



OFFICE OF THE VICE-PRINCIPAL
RESEARCH & INNOVATION

Engage

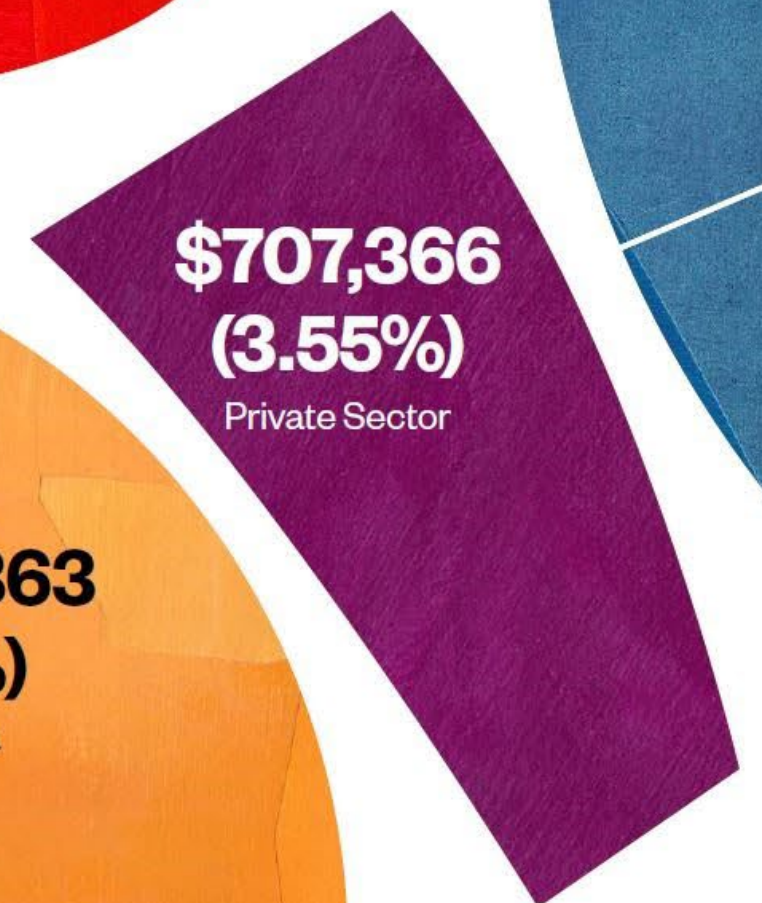
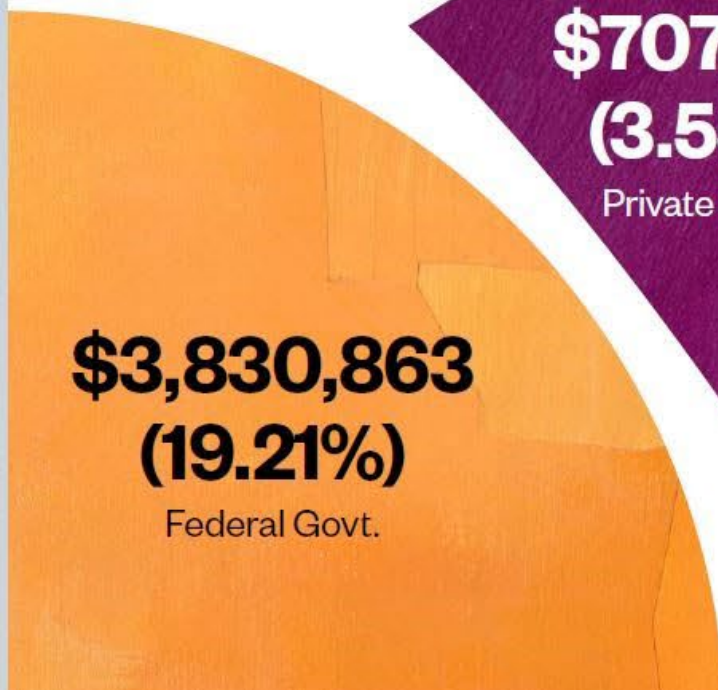
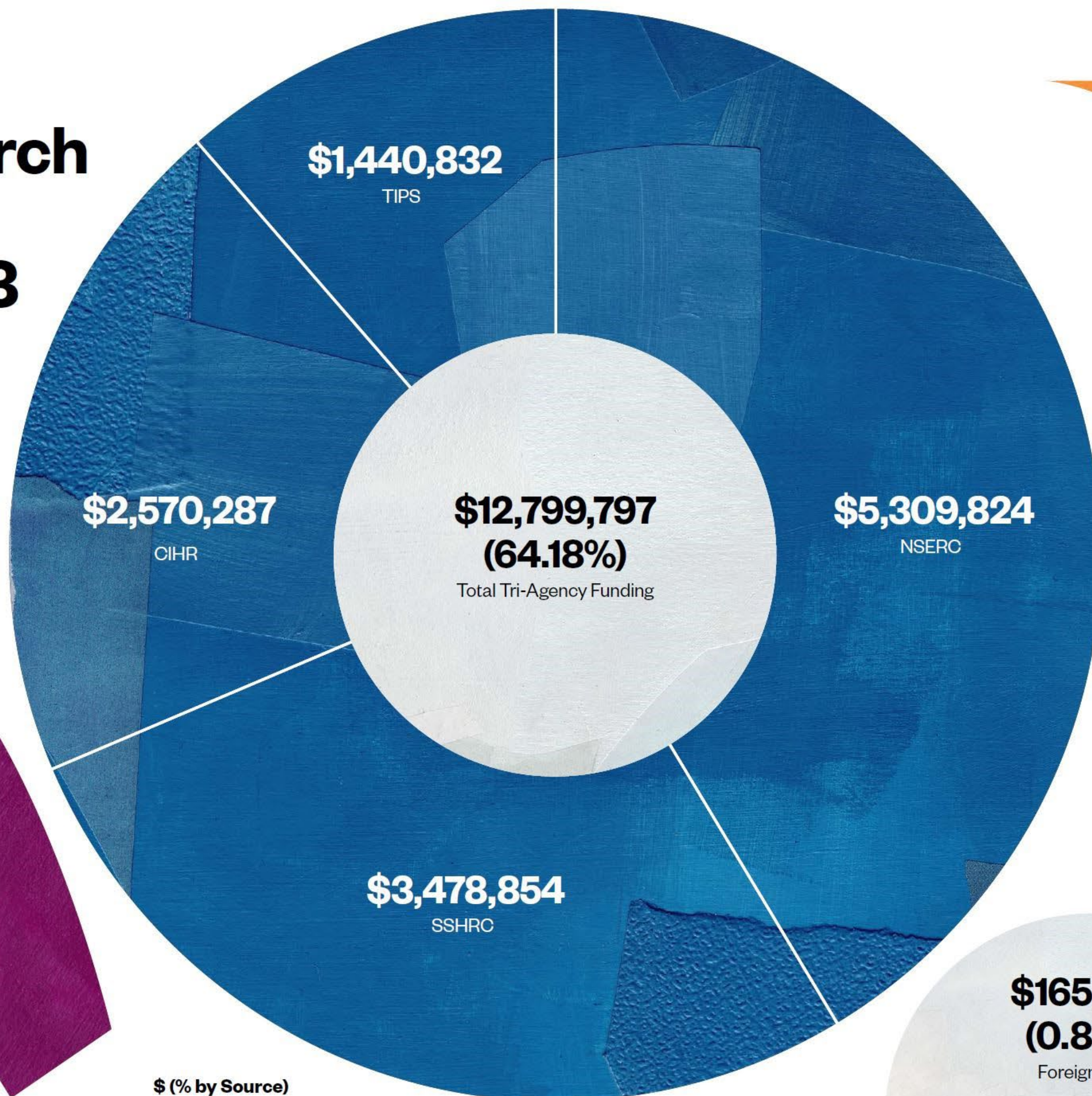
Building research connections and communities

2023-2024
Annual Report

Impact By Numbers

Highlighting the impact of our research

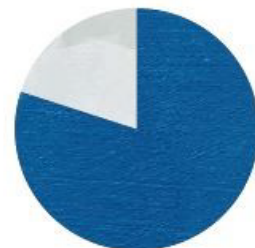
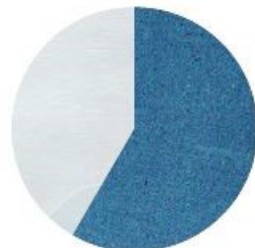
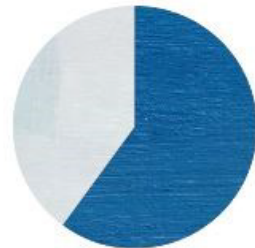
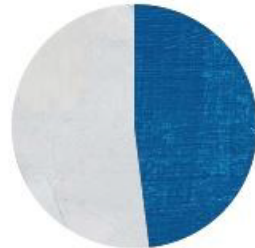

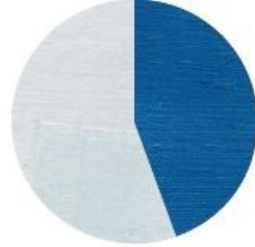
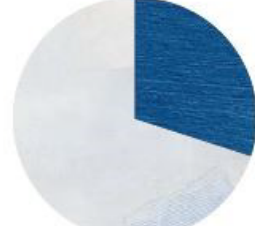
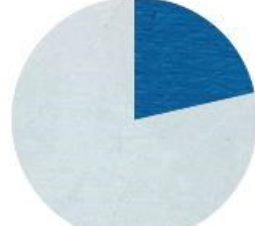
Total Research Funding: \$19,944,083




\$ (% by Source)

Grant Success

Funding rates for the most competitive Tri-Agency grants from the federal government

2023-24 TOTALS	U OF T SCARBOROUGH	NATIONAL
NSERC Discovery Grant	80% 	58.40% 
SSHRC Insight Development Grant	60.20% 	48.10% 
SSHRC Insight Grant	33.30% 	44.50% 
CIHR Project Grant	30% 	21.50% 

2023-24 TOTALS	
Supervisions by U of T Scarborough Faculty	1,009
	 <ul style="list-style-type: none"> 119 Masters Students 643 Doctoral Students 175 Post Doctoral Fellows
Research Faculty	321
Published Journal Articles	456

Initiatives & Partnerships

Advancing areas of importance and long-term goals

Research centers and institutes grow at UTSC

U of T Scarborough is the proud home of several cutting-edge interdisciplinary research centres, institutes and extradepartmental units. These include, for example, the Centre for Global Disability Studies, Culinaria Research Centre, and SoundLife Scarborough, representing initiatives across the arts, humanities, social sciences and sciences. This past year saw three new institutes added to this rich and exciting network of innovative research and scholarship.

SDGs@UofT: Creating an equitable and sustainable future

Institutional
Strategic
Initiatives



The Environmental and Related Technologies Hub (EaRTH District)



**CENTENNIAL
COLLEGE**



U of T Scarborough has partnered with **Centennial College, Ontario Tech University, Fleming College** and **Trent University** to establish the Environmental and Related Technologies Hub (Earth District). The Earth District is committed to fostering a vibrant ecosystem of collaboration, research, education, and commercialization, aimed at driving sustainable technology sectors, prioritizing local community well-being, and catalyzing economic growth.

Earth District is forming strategic partnerships with industry, government and Indigenous communities to create a positive impact both locally and globally.

In March 2023, Earth District received [\\$500,000](#) from the Ontario Vehicle Innovation Network (OVIN) to develop the Earth Switch Program. This program involved 40 external partners and introduced more than 4,200 students — from grades 10–12 as well as post-secondary students in participating colleges and universities — to new career opportunities in the transportation and mobility sector, with a focus on vehicle innovation and electric vehicles.

Earth District signed its first joint memorandum of understanding with Alstom, a global leader in smart and sustainable mobility, on October 30th, 2023. The goal is to create new learning, research and work opportunities in the mobility sector. This partnership will help develop the talent Ontario and Canada need to deliver sustainable mobility solutions critical to tackling the climate crisis, such as the electrification of regional rail systems.

U of T Scarborough's leadership in Earth District helps increase the visibility of the campus's expertise in environmental research and offers to the campus research community new opportunities for collaborations across sectors.

Work with anchor institutions

Ontario Shores Centre for Mental Health Sciences



↑

Ontario Shores x The Hub Hackathon for Mental Health & Innovation, March 2023

New joint facility at the Toronto Zoo will offer students, faculty more opportunities for hands-on learning and research



Clusters of Scholarly Prominence Program (CSPP)

Sam Ibrahim Centre

for Inclusive Excellence in Entrepreneurship, Innovation and Leadership

Our Start-Up Stats

Combined Revenues and Investment of The Hub/SICIEEIL Start-ups:

\$100M+

University Students Participated in Hub Events:

5180

Total companies in residence

127

Existing

64

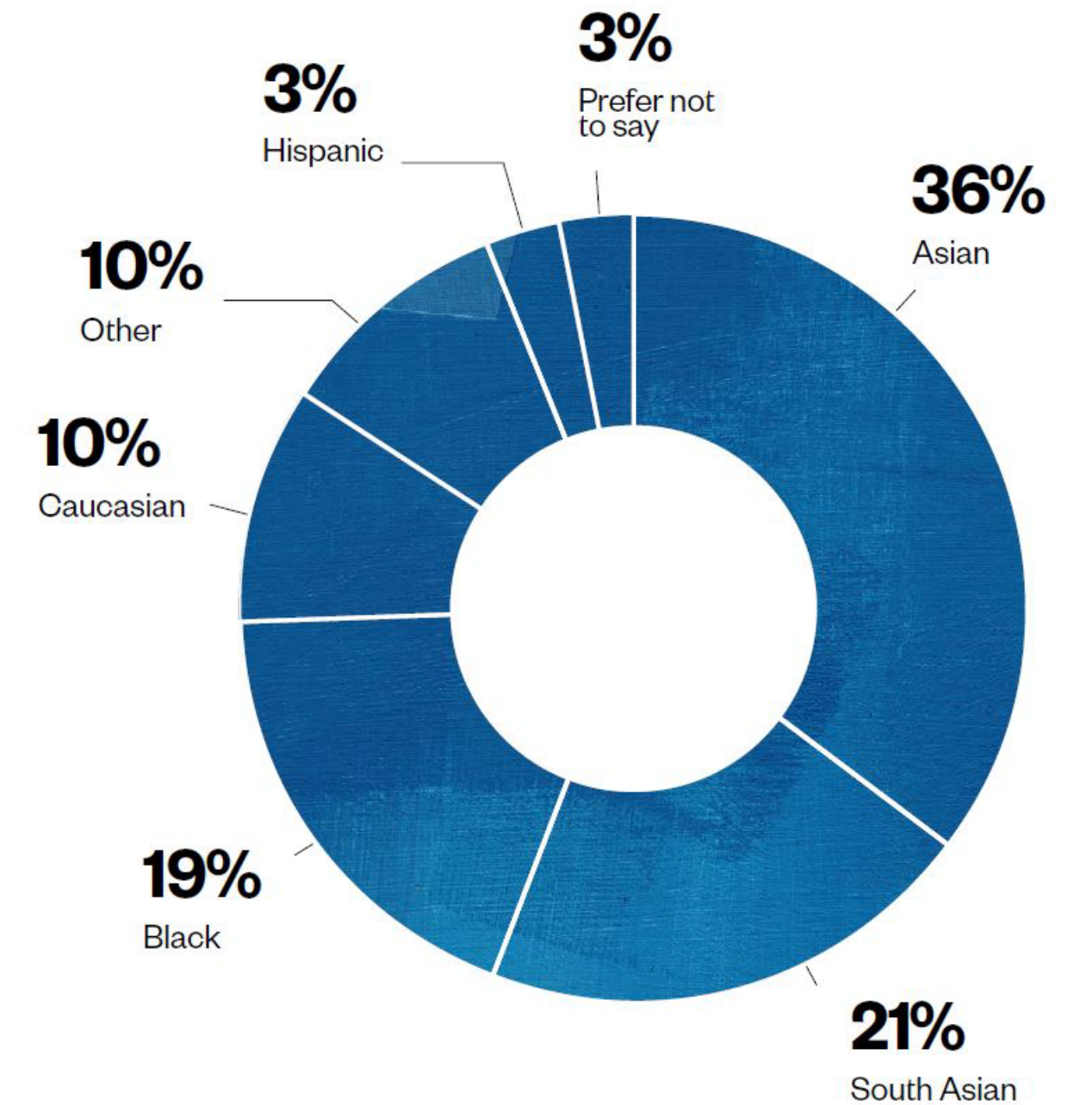
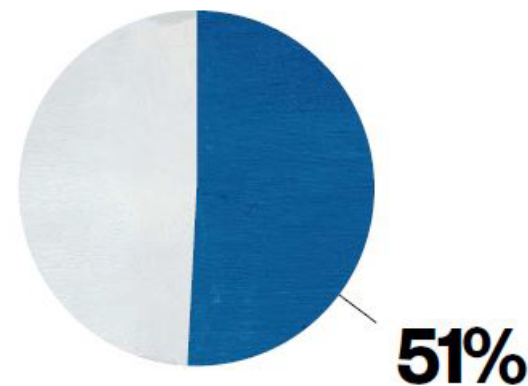
New companies

51

Equity, Diversity and Inclusion (EDI) Startup Matrix

Based on self-reported intake surveys, founders identified their ethnicity. Among the participants, 90% of founders identify as people of colour.

Total percentage of companies with women founders



The background features a collage of overlapping paper scraps in various shades of teal and light blue. The scraps are layered, creating a textured, layered effect. The main title is centered over this background.

Our Research

Impactful research drives deeper understanding

Professor awarded \$8M in federal funding to make Canada's transition to clean energy more equitable



Patricia Romero-Lankao,
Professor, Department
of Sociology

U of T Scarborough researcher discovers critically endangered bats living in two new locations

The Jamaican flower bat is so endangered, it was believed that only a small colony of roughly 500 existed, all living in a single cave. Until now.

An international team, including a PhD student from U of T Scarborough, recently made a groundbreaking discovery of two new habitats of the flower bat. The research, published in *Oryx—The International Journal of Conservation*, shows the bat living in Jamaica's Green Grotto Caves and Rock Spring Caverns.

"It's exciting that we found them in two new locations, but it doesn't mean they still aren't in danger of going extinct," says **Phillip Oelbaum**, a PhD student in Professor **Ken Welch's** lab in the Department of Biological Sciences and lead author of the study. "It also doesn't mean they should be delisted as a critically endangered species. It just shows how little we know about them and that more research is needed."

It's unknown why there are so few Jamaican flower bats in existence. The bat is found only in Jamaica and its numbers may have always been low. It may also be threatened due to habitat disturbance from bauxite mining, predation from cats and guano harvesting. Guano (bat feces) is a highly sought after fertilizer because of its high nitrogen and phosphorus content.

The species was declared extinct until 2010, when a small colony was found in Stony Hill Cave. Finding these new breeding grounds raises hope for the bat's survival and conservation, says Oelbaum.



↑ **Damion Whyte, Phillip Oelbaum, and Ronnie Hall** during recent field work in Jamaica.



↑
Jamaican flower bat

Jamaican flower bats found in Stony Hill Cave, Jamaica.



Afrosonic Innovation Lab provides a thriving space for music of the African diaspora

Launched in 2021, the Afrosonic Innovation Lab works to explore and experiment with Black music and sonic cultures from across the African diaspora. It is led by **Mark V. Campbell**, an Assistant Professor in the Department of Arts, Culture and Media.

“The mission around the lab is to be open and experimental around creating music, and working with soundscapes and sound in ways that can connect theory to practice,” Campbell says.

Situated in the Department of Arts, Culture and Media, the Afrosonic Innovation Lab encourages students to not only create music but conduct research to gain and mobilize knowledge about the role of music in the African diaspora. It also fosters a collaborative environment where researchers can think beyond the silos of disciplines.

The lab hosts a variety of events and programming in Scarborough and downtown Toronto throughout the academic year, including a speaker series and an artist residency. Programming in past years has brought new voices to Toronto through the musical world of the Spanish-speaking Caribbean and celebrated the foundations of sound system cultures in Toronto.

Guests from the speaker series in 2022 included Grammy-nominated artists Yosvany Terry and percussionist Magdelys Savigne — who are both from Cuba — as well as Welmo Romero-Joseph, an Afro-Puerto Rican poet and rap artist. Guests in 2023 included hip-hop scholar Dr. Shanté Paradigm Smalls and poet NourbeSe Philip.

Meanwhile, the lab’s 10-month artist residency program gives creatives an opportunity to experiment and challenge themselves by building a project that utilizes academic research and creation — which can range from performance to new music or archival research. The lab also takes up artist residencies to advance creative projects based on sound, music or performance in both local and international contexts.



We also illuminate the very rich and multifold ways that sound and music have been critical to the sustenance, the survival and the thriving of populations of Africans forcibly displaced from the continent.



Mark V. Campbell,
Assistant Professor,
Arts, Culture and Media



Faculty & Student Awards

Celebrating our achievements

Current Canada Research Chairs at U of T Scarborough



Daniel Bender
Historical and Cultural Studies, CRC in Global Culture, 2014-2028



Brian Connelly
Management, CRC in Integrative Perspectives on Personality, 2016-2026



Caroline Hossein
Global and Development Studies, CRC in Africana Development and Feminist Political Economy, 2022-2027



Cendri Hutcherson
Psychology, CRC in Decision Neuroscience, 2018-2028



Marney Isaac
Physical & Environmental Sciences Centre for Critical Development Studies, CRC in Agroecosystems and Development, 2013-2024



Kagan Kerman
Physical & Environmental Sciences, CRC in the Bioelectrochemistry of Proteins, 2016-2026



Bianca Schroeder
Computer and Mathematical Sciences, CRC in Data Centre Technologies, 2014-2024



Bebhinn Treanor
Biological Sciences, CRC in Spatially Resolved Biochemistry, 2016-2026



Myrna Simpson
Physical & Environmental Sciences, CRC in Molecular Biogeochemistry, 2019-2026



Hilary Brown
Health and Society, CRC in Disability and Reproductive Health, 2019-2026

New Fellows of the Royal Society of Canada



Bálint Virág, Professor in the Department of Computer and Mathematical Sciences

A world leader in probability theory, specifically random walks and random matrices, Bálint Virág was also honoured this year with the Cathleen Synge Morawetz Prize from the Canadian Mathematical Society for a recent breakthrough in the field of probability studies co-authored with Prof. **Duncan Dauvergne** (UTM).



Lucan Ahmad Way, Professor in the Department of Political Science

Lucan Way is one of the world's foremost experts on democracy, particularly the relationship between democracy and its antithesis, dictatorship. He was also awarded the position of Distinguished Professor of Democracy at the University of Toronto this year in recognition of his extraordinary scholarly contributions.

New Members of the RSC College of New Scholars, Artists and Scientists



Stefanos Aretakis, Associate Professor in the Department of Computer and Mathematical Sciences

Stefanos Aretakis is known for his work proving rigorous mathematical theorems that provide fundamental insights into the structure of the natural world. He pioneered a groundbreaking discovery of a novel instability of black holes, known as the *Aretakis instability*, which is now routinely studied by physicists and theoreticians of gravitational wave astronomy.



Caroline Shenaz Hossein, Associate Professor in the Department of Global Development Studies

Caroline Hossein is the founding member of the international Diverse Solidarity Economies Collective (DISE), a group of feminist political economists writing on people-led economies. Her work, including her latest book *The Banker Ladies*, highlights the need to amplify culturally diverse community economies to counter the systemic exclusion of marginalized populations.

Connaught New Researcher Award Winners



Ina Anreiter

Assistant Professor, Department of Biological Sciences
The Role of m6A mRNA Methylation in Food Choice, Metabolism, and Obesity



Roger Antabe

Assistant Professor, Department of Health & Society
Improving Access to HIV/AIDS Services for Racialized Populations and Immigrants of Colour in Canada



Vinicius De Aguiar Furuie

Assistant Professor, Department of Anthropology,
Collaborative Research in Amazonia



Rafael Do Nascimento Grohmann

Assistant Professor, Department of Arts, Culture and Media
Worker-Owned Platforms and Gender: Rider and Tech Co-ops in Brazil and Argentina



Suleyman Dost

Assistant Professor, Department of Historical & Cultural Studies
Materializing Islamic Origins: Using Archaeology and Epigraphy for a Religious History of Arabia before Islam



Esmat Elhalaby

Assistant Professor, Department of Historical & Cultural Studies
Parting Gifts of Empire: The Idea of Decolonization and the Making of the Global South



Lisa Janz

Assistant Professor, Department of Anthropology
A Continuum of Human-Animal Relationships on the Mongolian Steppe



Yoshio Nozawa

Associate Professor, Department of Management
The Effect of Trading Platforms on Bond Prices



Walter Tavares

Assistant Professor, Department of Health & Society
Building Capacity in Community-Based Health Care and Social Services



Linbo Wang

Associate Professor, Department of Computer and Mathematical Sciences
Statistical Methods for Causal Inference from Observational Studies

Research Events

A recap of events hosted this year

The Heart innovation district, centered on building healthy communities



U of T Scarborough is leading the creation of an eastern GTA Health Innovation District — also known by the acronym HeART, for Health and Resilience Together — that will involve a consortium of academic institutions, hospitals, health providers and community organizations. These partners will work to drive changes to the healthcare system that aim to reduce long-standing health inequities within the region, with a particular focus on Scarborough's priority neighbourhoods.

To create and further strengthen connections between these diverse stakeholders, U of T Scarborough and Scarborough Health Network hosted the Building Communities through Inclusive Health conference in October 2023. Over two days, hundreds of researchers, community members and health care workers from across the GTA gathered and presented creative approaches to bridging inequity. Through panel discussions and workshops, participants brainstormed practical next steps to overcome equity gaps and barriers. Some highlights included a keynote speech by Professor Patricia Houston, Vice Dean, Medical Education at the Temerty Faculty of Medicine on the urgent need to promote health equity and a panel session discussing paths towards inclusive health.



[Building Communities through Inclusive Health](#)

IMPACT

INTENTIONALLY ENGAGE with UNDERSERVED COMMUNITIES

HISTORY OF PESI

IRENA CREED

PUBLICLY ENGAGED SCHOLARSHIP & INNOVATION

METRICS + IMPACT



OUR WORK WAS INVISIBLE

PESI HELPS TO MEASURE OUR IMPACTS

TANGIBLE IMPACTS FOR SOCIETY



COMMUNITY OF PRACTICE

SCHOLARLY EXCELLENCE

INCLUSIVE RESEARCH ECOSYSTEM

CO-PRODUCTION & MOBILIZATION UNIT

COLLABORATION

PUBLIC

CO-CREATING

PRIORITY SETTING

TRUST, TRANSPARENCY and CARE



VALUES

① WHAT ARE YOUR PERSONAL VALUES



PEOPLE CENTRED

BUILDING TRUST

COMPENSATION FRAMEWORK PARTNERS GET PAID



ANTI OPPRESSIVE

FUNDING

INTEGRATE STUDENT EXPERIENCE

INCREASE PUBLIC AWARENESS

HOW TO ARTICULATE YOUR VALUES

SHARED INTERESTS

④

WORK WITH COMMUNITIES

INVESTED in PEOPLE

SELF DETERMINATION

ARE WE SAFE TO BRING OUR VALUES IN TO THE UNIVERSITY?

THIS WORK IS ABOUT HOPE

LONG TERM SUSTAINABILITY

IMPORTANCE OF RESOURCES

CREATIVITY



COLLABORATION

COORDINATION

HUMAN CENTRED

LEARN the NATURE OF YOUR OWN GIFTS

LIBRARY

FARM INVEST



PEOPLE TRAINING COMPENSATION for PARTNERS

MEANINGFUL WORK

INTERCONNECTED

UTSC



ENGAGE

COMMUNITY ENGAGEMENT FRAMEWORK



SOCIAL JUSTICE



PARTNERSHIP

SINCE 2010 SUCCESS

② BUILDING TRUST

COMPENSATION FRAMEWORK PARTNERS GET PAID



PEOPLE CENTRED

UNDERSTANDING

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LIBRARY

FARM INVEST



PEOPLE TRAINING COMPENSATION for PARTNERS

MEANINGFUL WORK

INTERCONNECTED



COLLECTIVE ACTION

MOVING the NEEDLE!

HOW DO PARTNERS ENGAGE?



REVISIT, RETHINK, EVOLVE

PAUSE. HAPPENS THROUGHOUT the WORK we DO BUT BE RESPONSIVE

Looking Ahead

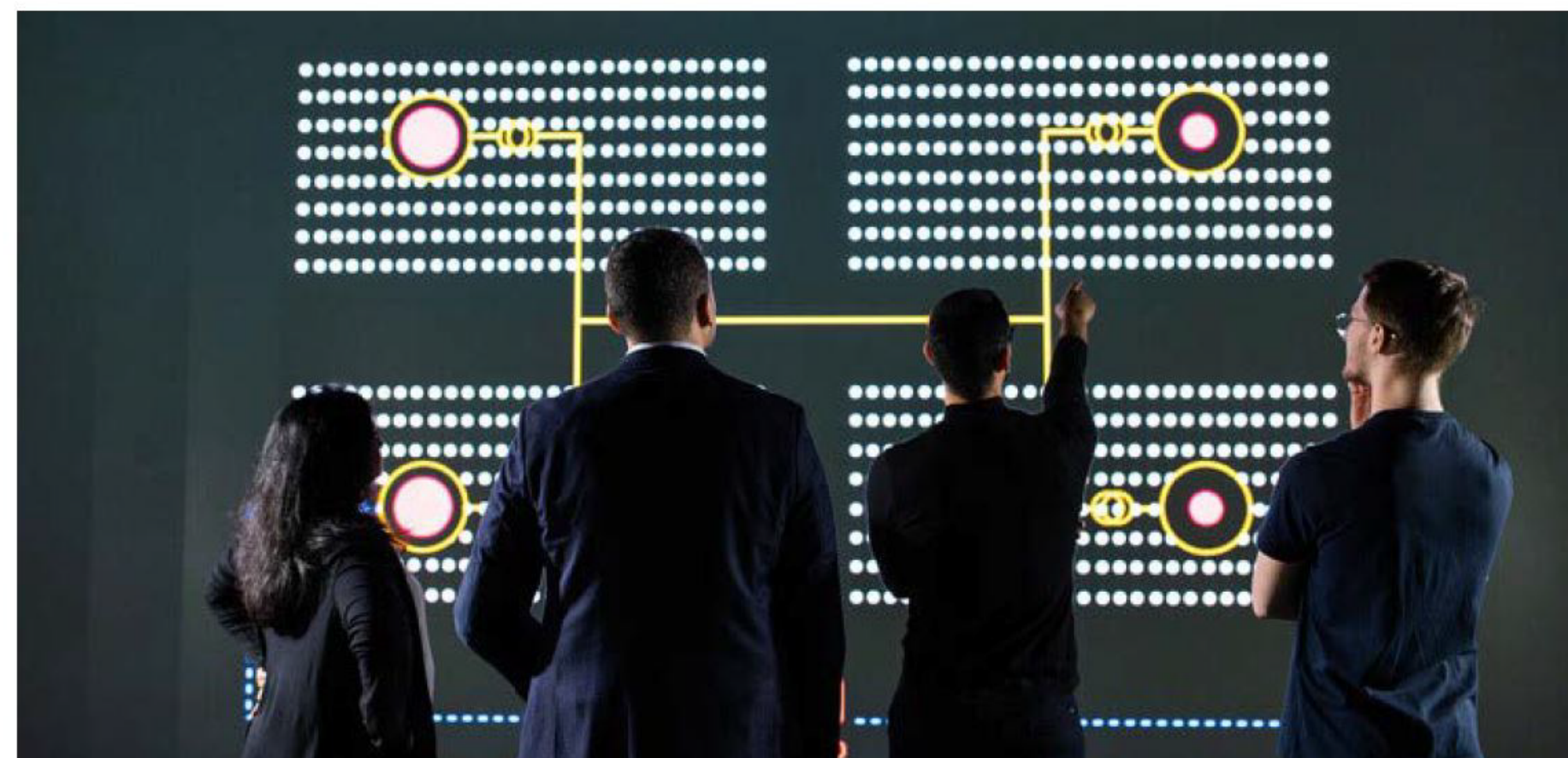
Exciting new initiatives at U of T Scarborough

Future Directions: Equity, Diversity and Inclusion in the Research Life Cycle

In alignment with U of T Scarborough's strategic institutional and research priorities, the **Equity, Diversity, and Inclusion Office (EDIO)** and the **Office of the Vice-Principal Research & Innovation (OVPRI)** are collaborating to supporting Equity, Diversity and Inclusion (EDI) within and across all research practices. In line with these commitments, we have jointly drafted a **Resource Directory for Embedding Equity, Diversity and Inclusion in the Research Cycle**.

Initially conceptualized and prepared by Nicola M. Dove (Special Project Officer, EDIO), this resource is being further developed to direct researchers/research teams to resources that will enable them to productively embed EDI into their research practices. These practices include, but are not limited to:

- **Research Design**, i.e., how does/should social location (race, gender, age, ability, nationhood, sexuality) factor into my research questions and design?
- **Setting up a Research Team**, i.e., how do we employ equitable and inclusive recruitment, screening, interviews, selection, and hiring strategies?
- **Onboarding and Training**, i.e., how do we identify barriers to participation and implement strategies to support full participation of all team members throughout the research process?
- **Partnerships and Community Engagement**, i.e., how do we ensure and privilege community voices throughout the research process?
- **Knowledge Mobilization**, i.e., what diverse pathways for research impact can we pursue that support and enable academic and non-academic communities?



While this resource directory is still in development, it will soon be available to all U of T Scarborough researchers and community members who are seeking expansive knowledge, ideas, and practices regarding EDI commitments in their research. In addition to circulating the resource, the OVPRI is dedicated to offering webinars and departmental visits in the upcoming academic year(s) to ensure that researchers feel supported in designing and carrying out equitable, diverse, inclusive, and socially just research. More information to come!



This initiative will offer important resource to researchers across the tricampus and beyond, with tools to achieve inclusive excellence by embedding EDI throughout the research life cycle.

Congratulations and thank you.

Our thanks go to everyone on staff and working in collaboration with the Office of the Vice-Principal Research & Innovation. For this annual report, we worked together creatively as a team to tell the stories of our work and the many successes of the vibrant research community at U of T Scarborough. Contributions to the 2023-2024 OVPRI Annual Report were made by every member of our staff, including Bahar Barkhordarian, Meredith Best, Hayley Brooks, Andrea Charise, Cintia Cristia, Ailen Cruz, Feihan Dai, Jason Darby, Donovan Dill, Joel Faber, Nicoda Foster, Janet James, Francesco Leri, Anika Mifsud, Seymone Mohammed, Alison Mountz, Kristine Peruzzi, Brice Rousseau, Jenefer Savoeng, Mark Schmuckler, Carmen Siu, Komal Tariq, Michelle Wodzak, Julia Gruson- Wood. We also thank previous OVPRI leadership and staff for their contributions, including Irena Creed, Ariella Lukach, Sharon George, Joshua van Ry, Jovana Drinjakovic, and Suhail Asrar. Thanks also to Simone Castillo, Sarah Forbes, Imre Szeman, Sergio Montero, Charles Trick, Patricia Romero-Lankao, and Erica Di Ruggiero. Finally, we gratefully acknowledge U of T and U of T Scarborough Communications for use of images and stories.

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SOCIAL

#UTSCresearch
@UTSCresearch



OFFICE OF THE VICE-PRINCIPAL
RESEARCH & INNOVATION

Summary Statistics

	2023-24
Research Funds (Number of Grants and Contracts)	327
Funding Applications	306
Total Funding Sponsors	58
Total Private Sector Partners	6
Total Number of Funding Programs	85

