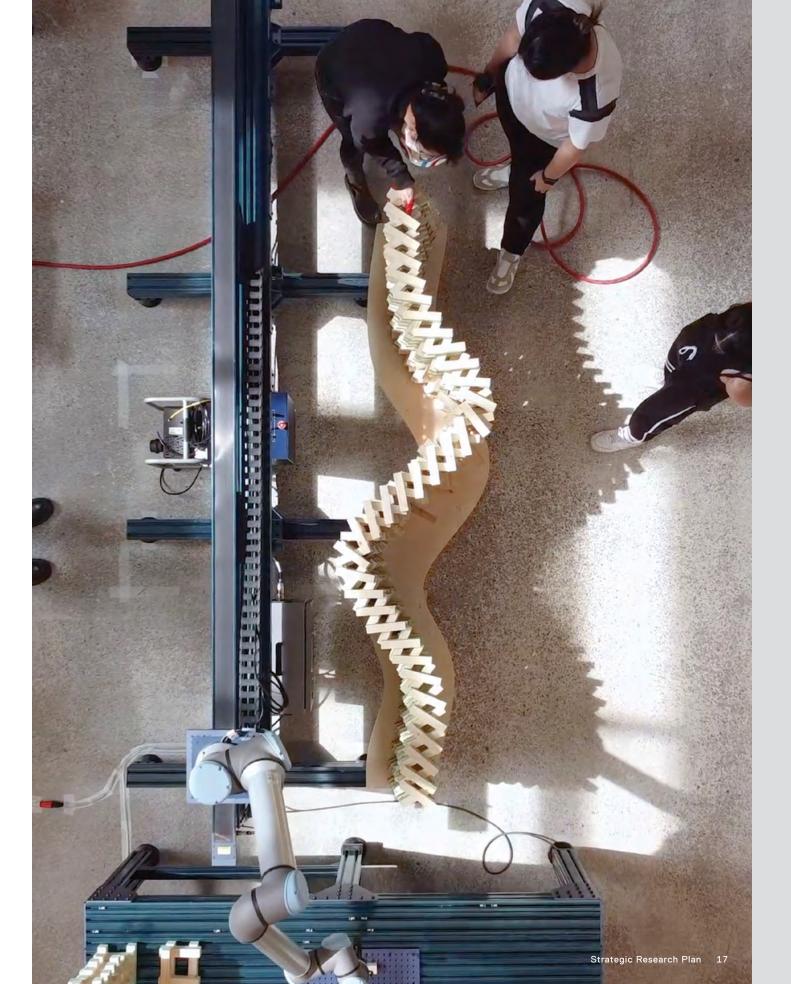
Sub-themes

- Advanced Materials and Manufacturing
- Artificial Intelligence and
- Data Analytics
- Autonomous and Real-Time Systems
- Cybersecurity, Safety, and Privacy
- Digital and Social Media
- Digital Twins and Augmented Reality
- Information and Communication Technologies
- Management of Technology
- Mathematical Modeling, Simulation, and Optimization
- Quantum Science and Technology

Examples of Related Research Centres / TMU Entities

- Advancing Engineering, Research and Innovation in Aerospace (AERIAS)
- Centre for Digital Enterprise Analytics and Leadership (DEAL)
- Critical Metaverse Design Network for Embodied and Virtual Experiences (EVE)
- Cybersecurity Research Lab (CRL)
- Institute for Innovation and Technology Management
- Rogers Cybersecure Catalyst
- School of Information Technology Management
 Social Media Lob
- Social Media Lab

Right: The Design + Technology LAB at The Creative School.





Resilient, Inclusive Communities

Urban planning and design are fundamental to creating resilient, inclusive communities that advance social justice and equity. Community encompasses a diverse array of people, places, and businesses, including small retailers, all contributing to economic vitality and social cohesion. The development of places and infrastructure significantly influences the inclusivity of spaces, particularly for newcomers to Canada. Through a focus on green building and architecture, as well as climate resilience, we construct socially and environmentally sustainable spaces that address systemic disparities. TMU researchers navigate the interconnected web of social, economic, political, cultural, and technological factors to develop and promote evidence-based solutions to overcome barriers to essential services such as housing, transit, and health. Our SRC endeavours explore intersectional issues such as gender identity and expression, class and socioeconomic status, history, disability, age, nationality, and religion to better understand the complexities of identity, place, and related dynamics of power. Collaboration with stakeholders and policymakers is central to our approach, ensuring communities are empowered and engaged in developing solutions to promote equitable access to resources, spaces, and opportunities.

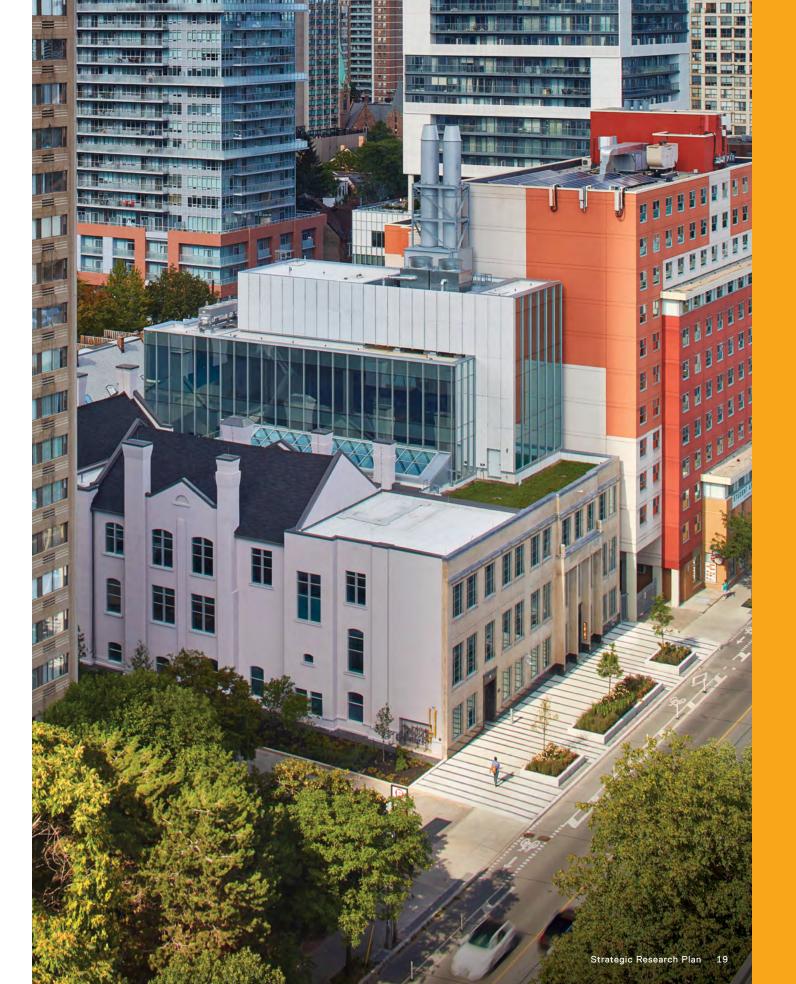
Sub-themes

- Community Resilience and Social Equity
- Early Childhood Education
- Food Security and Food Distribution
- Governance and Policy
- Green Building and Architecture
- Housing and Real Estate Economics
- Indigenous Community-Driven Innovation
- Migration, Integration, and Settlement
- Urban Planning and Design

Examples of Related Research Centres / TMU Entities

- Canada Excellence Research Chair in Migration and Integration
- Centre for Studies in Food Security
- Centre for Urban Research and Land Development (CUR)
- City Building TMU
- Disability Publics Lab
- Gender Studies Minor
- Migrant Integration in the Mid-21st Century: Bridging Divides – Canada First Research Excellence Fund (CFREF) Program
- Retail Leadership Institute
- Together Design Lab
- Toronto Metropolitan Centre for Immigration and Settlement (TMCIS)
- Urban Analytics Institute

Right: The Centre for Urban Innovation.





Climate, Environment, and Sustainability

The theme of climate, environment, and sustainability emerges as an urgent call to address the global climate emergency and drive just systems transitions. Taking an interdisciplinary approach that coalesces across a variety of disciplines, including natural sciences, engineering, policy, law, and social sciences, TMU researchers are modelling and exploring the consequences of climate change and other environmental impacts on people and ecosystems by tracking harmful pollutants and developing innovative solutions. Our researchers are leading groundbreaking initiatives in green wastewater management, phasing out greenhouse gas emissions across Canada, and integrating cutting-edge technologies for carbon-neutral buildings. We are pioneering solutions that promote advanced energy storage, smart grids, and the electrification of transportation to facilitate the clean and sustainable transition of energy and transportation sectors. We are developing climate-neutral, net-zero solutions, including advancements in a range of engineering technologies, to shape a more sustainable future.

Sub-themes

- Clean Energy Technologies
- Climate Action
- Environmental Policy
- Natural and Urban Ecosystems
- Sustainable Engineering
- Transportation and Mobility

Examples of Related Research Centres / TMU Entities

- Centre for Urban Energy (CUE)
- Laboratory of Innovations in Transportation (LiTrans)
- Smart Campus Integration and Testing Hub (SCITHub)
- TMU's Sustainability Action Plan
- TransForm Lab
- Urban Water TMU

Right: TMU's Urban Farm rooftop.





Future of Work

Decent work and economic growth are closely intertwined with the future of work in Canada, shaping the landscape of employment, labour markets, and overall economic prosperity. As the nature of work evolves with technological advancements and changing market demands, TMU researchers seek to promote sustained, inclusive economic growth, full and productive employment, and decent work for all. Our multifaceted approach spans entrepreneurial, innovation, and policy ecosystems and incorporates management/leadership best practices. By identifying and promoting best practices in corporate social responsibility, labour relations, workforce diversity, corporate governance, leadership, and ethics, TMU researchers drive excellence in business operations. We also enhance business structures through expertise in pensions and investments, taxation, consumer research, and corporate accounting and finance. Our SRC activities encompass firms of all sizes, from global leaders to emerging family businesses, across diverse industries with a focus on hospitality, tourism, retail, real estate, sports, and tech sectors. Working with industrial and community partners, our researchers advance inclusive growth and reduce barriers to workforce participation for underrepresented groups, contributing to a more resilient and dynamic labour market.

Sub-themes

- Corporate Social Responsibility
- Economic Growth and Productivity
- Entrepreneurship and Innovation Ecosystems
- Equity, Diversity, Inclusion and Accessibility
- Global Management and International Business
- Human Resources Management
- Retail, Marketing, and Consumer Behaviour
- Supply Chain Management and Logistics

Examples of Related Research Centres / TMU Entities

- Centre for Labour Management Relations (CLMR)
- Diversity Institute (DI)
- Entrepreneurship Research Institute (ERI)
- Family Business Institute
- Future Skills Centre
- Institute for Hospitality and Tourism Research
- Institute for the Study of Corporate Social Responsibility
- Magnet
- School of Accounting and Finance
- School of Business Management
- School of Retail Management

Right: Interactive tabletop visualization of migration data at the Synaesthetic Media Lab (Synlab).



Democracy, Justice, and Governance

TMU's researchers explore the intersections between law, governance, and modern institutions by investigating how the pillars of democracy, including the rule of law, freedom of the media, and protection of human rights, can be strengthened to enhance inclusivity, public participation, and accountability.

TMU's SRC activity focuses on deconstructing traditional legal distinctions to empower communities to foster inclusive social justice that centres the experiences of equity-deserving communities, including Indigenous peoples, Black, and other racialized groups. Researchers also examine the role of social movements in shaping norms, critically assess the regulative force of legal institutions, and make tangible contributions to access to justice reforms.

In an era of deliberate proliferation of misinformation, it is especially important to rebuild and enhance trust in public institutions at the local, national, and international levels. By fostering critical dialogue, scholarly inquiry, international collaboration, and community partnerships, TMU's SRC contributes to the development of more equitable and just democratic systems.

The evolution in how information is communicated is revolutionizing journalism and the media industry. This transformation is opening avenues to address disparities in coverage and representation, paving the way for more inclusive narratives that challenge and change harmful stereotypes. In confronting the multifaceted and intersecting challenges of, for example, growing income and social inequality, a rise in populism, and the risk of foreign interference, TMU researchers are working to repair societal fractures and accelerate progress towards equity and inclusion.

Sub-themes

- Democracy and Engagement
- Ethics
- Human Rights and Governance
- Indigenous Rights and Data Sovereignty
- Racial Justice and Law
- Responsible Use of Technology
- Social Innovation

Examples of Related Research Centres / TMU Entities

- Black Studies Minor
- Centre for Free Expression
- Democratic Engagement Exchange
- International Law and Global Justice Initiative
- Jarislowsky Democracy Chair
- Journalism Research Centre
- Justice and Technology Initiative
- Lincoln Alexander School of Law
 School of Public Policy and
- Democratic Innovation
- Ted Rogers Leadership Centre (TRLC)
- The Dais
- Yellowhead Institute





Arts, Culture, and Creativity

Art and creative practices expand the ways we think about the world and our place in it, enrich our lives, advance new forms of knowledge, and help us arrive at creative solutions to real-world problems.

By challenging dominant narratives and amplifying underrepresented voices, the arts serve as powerful tools for confronting systemic injustices and inspiring collective action. The arts are vehicles for collective memory, the formation of cultural identity, and imagining better futures.

Blurring the line between conventional research and creative practice, and drawing from a diverse urban and academic milieu, TMU researchers engage in creative scholarship and arts-based research methods to advance new theoretical paradigms and ways of thinking within and beyond the creative sectors in domains as diverse as healthcare, education, migration, environmental sustainability, emerging technologies, and cultural policy.

Using a range of methods of curation and creation, our SRC leaders are forging new practices and standards for academic, professional, business, and public audiences by creating avenues where all voices are heard and valued.

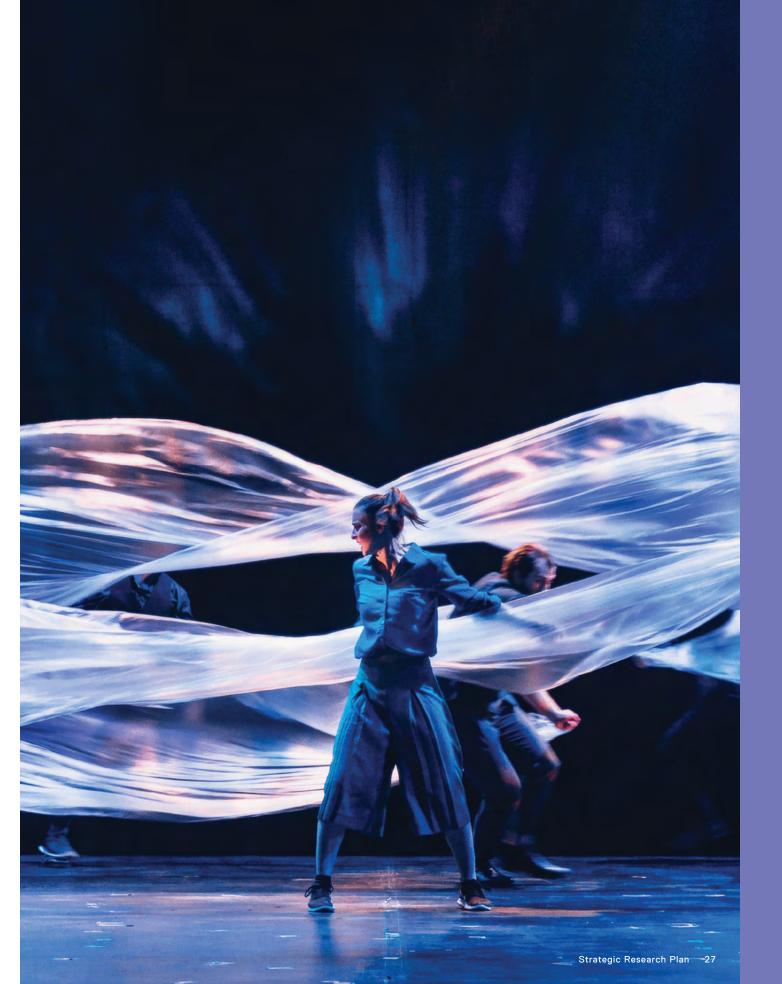
Sub-themes

- Arts Education and Community Engagement
- Black Studies and Scholarship
- Creative Enterprise
- Creativity and Societal Change
- Creative Technologies and Al
- Digital Humanities
- Histories, Archives, and Curation
- Storytelling, Experiential, and New Media

Examples of Related Research Centres / TMU Entities

- Black Scholarship Institute (BSI)
- Centre for Digital Humanities (CDH)
- Centre for Fashion and Systemic Change (CFSC)
- Creative Al Hub
- Documentary Media Research Centre (DMRC)
- Future of Sport Lab
- Inclusive Media and Design Centre (IMDC)
- Modern Literature and Culture (MLC) Research Centre
- Red Bull Gaming Hub
- Saagajiwe
- The SingWell Project

Right: Performance at The Creative School.



Cultivating Success — Encouraging Bold Ideas

TMU leverages its historic mandate to conduct SRC activity that serves societal needs to inform its current and future SRC aspirations and programming. Capitalizing on this trajectory, TMU is breaking down thematic and disciplinary silos by integrating a mix of programs, faculties, and sector orientations. This approach allows for the clustering and growth of SRC activity towards enhanced SRC partnerships and opportunities for researchers and students. We are committed to a multi-year strategy to expand the quality and level of support to enhance research participation, excellence, and success.

TMU's SRC excellence and impact are built upon supporting our established strengths as well as identifying and incubating new, bold ideas and nascent areas of SRC activity. This strategy includes attracting top faculty, students, and staff and a sustained focus on building and measuring our SRC profile and reputation through increased funding, a robust research infrastructure, greater recognition, publications, commercialization and patents, industry and community partnerships, knowledge mobilization and dissemination, and graduate and undergraduate engagement in SRC activity.

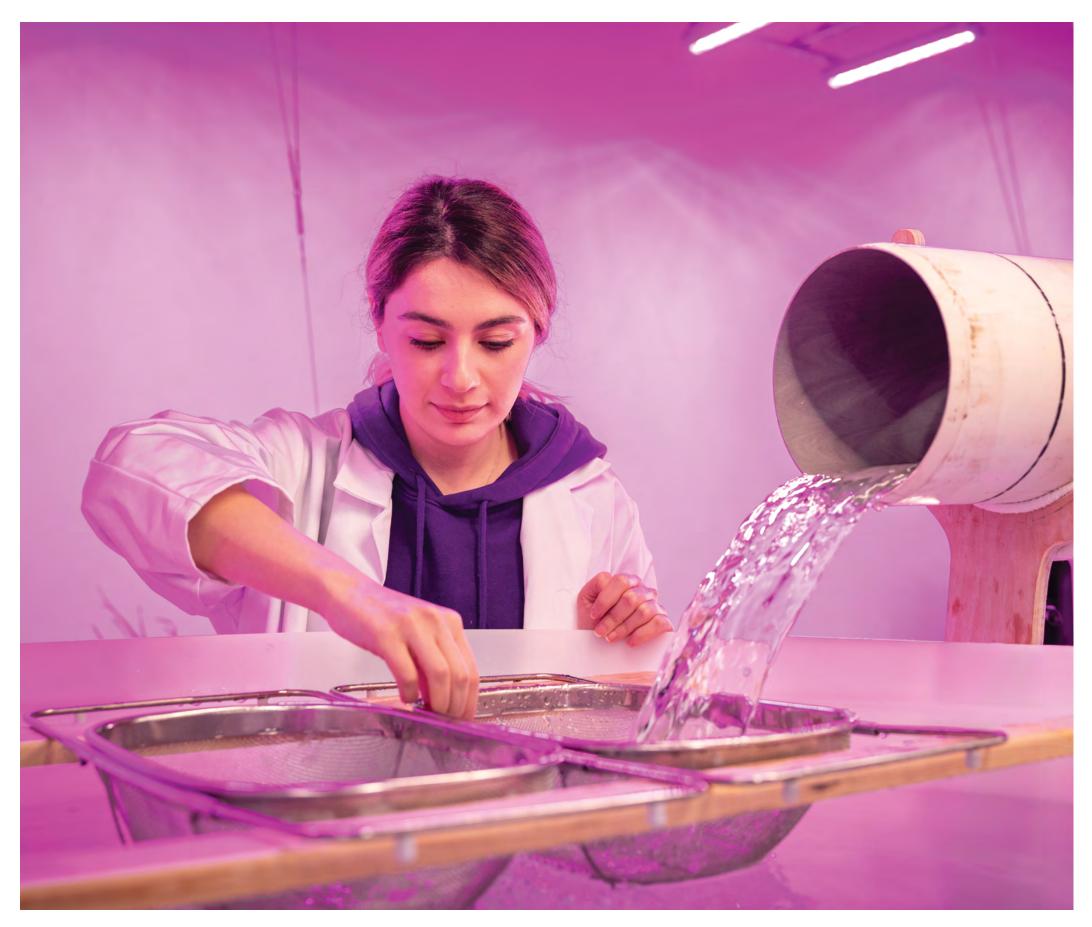
Key to this growth has been an investment in faculty growth and renewal, which has resulted in the recruitment of top-tier scholars and researchers across diverse fields and disciplines. Through strategic recruitment, professional development opportunities, and the fostering of interdisciplinary collaboration, TMU has cultivated a vibrant SRC community. Looking to the future, the importance of continued investment in faculty growth and renewal cannot be overstated. By prioritizing the recruitment, development, and retention of talented faculty members, we can sustain and further enhance the intensity, excellence, and impact of our SRC activities, positioning TMU as a global leader making significant contributions to addressing the complex challenges facing our world today.

This vibrancy of our SRC community is strengthened by the contributions of highly qualified personnel (HQP), including postdoctoral fellows and undergraduate and graduate students. The active involvement of HQP ignites the spirit of inquiry and infuses SRC activities with new ideas, energy, and enthusiasm. Recognizing the pivotal role of exposure to research opportunities, particularly for students, TMU

places great emphasis on engaging HQP early in their academic journeys. Faculty members play a vital role in mentoring students, guiding them through the research process, nurturing their academic and professional growth, and imparting invaluable knowledge and expertise that will shape their future endeavours. These opportunities bolster students' competitiveness and exert a profound influence on their choice to pursue further academic pursuits, shaping the trajectory of their scholarly journey and fostering a lifelong passion for research and discovery.

Right: Growing for the future: The iGrow Platform SMART vertical farm project in the Laboratory of Biomaterials and Advanced Manufacturing. This project is funded by the Weston Family Foundation's Homegrown Innovation Challenge.





From ideation and funding acquisition to dissemination and knowledge mobilization, each stage of the SRC process requires careful planning, resources, and support.

To support the implementation of the SRP, the university's enabling infrastructure, both central and Faculty-level, should be reviewed to ensure that the systems and supports are aligned with the ambitions of the plan. TMU will continue to enhance administrative and infrastructure support, including strengthening the quality of our accountability framework and reputation-enhancing initiatives.

The OVPRI will also work to build knowledge mobilization capacity among researchers and knowledge users. Through training programs, workshops, and mentorship opportunities, TMU will empower individuals to effectively communicate research findings, engage with stakeholders, and drive positive change in their communities.

Implementing the Strategic Research Plan

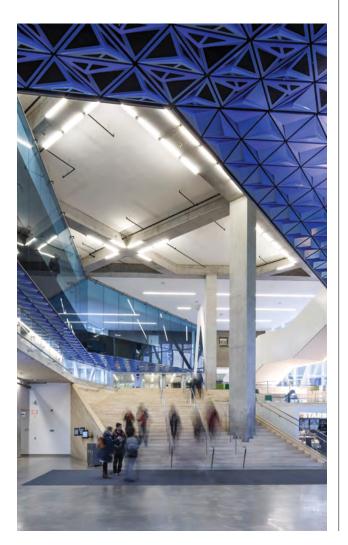
Left: The Urban Water TMU Experimental Lab.



SRC Physical and Digital Infrastructure

The physical and virtual spaces of the institution are central to the success of our SRC growth. These spaces serve as dynamic environments that foster collaboration, innovation, and discovery, providing researchers with the resources and support needed to excel in their scholarly pursuits.

In alignment with the <u>campus master plan</u> and in conjunction with research infrastructure funding calls, we will continue to identify new space and facility requirements that will connect research and talent development with industry, business, and community. We need our physical spaces, such as laboratories, studios, libraries, and collaborative workspaces, to have access to state-of-the-art equipment and infrastructure that enable cutting-edge research and experimentation. New and renewed facilities will increase opportunities for interdisciplinary collaboration and partnership. Investment in digital infrastructure is equally vital to



the expansion of SRC activity at TMU. The TMU Libraries are central to the research infrastructure required to ensure SRC innovation and success. The library provides expertise, cross-disciplinary academic perspectives, research dissemination and preservation, and a deep understanding of evolving SRC needs and opportunities. It also plays a foundational role in supporting innovative individual researchers, scholars, creators, and students, and connecting multidisciplinary research teams. A healthy research library system plays a critical role in supporting research excellence and advancing the university's reputation. In alignment with TMU's Research Data Management Institutional Strategy and the TMU Library Open Access Policy, we are committed to supporting the effective management, preservation, and sharing of research data to foster transparency, reproducibility, and innovation. A key resource available to improve the discoverability and reproducibility of SRC outcomes is the TMU institutional repository, which serves as a central platform for capturing, preserving, and sharing both traditional and non-traditional forms of SRC activity. By embracing open access principles and providing support for research data management, TMU empowers researchers to make meaningful contributions to knowledge creation and dissemination, driving innovation and impact across diverse fields and disciplines. With expertise in research data management, open scholarship and science, intellectual property, knowledge mobilization, and community outreach, the TMU Libraries are critical to advancing the goals of the Strategic Research Plan.

In alignment with TMU's Digital Strategy, sustained investment in essential university-wide network and computing infrastructure is required as a foundation on which other services can be built and maintained. A robust, secure, high-bandwidth campus network with pervasive wireless access. a widely and easily accessed collaborative platform, and the ability to access remotely provided compute services are all essential. In addition, the focus on transformative digital and physical infrastructure will leverage some of the TMU Libraries' most successful SRC innovations (the institutional repository, open publishing, the collaboratory, digital preservation, research communities, and the open researcher platform pilot) and allow expansion and creation of new programs and services to meet emerging SRC priorities and growth.

Success Measures

TMU is committed to collaborative SRC practices that recognize and value the contributions of community members and partner organizations and prioritize inclusivity, diversity, and equity. We strive to cultivate meaningful and mutually beneficial partnerships that empower communities, promote social justice, and address pressing community issues. The involvement of these partners not only enhances the quality and relevance of research outcomes but also strengthens relationships, fostering trust, reciprocity, and shared responsibility in research and innovation. Through ongoing collaboration and engagement, we are committed to maximizing the societal impact of our SRC activities and creating positive change.

The grant application process has increased its emphasis on describing the impact of proposals, underscoring the need for researchers to demonstrate not only the outputs of their work but also the broader outcomes and societal benefits. Outputs refer to the tangible products or deliverables of SRC activities, such as publications, patents, or prototypes. Outcomes encompass the broader societal, economic, or environmental changes resulting from these outputs.

TMU recognizes the importance of articulating both outputs and outcomes, and engaging both quantitative and qualitative impact measures when considering the potential value and significance of SRC activities. As articulated in our Responsible Use of Bibliometrics Statement, and by Tri-agencies and other granting bodies, we understand that impact varies across disciplines and extends beyond academic metrics and citation counts to encompass real-world applications and contributions to societal wellbeing.

Meaningful engagement with community members and partner organizations enriches the research process, fosters mutual learning and understanding, and enhances societal impact. Whether through participatory research initiatives, co-creation of knowledge, or community-based collaborations, the insights and perspectives of external stakeholders contribute to the generation of innovative solutions to complex challenges and the advancement of knowledge in diverse fields and disciplines.

Agreed-upon measures of progress are essential for operational transparency. These measures facilitate the OVPRI's planning and decision-making processes and allow for the celebration and recognition of SRC excellence. The OVPRI will continue to work closely with the Deans and Associate Deans of Research in each Faculty to co-create relevant SRC activity objectives and standards to directly support their respective strategic SRC plans.

Right: The Immersion Studio in the TMU Library.



SRC success may be evaluated through a range of activities, including:

Research Funding and Collaboration

- Intensity of SRC activity and proportional share of external funding
- Quality and number of international partnerships, funding, and publications
- Number of collaborations and partnerships with industry, government, and non-governmental organizations
- Number of interdisciplinary collaborations with academic partners
- Leadership in the development of new fields and/or multidisciplinary areas of SRC activity



- Quality, length, and number of community partners
- History of collaboration (number of projects worked on together)
- Number of partnerships and affiliations with health service organizations
- Number of organizations led by underserved communities
- Production of community outputs such as scholarly works and cultural sensitivity training
- Communication of research results and knowledge translation to specialist or non-specialist audiences, including the public (e.g., magazine/newspaper articles, media interviews, blog posts, social media, presentations, publications, or public lectures)
- Contributions to policies, guidelines, regulations, laws, standards, and/or practice

/ Impact and Outcomes

- Number and quality of outputs, such as peer-reviewed publications or exhibits, as appropriate to the discipline
- Growth in the adoption of open science and open access practices
 Number of HQP involved in
- SRC activities

 Traditional and social media
 coverage
- Industrial or social innovation, including new technologies, patent applications, licensing of products and services, or other forms of knowledge transfer and adoption resulting from SRC activities
- Community benefit
- Knowledge translation and mobilization initiatives, including open dissemination and additional ways to mobilize knowledge, such as podcasts, digital storytelling, Indigenous storytelling, and art installations
- Influence on current policy, guidelines, regulations, laws, standards and/or practices
- Influence on the direction of thought and/or activity in the community or targeted partner
- Integration of SRC into teaching to develop innovative teaching approaches, including clinical teaching opportunities, that mobilize and apply research
- Visibility and reputation, measured by national and international reputational surveys

Recognition

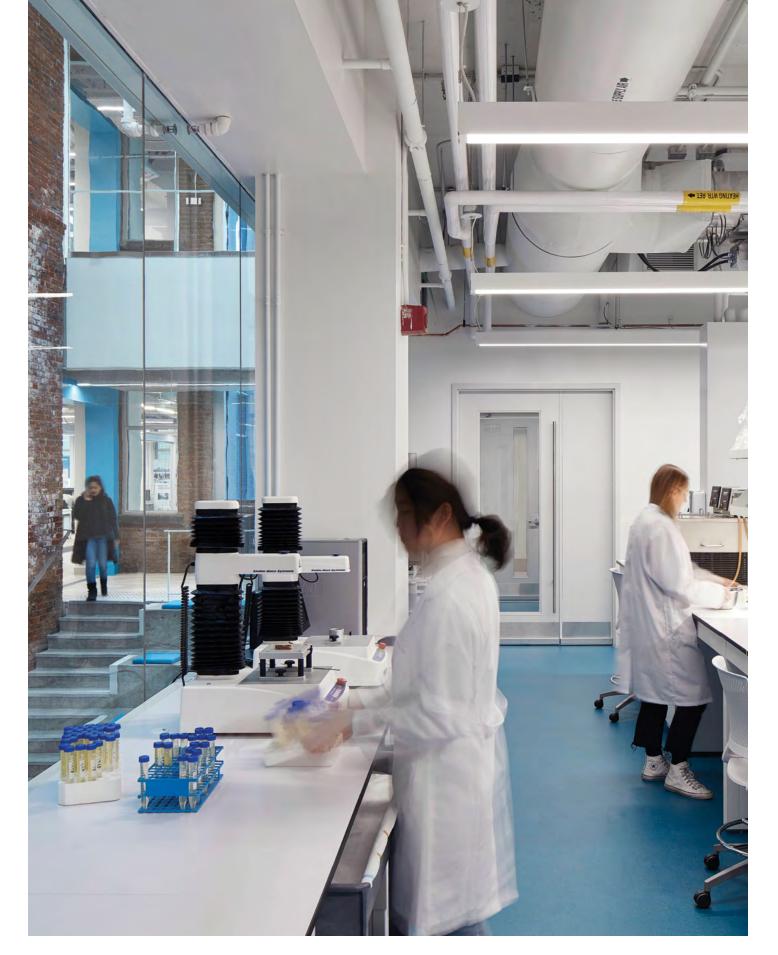
- Number of national or international SRC awards and prizes received by faculty
 Number of national or international SRC awards and
- prizes received by undergraduate and graduate students
- National and international
- peer review and recognition
- Periodic third-party review
- International rankings

Growth

 Attract, develop, retain, and support outstanding faculty, staff, students and postdoctoral fellows
 Enhance supports to opport and

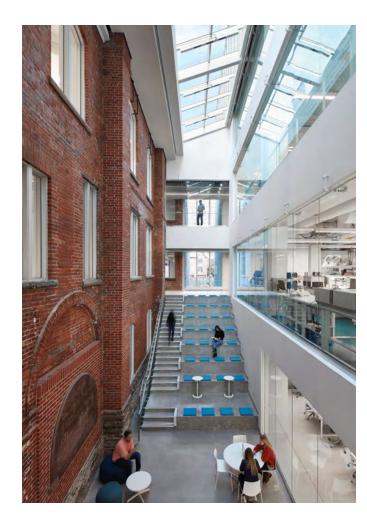
- Enhance supports to encourage equitable access and cultivate SRC interest and experience for undergraduate students
- Collaborate with the Yeates School of Graduate and Postdoctoral Studies towards attracting and training high-quality postdocs, PhDs, and master's students
- Globally mobilize people and ideas through exchange, programs, and advanced research opportunities





Role of the Office of the Vice-President, Research and Innovation in Cultivating Success

To support SRC excellence, attract and retain top talent, and promote SRC impact, a key priority of the OVPRI is to build collaborative partnerships across the university. This includes working with TMU Global and with the Yeates School of Graduate and Postdoctoral Studies towards greater SRC partnerships and initiatives in support of building TMU's cohort of highly qualified personnel (HQP) at the graduate and postgraduate levels. In addition, the OVPRI is strengthening the innovation ecosystem to move research from lab to market by providing various levels of support for knowledge and technology transfer and commercialization.



As a shared service, the OVPRI fulfills a number of important functions, including:

- Providing advice and support to researchers on individual and institutional research proposals, as well as knowledge and technology transfer to external parties (innovation and commercialization).
- Leading the development and management of institution-led projects and programs and the development of institutional initiatives and strategic partnerships.
- Facilitating and ensuring compliance with federal policies and guidelines in relation to research ethics, security, and integrity.
- Supporting the university's enterprise risk management framework to identify, assess, and mitigate risks related to scaling the institution's SRC activities.
- Enhancing opportunities for the training and development of research trainees, including graduate students and postdoctoral researchers, and supporting undergraduate research opportunities.
- Communicating SRC outputs and outcomes.
- Providing the required leadership and support for SRC compliance requirements.

The OVPRI uses the SRP to work collaboratively to scale TMU's scholarly, research, and creative activities in order to continue the institution's trajectory of excellence and growth. The SRP is a guide that provides a framework to identify how to scale in a disciplined manner with a focus on our areas of excellence. As the research support landscape continues to change, the OVPRI will evolve to be well-positioned to provide comprehensive support and encourage the stimulation of innovation through strengthened multidisciplinary connections and bigger and bolder projects and partnerships.

Strategic Research Plan Progress Review

SRC activity is a cornerstone of TMU's orientation towards and commitment to the development of talent, student experience, and knowledge creation and mobilization. These activities address key challenges and opportunities in the world today through collaborations and partnerships in our region, country, and around the globe.

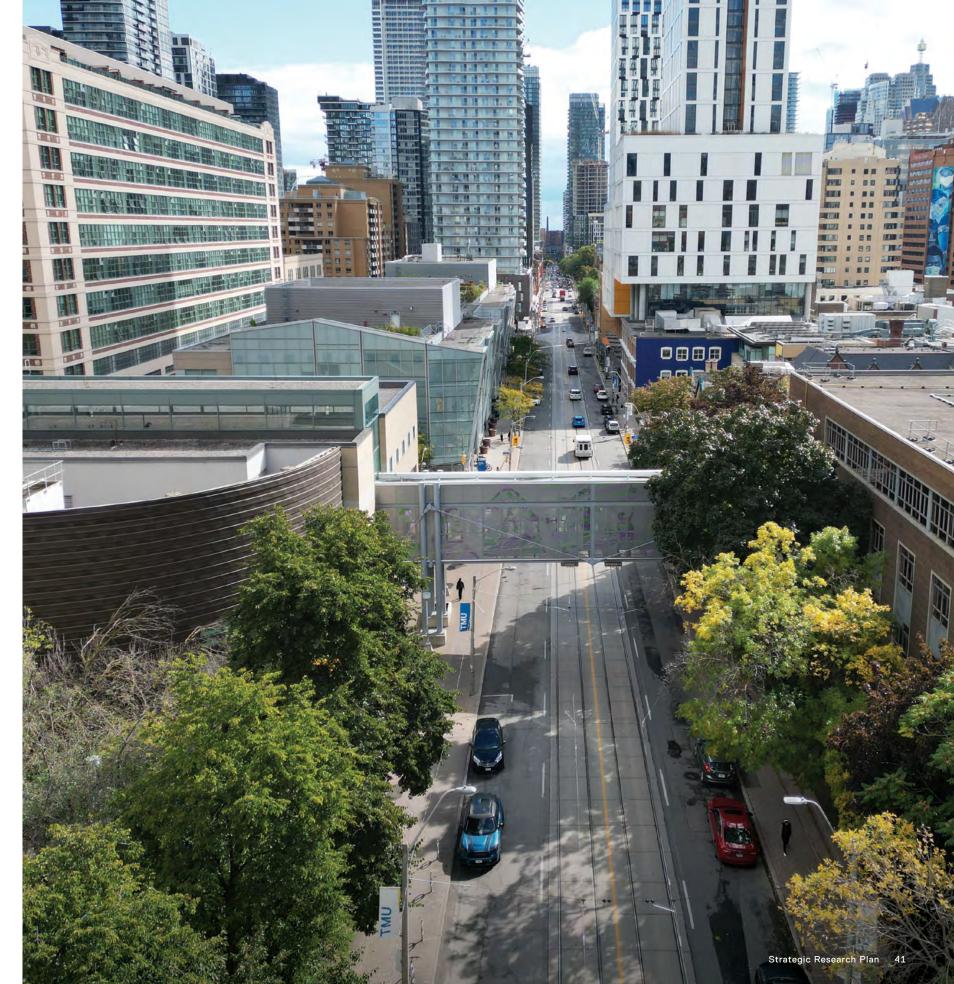
The Strategic Research Plan is integrated and aligned with the institutional priorities set out in the university's Academic Plan. The Academic Plan captures enhancing SRC excellence, intensity, and impact, as one of its key priorities. The SRP outlines how TMU will achieve this objective by distinguishing key thematic areas of institutional SRC investment and highlighting support structures.

Progress on the SRP will be reported through the Senate SRC Activity Committee. The Senate SRC Activity Committee has a mandate to examine and report to the Senate regarding the state of SRC activity at TMU and upon issues regarding SRC activity that are likely to arise. Its membership, broadly representative of the university, includes individuals from each Faculty, the Libraries, the Yeates School of Graduate and Postdoctoral Studies, the Research Ethics Board, and undergraduate and graduate student senators.

The Senate SRC Activity Committee has established a subcommittee, the SRC Leaders Group, which consists of the Associate Deans of Research (or equivalent) who meet regularly to gather input and offer advice to the Vice-President, Research and Innovation regarding strategies for enhancing SRC activity at TMU. The SRC Leaders Group is an active forum for exchanging information and discussing SRC activity issues and strategic planning. Its efforts support the progress of the Strategic Research Plan.

Each year, the OVPRI compiles an annual report that articulates achievements and key actions to deliver on the SRP. The annual report describes progress on:

- supporting SRC excellence and increasing funding success;
- expanding research collaborations and partnerships;
- amplifying SRC impact, knowledge
- mobilization, and transfer; and,
- strengthening SRC supports and systems.



APPENDICES

Appendix A

Strategic Research Plan Creation and Approval Process

The 2025–2030 Strategic Research Plan was developed through an iterative consultation process under the leadership of the Office of the Vice-President, Research and Innovation and guided by a Steering Committee with diverse representation from each Faculty and the student body. The development of the plan was informed by a comprehensive mid-point review of the previous SRP and draws on the plans of our faculties, partners, and stakeholders. It is informed by the institutional priorities articulated in the Academic Plan and supports the recommendations found in the Truth and Reconciliation Community Consultation Summary Report.

The broader university community was engaged throughout the SRP development process through a multi-faceted and inclusive approach to ensure broad and meaningful engagement across TMU's SRC community, which included a series of town halls, focused engagement sessions, and the opportunity to provide comments on a draft plan. The plan was then approved via TMU's collegial governance framework. The SRP is aligned with the university's Academic Plan and 2020–2030 Strategic Vision.



Appendix B

Canada Research Chair Allocation and Management

The allocation and management of TMU's Canada Research Chairs (CRCs) is overseen by the Executive Committee for CRC Planning, which is chaired by the Vice-President, Research and Innovation. Members of the Committee include the Associate Vice-President, Research and Innovation (Vice-Chair); the Provost and Vice-President, Academic or designate; the Vice-President, Equity and Community Inclusion or designate; the Vice-Provost and Dean, Yeates School of Graduate and Postdoctoral Studies or designate; the Assistant Vice-President, TMU International; a Dean from one of the university's Faculties; and a TMU faculty member with an established research track record. The Vice-Provost, Faculty Affairs and Assistant Vice-President Business Development and Strategic Initiatives, OVPRI are ex officio members of the committee.

This committee reports to the President of the university and reviews all policies and processes relating to the management of the university's allocation, including strategic decisions, renewal reviews, and allocation requests. The Committee also oversees the implementation of TMU's Equity, Diversity, and Inclusion (EDI) Action Plan and equity targets in the CRC process.

TMU's EDI Action Plan for Canada Research Chairs (CRCs) forms the basis for our commitment to go beyond the minimum CRC compliance requirements. Our aspirational goal is to have our faculty and staff reflect our diverse student body and community, and this is also the goal for all CRC appointments. TMU intentionally incorporates EDI into each step of the CRC hiring process, including the language used in position descriptions, posting hiring advertisements widely and appropriately, unconscious bias training for hiring committees, and monitoring progress in achieving our EDI goals.

Planned Allocation

As of March 2024, TMU has an allocation of 25 Chairs: three Tier 1s and 22 Tier 2s, consisting of two Canadian Institutes of Health Research (CIHR) Tier 1s, two CIHR Tier 2s, 13 Natural Sciences and Engineering Research Council of Canada (NSERC) Tier 2s, one Social Sciences and Humanities Research Council (SSHRC) Tier 1, and seven SSHRC Tier 2s. This breakdown includes two SSHRC Tier 2 Chairs resulting from a flexible option to split one SSHRC Tier 1 into two SSHRC Tier 2 Chairs and an agency change from NSERC to CIHR. Currently, 22 Chairs are occupied.

Research Theme	Current Allocation	Pending Allocation
Health and Wellbeing	8	
Transformative Technology	5	1
Resilient, Inclusive Communities	2	1
Climate, Environment, and Sustainability	3	
Future of Work	1	
Democracy, Justice, and Governance	1	
Arts, Culture, and Creativity	1	2

In an increasingly interconnected world, TMU is addressing the opportunities and challenges that extend beyond borders. Through strategic partnerships with organizations, governments, and industry, we leverage our expertise and resources to make a positive impact in our communities and on a global scale.

STEVEN N. LISS, PhD Vice-President, Research and Innovation, Toronto Metropolitan University

