Office of the Vice-Principal Research & Innovation's Annual Report (April 2022-March 2023):

Transforming UTSC

Meet THE OVPRI TEAM!

SENIOR LEADERSHIP





Irena Creed VPRI

Grace Skogstad Interim AVPRI-SIP



Shaun Young DIRECTOR

ADMINISTRATION

RESEARCH ACCELERATION



TBD Suhail Asrar EA to the VPRI MANAGER OF OPERATIONS & PROJECT MANAGEMENT



Carmen Siu Kristine Peruzzi **RESEARCH OPERATIONS &** ASSISTANT TO VPRI FINANCIAL OFFICER



Sharon George MANAGER, RESEARCH **SERVICES & PARTNERSHIPS**



GRANT DEVELOPMENT

Anika Mifsud Jovana Drinjakovic **RESEARCH ADMINISTRATION** OFFICERS



TBD **EDITORIAL & PROPOSAL** DEVELOPMENT OFFICER



TBD MANAGER, RESEARCH ACCELERATION



Cintia Cristia Fay Dai STRATEGIC RESEARCH DEVELOPMENT OFFICERS





Brice Rousseau Jason Darby **RESEARCH PARTNERSHIP & BUSINESS** DEVELOPMENT OFFICERS





RESEARCH AWARDS & HONOURS OFFICER



Joshua Van Ry **RESEARCH SERVICES** OFFICER

VIVARIUM



Michelle Wodzak DIRECTOR



Donovan Dill **OPERATIONS LEAD**



Jenefer Savoeung HUB PROGRAM COORDINATOR

UTSC's vision is to constructively disrupt the status quo, connect the world, and advance transformative change for the good of all.

UTSC is transforming the campus to improve the health of people and the planet by integrating the UN SDGs into the DNA of our campus.



Five design aspirations are guiding this transformation.

- 1. Leverage our place
- 2. Model the way
- 3. Capitalize on strengths
- 4. Empower action
- 5. Catalyze Social Change

U of T ranked 2nd in the world in first-ever QS sustainability ranking!



We recently celebrated our successes in sustainability at UTSC.



<u>One</u> way is to help achieve the transformation is via the "<u>institutes for Resilient and Inclusive</u> <u>Societies and Ecosystems."</u>



We engaged in a number of conversations with the UTSC community about iRISE and its inaugural institutes.

Institute for Environment, Conservation, & Sustainability



Imre Szeman, Director, Professor, Human Geography

Institute for Inclusive Health & Well-Being

irise



Charles Trick Interim Director, Professor, Health and Society





Institute for Inclusive Economies & Sustainable Livelihoods



Caroline Hossein Interim Director, Associate Professor, Global Development Studies



Sergio Montero Munoz Incoming Director Associate Professor, Human Geography

We estimate **829** members of the UTSC campus community and the broader U of T community were consulted

We also continued conversations on a proposal for an institutional strategic initiative (ISI) on the SDGs

SDGs @ U of T

Academic Lead: Erica Di Ruggiero



Associate Professor, Dalla Lana School of Public Health, Health and Society



We will be seeking approval for this ISI at the Central Leadership Table on May 4, 2023

The SDGs@UofT will be part of iRISE



The SDGs@UofT will be part of iRISE



We are working hard to further transform UTSC.

Proposed Canada Excellence Research Chair (CERC) in Sustainability Transitions

Dr. Patricia Romero-Lankao



Proposed Research Program: JUSTICE: Just Urban Sustainability Transitions Centred in Equity

Paty is joining UTSC as of July 1, 2023, as a Professor in the Department of Sociology

We are working hard to further transform UTSC.

Community



We've invested in new clusters of scholarly prominence.

2022



Water Pathways Cluster Leads: Mathew Wells (Physical & Environmental Sciences) & Cosima Porteus (Biological Sciences) Funding: \$600,000



Flourish: The Arts and Social Wellness Cluster

Cluster Lead: Andrea Charise (Health & Society) Funding: \$528,440



The Centre for Environmental Research in the Anthropocene

Cluster Leads:

Marc Cadotte (Biological Sciences) & Myrna Simpson (Physical & Environmental Sciences) Funding: \$580,000



The Clinical Research and Evaluation Cluster Cluster Leads:

Michael Best (Psychology) & Zindel Segal (Psychology) Funding: \$600,000



Urban Just Transitions from Scarborough to the Globe Cluster Leads:

Matthew Hoffmann (Political Science) & Laura Tozer (Physical & Environmental Sciences) Funding: \$590,040



Suburban Mobilities Cluster Cluster Lead: Steven Farber (Human Geography) Funding: \$600,000

CONNECTING COMMUNITIES TOWARD FOOD SOVEREIGNTY

Sustainable Farming and Food Futures Cluster

Sustainable Food and Farming Futures Cluster Cluster Leads:

Jayeeta Sharma (Historical and Cultural Studies) & Marney Isaac (Physical & Environmental Sciences, Global Development Studies) **Funding:** \$1,200,000

We continue to support our faculty and research community.



We are also supporting the creation of new UTSC Core Facilities



We invested over \$2M in UTSC Core Facilities to ensure our researchers had the needed infrastructure, tools, and techniques.



UTSC 2022-23 total annual research funding was \$16.9 million*, with ≈52% of it coming from Tri-Agency sources.



Note: 2022-23's final figures are pending upcoming competition results. Data source: VPRI Dashboards, April 2023



SSHRC Insight Grant



NSERC RTI Grant National 29% 33%

SSHRC Connection Grant



We are pursuing areas where we can reach new heights.



Note: Faculty Participation data is currently only available until 2020-21.

*CRC-ineligible Tri-Agency Programs: <u>https://www.chairs-chaires.gc.ca/program-programme/research_funding-financement_recherche-eng.aspx#exclusions</u> Data source: VPRI Dashboards, March 2023

With these supports, UTSC faculty's research productivity continues to increase.



* : 2022-23's final figures are pending upcoming competition results Data source: VPRI Dashboards, April 2023.

Our 315 research faculty were awarded 347 grants.

Total \$ of newly awarded grants variable, but on the rise.



We continue to support our innovators through the campus accelerator, The Hub.



The Hub continues to stimulate the growth of trailblazers in the innovative space.



Neurokin

Maria Khandaker (top) and Shupa Rahman, co-founders of Neurokin

A one-stop information shop for marginalized neurodivergent people who identify as women, 2SLGBTQ+ and/or people of colour.



mhapy Chijindu Ukagwu, founder of mhapy.

The company created a chatbot named Ruby that tracks users' mental health symptoms the way nurses do And we are working to further enhance our innovation ecosystem.

A key element of these efforts is a proposal for a new Centre of Inclusive Excellence in Innovation, Entrepreneurship and Leadership (CIEIEL)

Life cycle of developing of an entrepreneur				
Design thinking to solve challenges	Formation	Incubation	Acceleration	Investment
Capstone course (e.g., top 50 students across UTSC)	(teaching)	(coaching)	(coaching)	(supporting)

We and our partners are invested in the future of work....



SWITCH: EaRTH flips the switch for cleaner automotive technologies and mobility solutions

Promoting careers in the automotive and mobility sector to high-school and postsecondary students







... and are supporting the development of the next generation of workers.

PETERBOROUGH-

KAWARTHA LAKES

Trent University, Fleming College

240 Grades 10-12 students,

200 Post-secondary students,

4 Internships

EaRTH SWITCH: \$1.3M PROJECT SUPPORTED BY \$500,000 OVIN FUNDING

East TORONTO

University of Toronto, Centennial College 240 Grades 10-12 students, 200 Post-secondary students, 22 Internships

OSHAWA-PICKERING

Ontario Tech University 120 Grades 10-12 100 Postsecondary 4 Internships

We are engaging the community to advance scholarship and innovation.

Engaged Scholarship: Towards Inclusive Excellence in Research



PESI is diverse in practice, focus and scope.



PUBLICLY-ENGAGED SCHOLARSHIP

FOUNDATION: Cultural DISCIPLINE(S): Arts & Humanities TERMINOLOGY: Public Scholar

COMMUNITY-ENGAGED SCHOLARSHIP

FOUNDATION: Community Capacity Building DISCIPLINE(S): Public Health, Extension TERMINOLOGY: Community Scholar

CIVICALLY-ENGAGED SCHOLARSHIP

FOUNDATION: Democratic, Political Participation DISCIPLINE: Education, Curricular TERMINOLOGY: Civic Scholar

CRITICALLY-ENGAGED SCHOLARSHIP

FOUNDATION: Social Justice, Anti-Racism DISCIPLINE(S): Ethnic, Race, Legal, and Women's Studies TERMINOLOGY: Activist Scholar

Blanchard & Furco, 2021

Our faculty are engaging in more international research.

Active Awards by Country (2022-23)



- Our faculty is actively engaged in international research
- Top research locations
 - United States 43
 - Great Britain 8
 - China 7
 - Costa Rica 5
 - India 5
 - France 4
 - Belgium 3
 - Ghana 3
 - Uganda 3
 - Belize 2

We continued our Celebration of Research Excellence Lecture Series.



Mark Campbell Arts, Culture and Media



Andrea Charise Health & Society



Artur Izmaylov Physical & Environmental Sciences



Scott Maclvor Biological Sciences



Alan Saks Management



Jessica Wilson Philosophy

We awarded our high-performing faculty.

UTSC Principal's Research Award



Mark Schmuckler Psychology

UTSC Research Recognition Award



Cendri Hutcherson Psychology

UTSC Pre-Tenure Faculty Research Awards



Cassandra Hartblay Health and Society



Sara Saljoughi English



Christina Guzzo Biological Sciences



Oleksandr Voznyy Physical & Environmental Sciences

UTSC Research Excellence Faculty Scholars



Patrick McGowan **Biological Sciences**



Hanno Rein Physical & Environmental Sciences



Notisha Massaquoi Department of Health & Society

2023 YWCA Toronto Women of Distinction Award for fighting inequities in health-care

A community-based health researcher who is interrogating anti-Black racism of those navigating institutional structures and systems in Canada.



Wisdom Tettey Principal UTSC, Department of Political Science African Scholars Award Distinguished Influencers Award

Maydianne Andrade Department of Biological Sciences African Scholars Award Distinguished African-Caribbean Award



Ashton Anderson Department of Computer and Mathematical Sciences

CS-CAN-INFO-CAN Outstanding Career Computer Science Research Prize

Computational social scientist who has pioneered computational methods to quantify online phenomena including **political polarization.**



Alex Voznny Department of Physical and Environmental Sciences

Chemical Institute of Canada 2023 Strem Award

Chemist who has advanced our understanding of artificially grown **colloidal nanocrystals**, which are particularly useful in LEDs, solar cells and certain types of lasers, among other applications.



Myrna Simpson Department of Physical and Environmental Sciences

Geochemical Society Clair C. Patterson Award

Environment scientist who is using nuclear magnetic resonance (NMR) and mass spectrometry to address knowledge gaps related to global environmental change, pollutants and contaminants.



Aisha Ahmed Department of Political Science

Royal Society of Canada College of New Scholars, Artists and Scientists

Political scientists who focuses on the intersection of Islamists and economies. She was named one of Toronto's most inspiring women in 2017 by Post City Magazine and won Muslim Woman of the Year at the Muslim Awards of Excellence MAX Gala a year later.



Diana Valencia Department of Physical and Environmental Sciences

Guggenheim Fellowship

Physical scientist who studies the interior of planets, its composition and how it evolves – including ways in which it might enable the emergence of life.

We are focused on building regional innovation districts, including EaRTH and HeART.











IVERSITY



HEALTH SCIENCES CENTRE

As we look forward to the next year, we have selected the following strategic priorities to further advance the research vision and mission of the campus.



Complete the optimization of the organization of the OVPRI.



Review research institutes, centres and clusters and core facilities to ensure they conform to our guidelines.



Complete a space audit to and develop a plan to support the needs of UTSC

Pursue CFI major infrastructure grants.



Create & operationalize a new innovation lifecycle website that provides a "one-stop shop" for fundamental information related to the innovation enterprise



Launch the Centre for Inclusive Excellence in Innovation, Entrepreneurship and Leadership



Develop a strategic action plan for internationalization.



Develop a strategic action plan for iRISE



Develop a strategic plan for the National Academy for Inclusive Leadership.



Build and put into action a road map for the 2025 Scarborough Global Summit.



Develop a plan to have a United Nations University node located at UTSC