

FOR INFORMATION

PUBLIC

OPEN SESSION

TO:	UTSC Academic Affairs Committee
SPONSOR: CONTACT INFO:	Irena Creed, Vice-Principal Research and Innovation, UTSC 416-208-4835, irena.creed@utoronto.ca or vpresearch.utscc@utoronto.ca
PRESENTER: CONTACT INFO:	See Sponsor
DATE:	April 13, 2023 for May 1, 2023
AGENDA ITEM:	2

ITEM IDENTIFICATION:

Annual Report of the Office of the Vice-Principal, Research and Innovation

JURISDICTIONAL INFORMATION:

Under section 5.7 of its Terms of Reference, the *“Committee receives annually, from the appropriate administrators, reports on services within its areas of responsibility, including research”*

GOVERNANCE PATH:

1. **Academic Affairs Committee [For Information] (May 1, 2023)**
2. Campus Council [For Information] (May 24, 2023)

PREVIOUS ACTION TAKEN:

No previous action has been taken on this item

HIGHLIGHTS:

This presentation for the Office of the Vice-Principal Research and Innovation (OVPRI) provides an update.

FINANCIAL IMPLICATIONS:

n/a

RECOMMENDATION:

Presented for information

*Annual Report of the Office of the Vice-Principal Research & Innovation
UTSC Academic Affairs Committee – May 1st, 2023*

DOCUMENTATION PROVIDED:

Power Point Presentation.

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



Ken Welch
Interim AVPRI-RFI



Shaun Young
DIRECTOR

ADMINISTRATION



Suhail Asrar
MANAGER OF OPERATIONS
& PROJECT MANAGEMENT



TBD
EA to the VPRI



Kristine Peruzzi
ASSISTANT TO VPRI



Carmen Siu
RESEARCH OPERATIONS &
FINANCIAL OFFICER

GRANT DEVELOPMENT



Sharon George
MANAGER, RESEARCH
SERVICES & PARTNERSHIPS



Jovana Drinjakovic
RESEARCH ADMINISTRATION
OFFICERS



Anika Mifsud
RESEARCH ADMINISTRATION
OFFICERS



TBD
EDITORIAL & PROPOSAL
DEVELOPMENT OFFICER

RESEARCH ACCELERATION



TBD
MANAGER, RESEARCH
ACCELERATION



Fay Dai
STRATEGIC RESEARCH DEVELOPMENT
OFFICERS



Cintia Cristia



Jason Darby

RESEARCH PARTNERSHIP & BUSINESS
DEVELOPMENT OFFICERS



Brice Rousseau

AWARDS & COMMUNICATION



TBD
RESEARCH AWARDS &
HONOURS OFFICER



Joshua Van Ry
RESEARCH SERVICES
OFFICER

VIVARIUM



Michelle Wodzak
DIRECTOR

THE HUB



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.

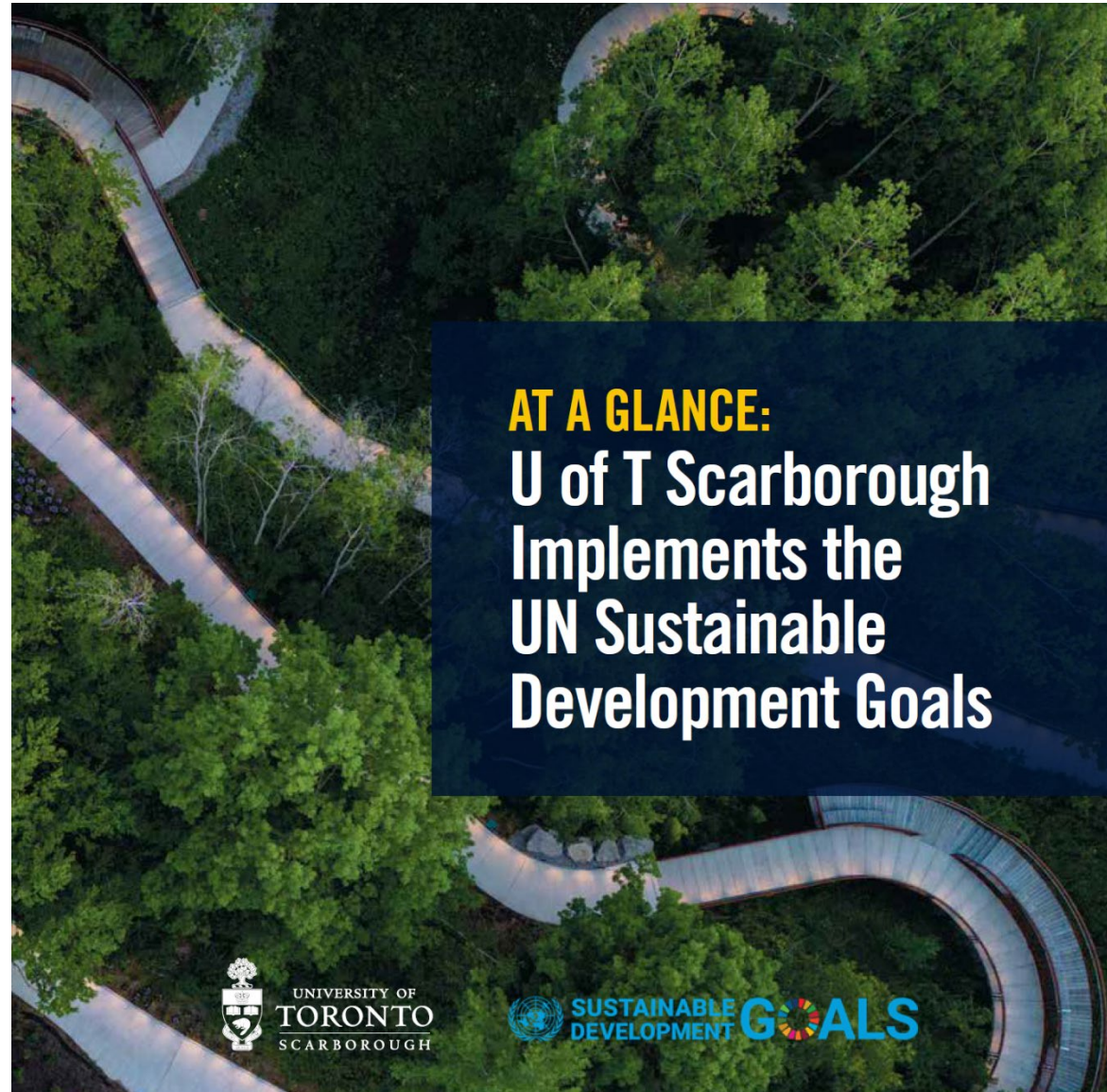
- 1. Leverage our place**
- 2. Model the way**
- 3. Capitalize on strengths**
- 4. Empower action**
- 5. Catalyze Social Change**

We are a global leader in sustainability!

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



We recently celebrated our successes in sustainability at UTSC.



AT A GLANCE:
**U of T Scarborough
Implements the
UN Sustainable
Development Goals**



**One way is to help achieve the
transformation is via the
“institutes for Resilient and Inclusive
Societies and Ecosystems.”**

iRISE

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

iRISE

Institute for Environment, Conservation, & Sustainability



Imre Szeman,
Director,
Professor, Human
Geography

Institute for Inclusive Health & Well-Being



Charles Trick
Interim Director,
Professor, Health
and Society



Allison Crawford
Incoming Director,
Associate 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

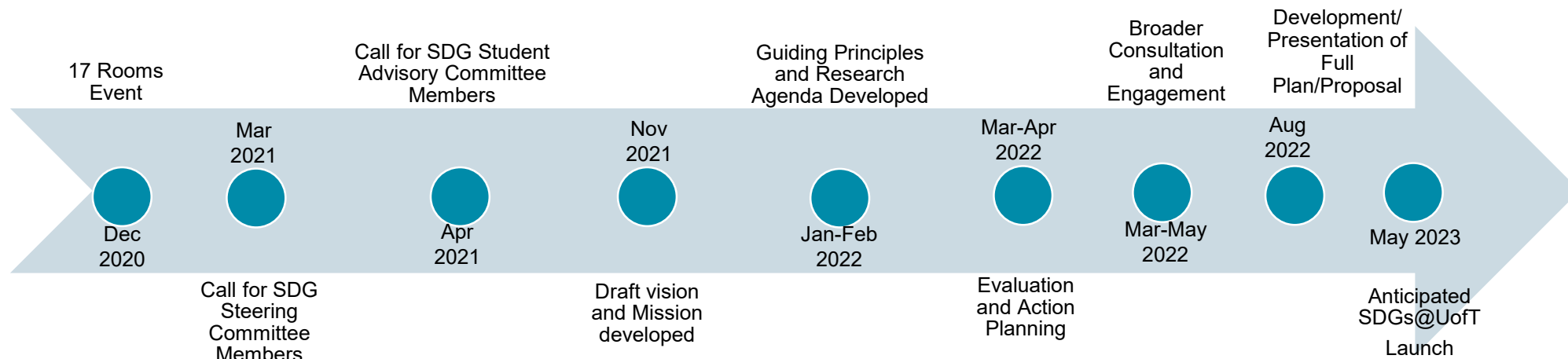
We also continued conversations on a proposal for an institutional strategic initiative (ISI) on the SDGs

SDGs @ U of T

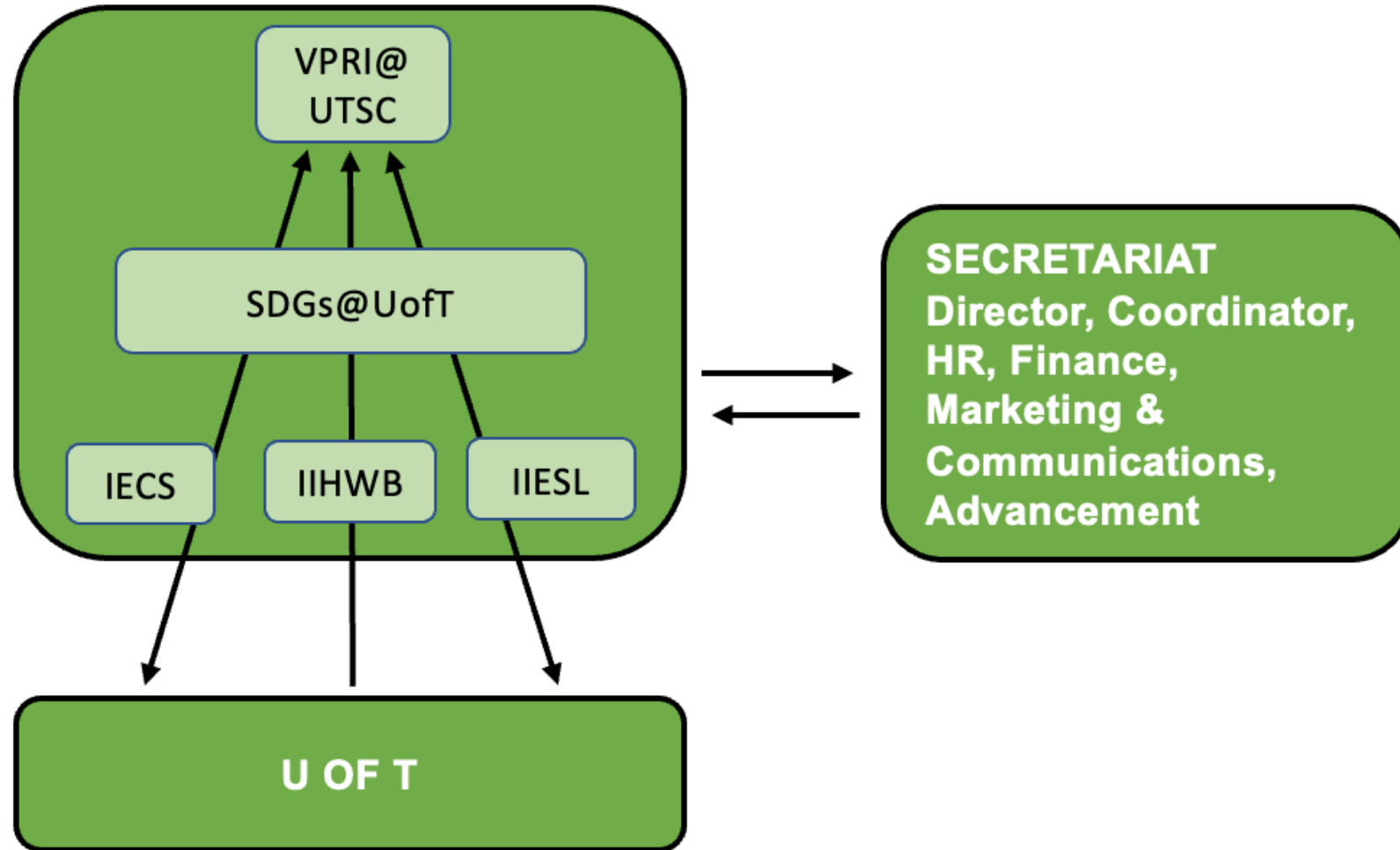
Academic Lead: Erica Di Ruggiero



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

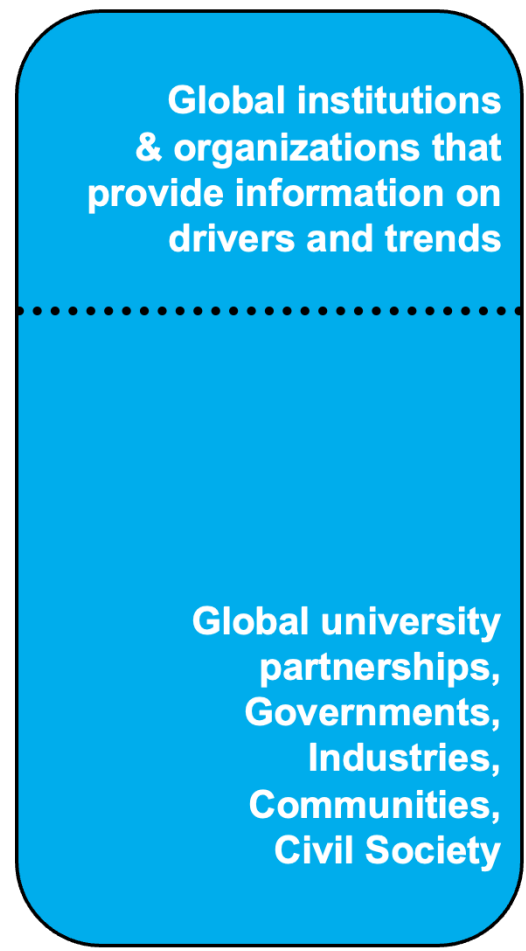


The SDGs@UofT will be part of iRISE

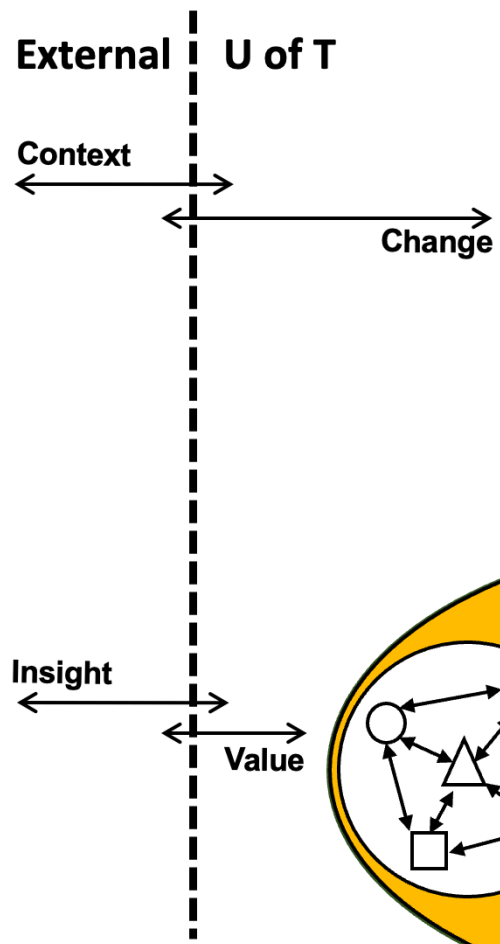


Permeable: an “open” innovation system, that is responsive to the needs of its setting, with two-way flows of knowledges.

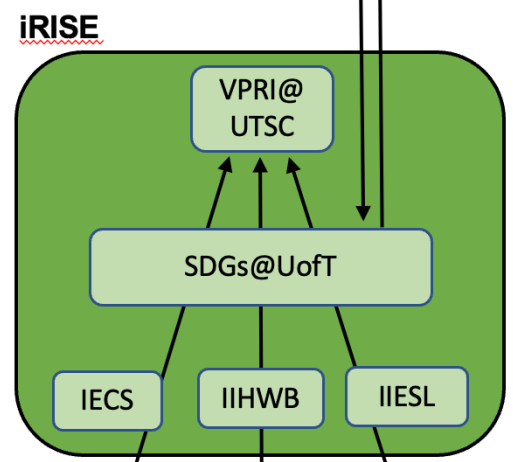
4 Advisors



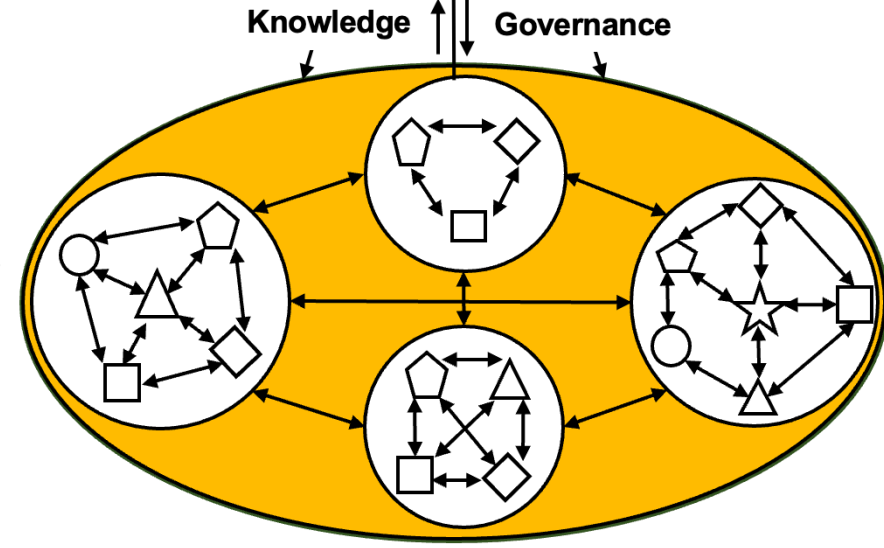
5 Knowledge Mobilizers



1 Leaders



2 Facilitators & Enablers



3 Innovators

Innovation tables that include key thought leaders from across the university performing research activities

We are working hard to further transform UTSC.

**Proposed
Canada Excellence Research Chair (CERC) in Sustainability Transitions**

Dr. Patricia Romero-Lankao

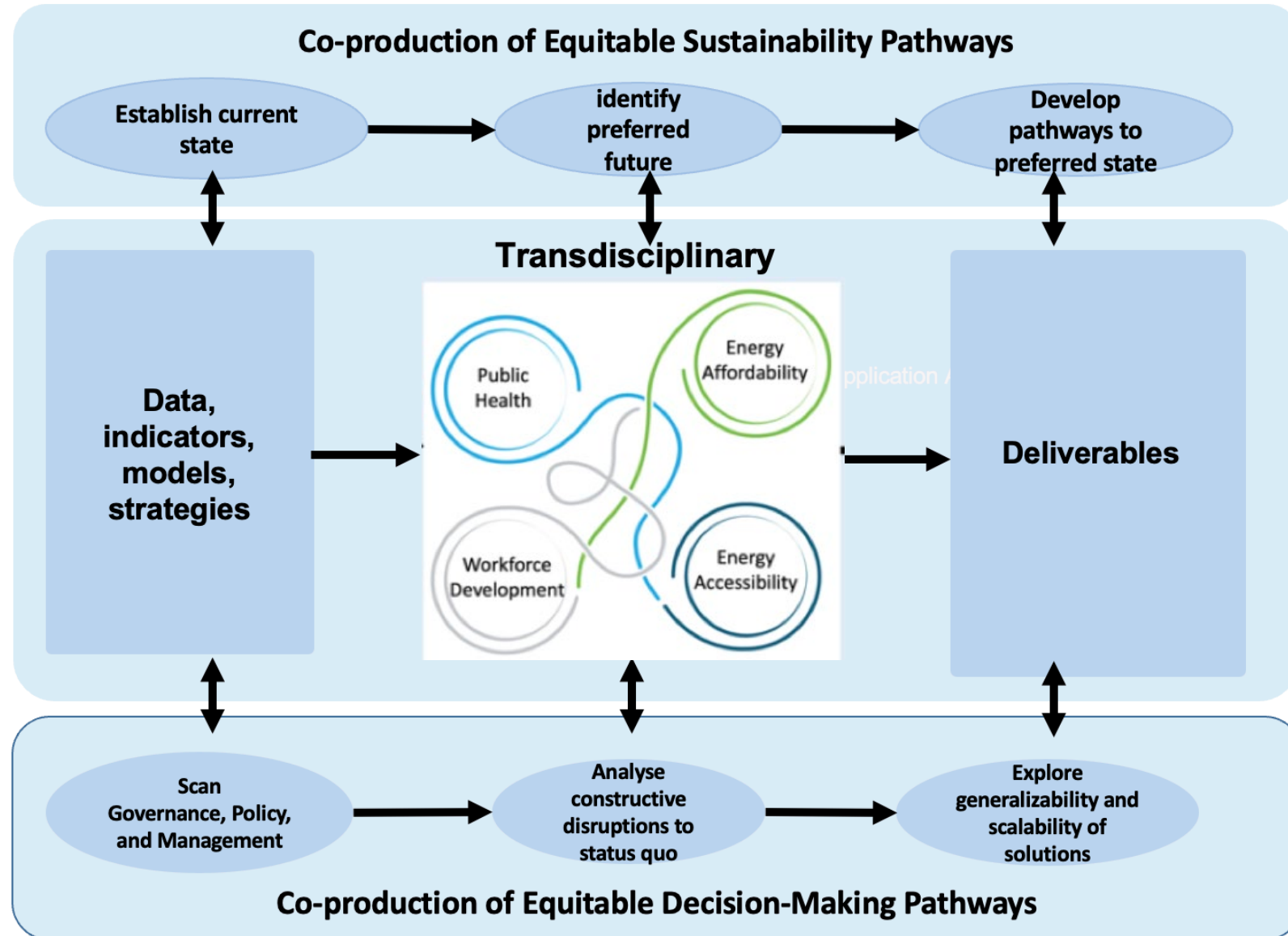


**Proposed Research Program:
JUSTICE: Just Urban Sustainability Transitions Centred in Equity**

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 Clinical Research and Evaluation Cluster

Cluster Leads:

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



Suburban Mobilities Cluster

Cluster Lead:

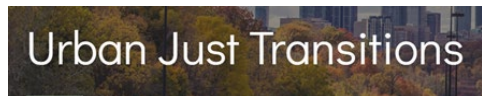
Steven Farber
(Human Geography)
Funding: \$600,000



The Centre for Environmental Research in the Anthropocene

Cluster Leads:

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



Urban Just Transitions from Scarborough to the Globe

Cluster Leads:

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

CONNECTING COMMUNITIES TOWARD FOOD SOVEREIGNTY

Sustainable Farming and Food Futures Cluster

Sustainable Food and Farming Futures Cluster

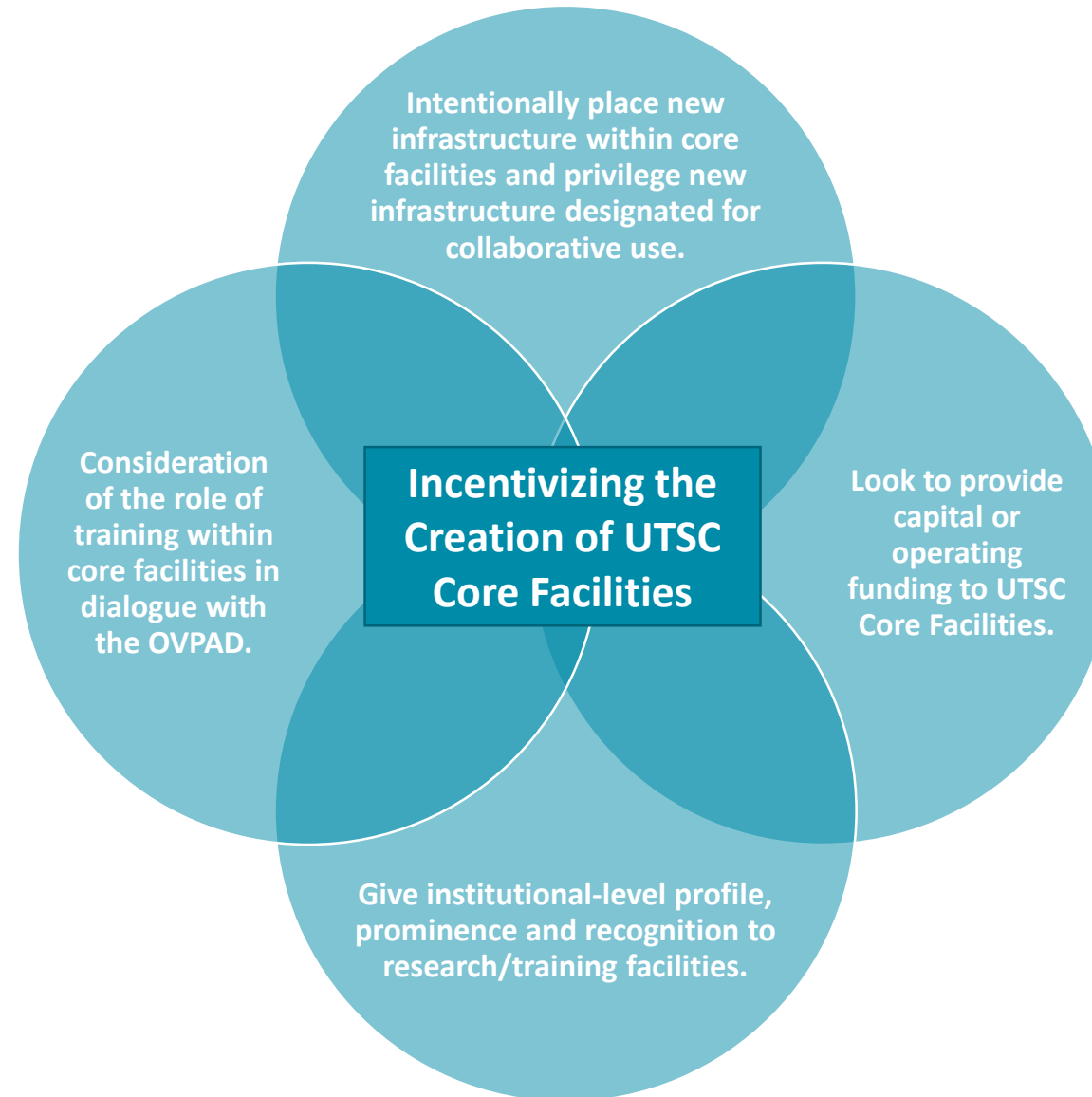
Cluster Leads:

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

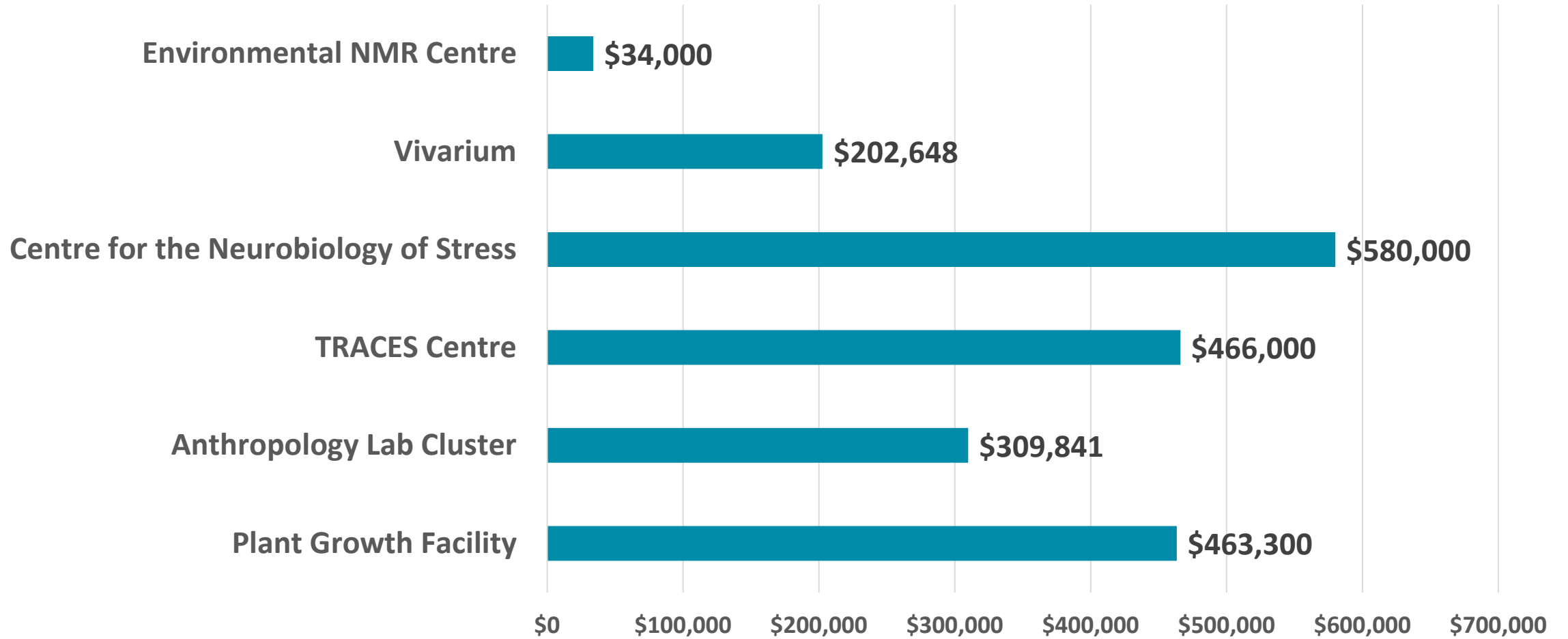
We continue to support our faculty and research community.



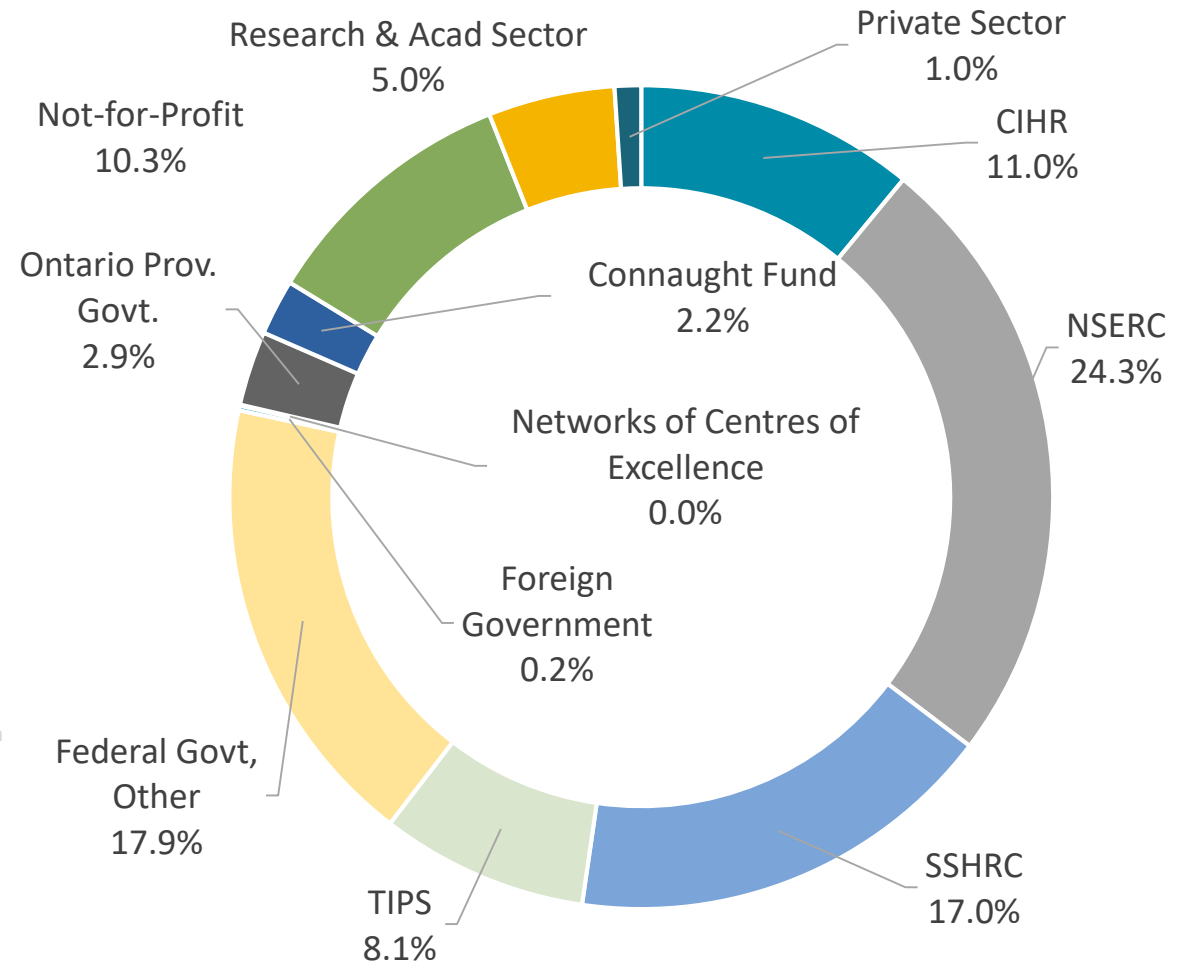
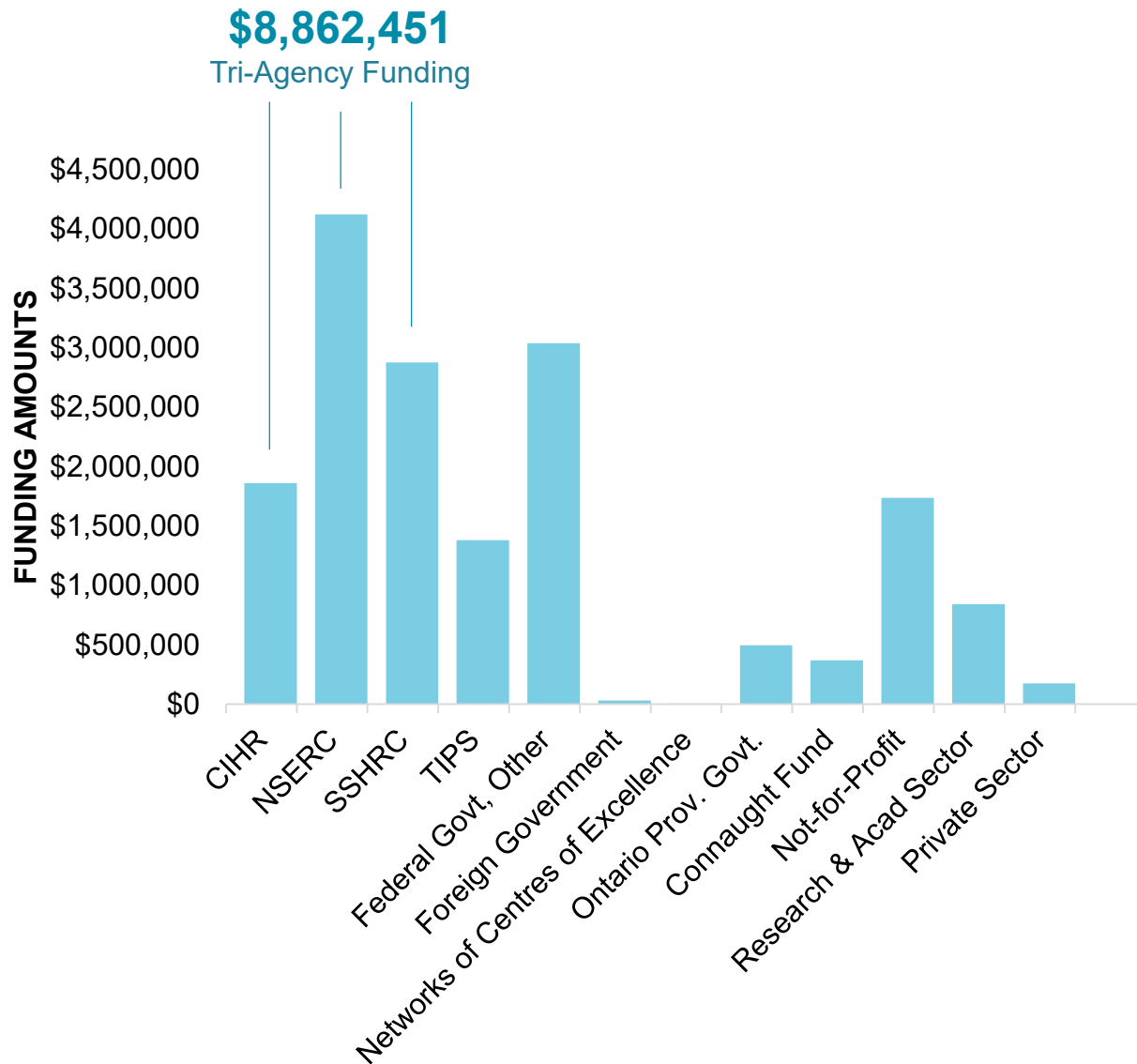
We are also supporting the creation of new UTSC Core Facilities



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



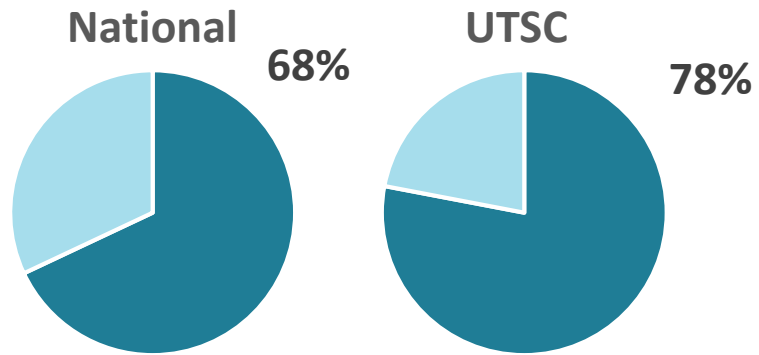
UTSC 2022-23 total annual research funding was \$16.9 million*, with ≈52% of it coming from Tri-Agency sources.



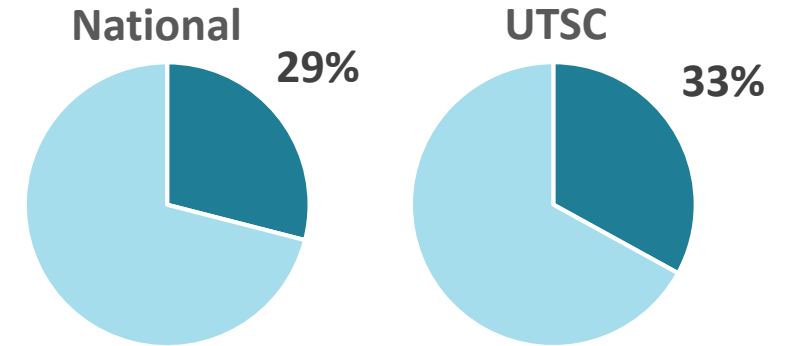
Note: 2022-23's final figures are pending upcoming competition results.
Data source: VPRI Dashboards, April 2023

Our Tri-Agency success rate typically exceeds the national success rate.

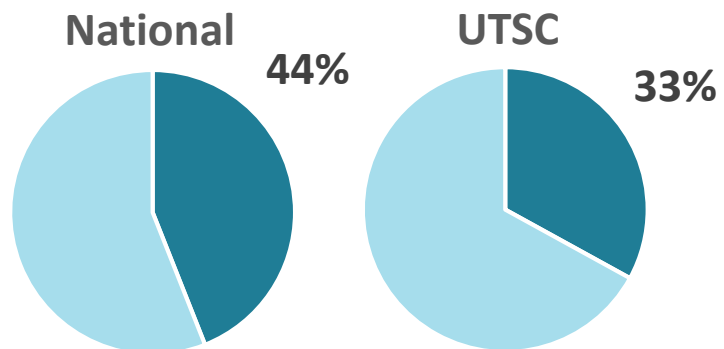
NSERC Discovery Grant



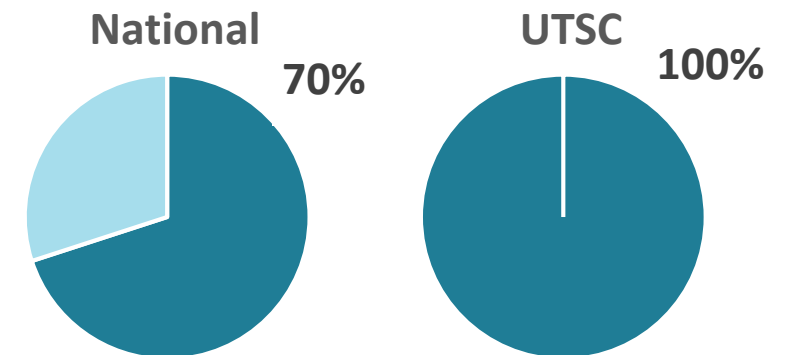
NSERC RTI Grant



SSHRC Insight Grant

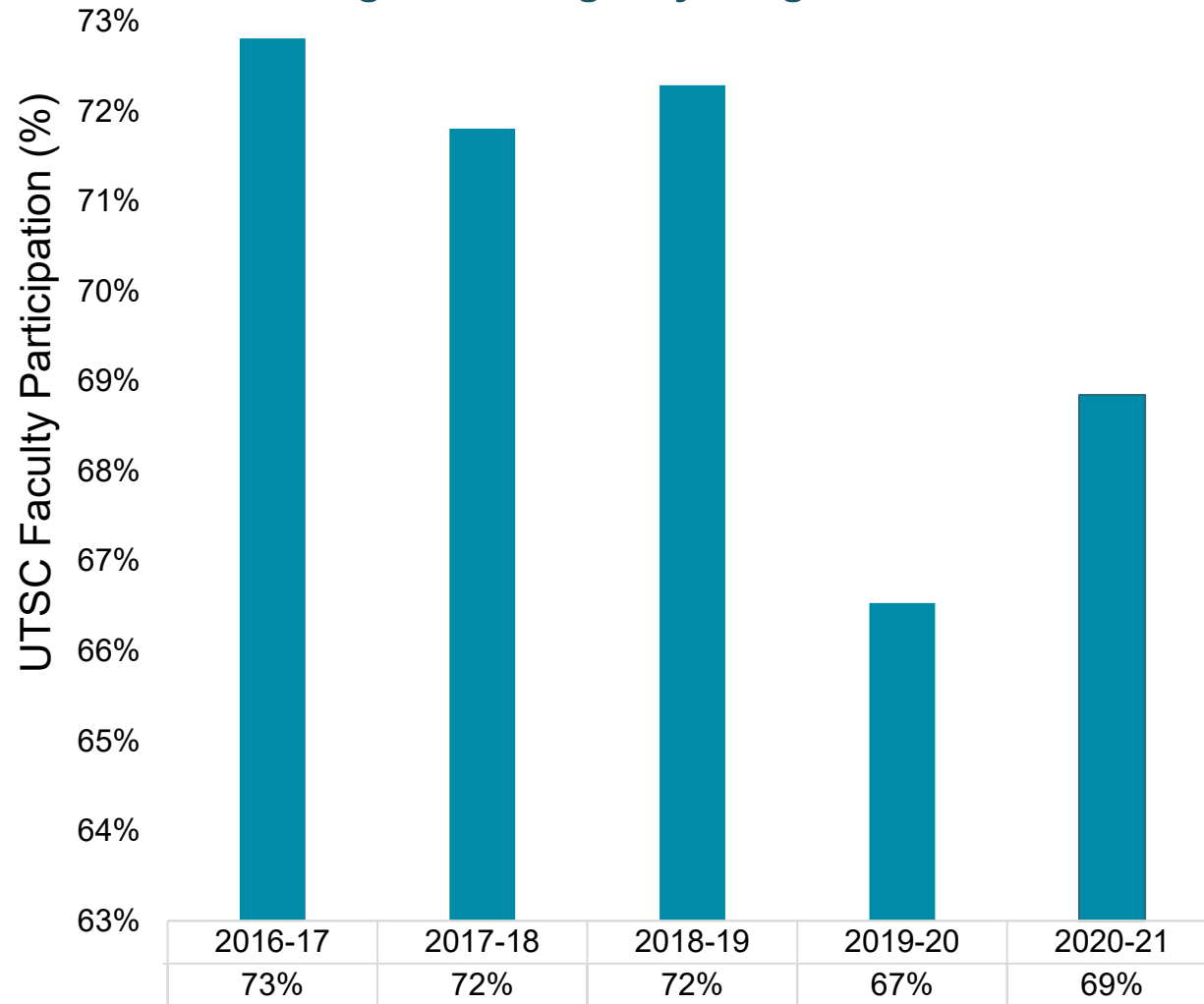


SSHRC Connection Grant



We are pursuing areas where we can reach new heights.

UTSC Faculty Member Participation in CRC-Eligible* Tri-Agency Programs



Goal: Increase UTSC Faculty Member Participation in CRC-Eligible Tri-Agency Programs

Strategy

Engage faculty who:

do not hold/have not recently applied for Tri-Agency funding

could be good candidates to pursue more complex, larger value grants



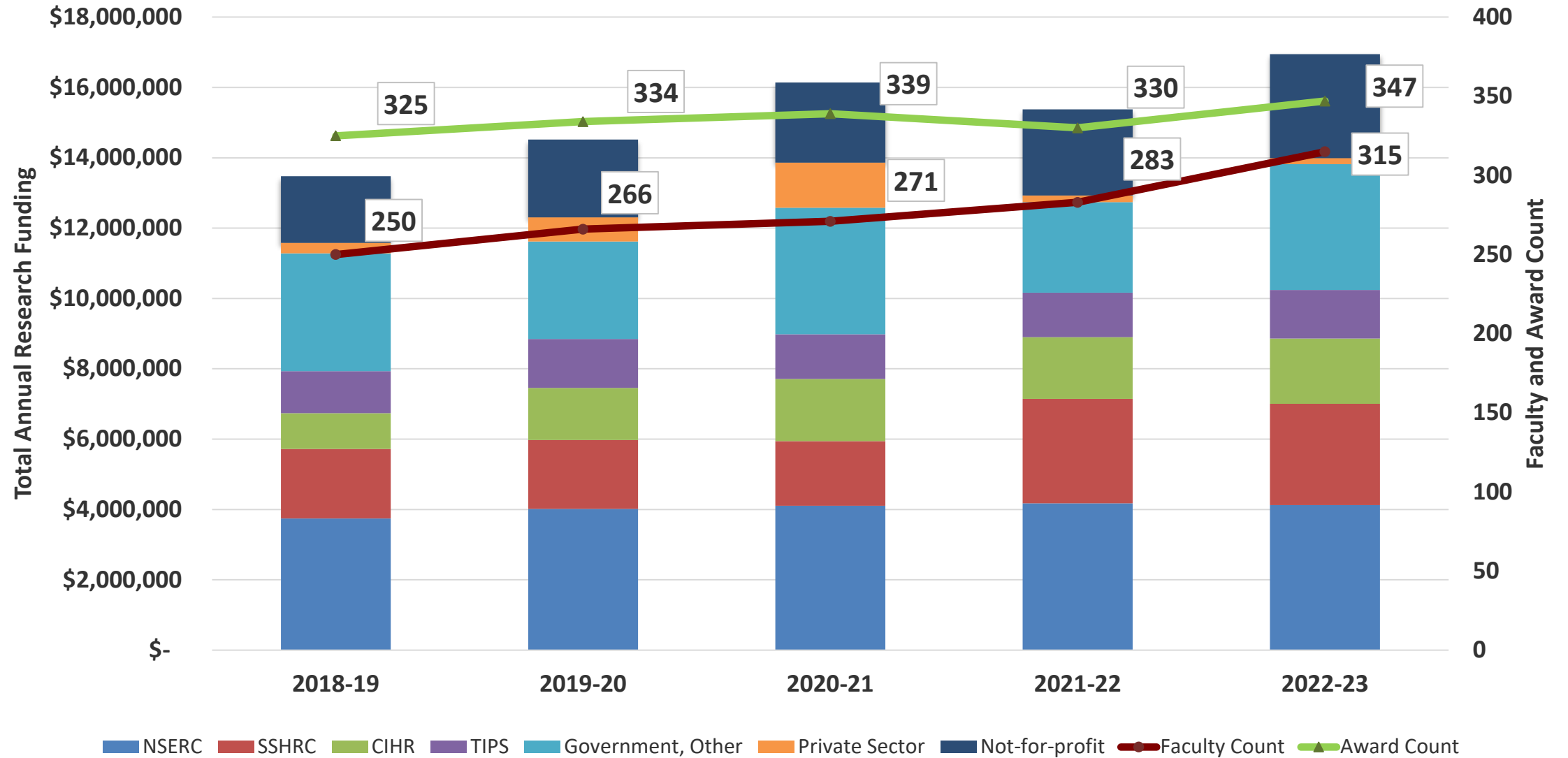
have research programs that were adversely affected by the pandemic

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

*CRC-ineligible Tri-Agency Programs: https://www.chairs-chaires.gc.ca/program-programme/research_funding-financement_recherche-eng.aspx#exclusions

Data source: VPRI Dashboards, March 2023

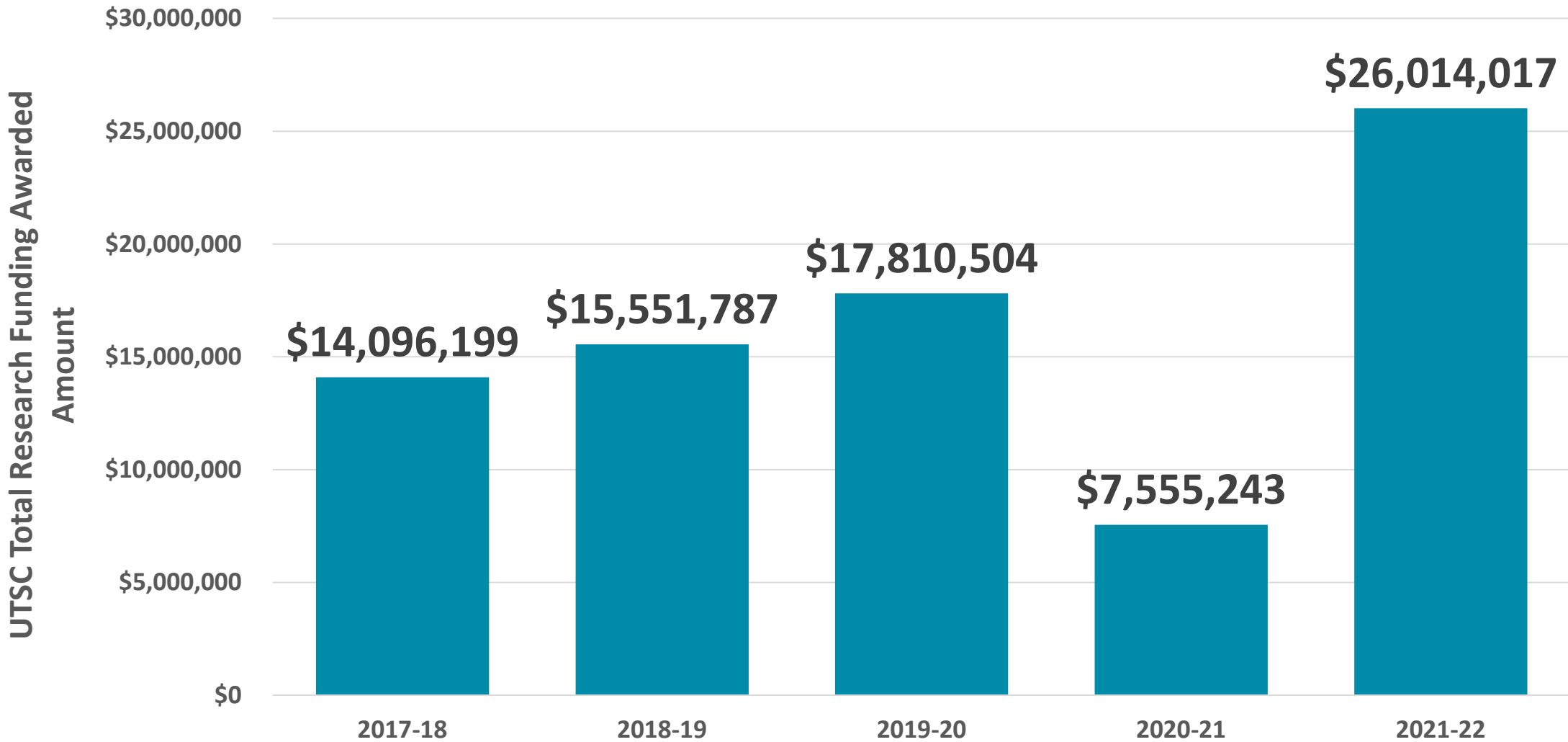
With these supports, UTSC faculty's research productivity continues to increase.



* : 2022-23's final figures are pending upcoming competition results

Data source: VPRI Dashboards, April 2023.

UTSC awarded research funding has reached unprecedented levels, with a 244% increase in 2021-22 from the previous year and a 85% increase since 2017-18



Note: Total Awarded Amount data is currently only available until 2021-22.

Data source: VPRI Dashboards, April 2023.

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



Combined revenues and investment of Hub Start-ups

\$3.05 M

Total Companies in Residence

87

Companies graduated **30** New companies **53**

Total percentage of companies with women founders

36%

Total percentage of founders identifying as people of colour

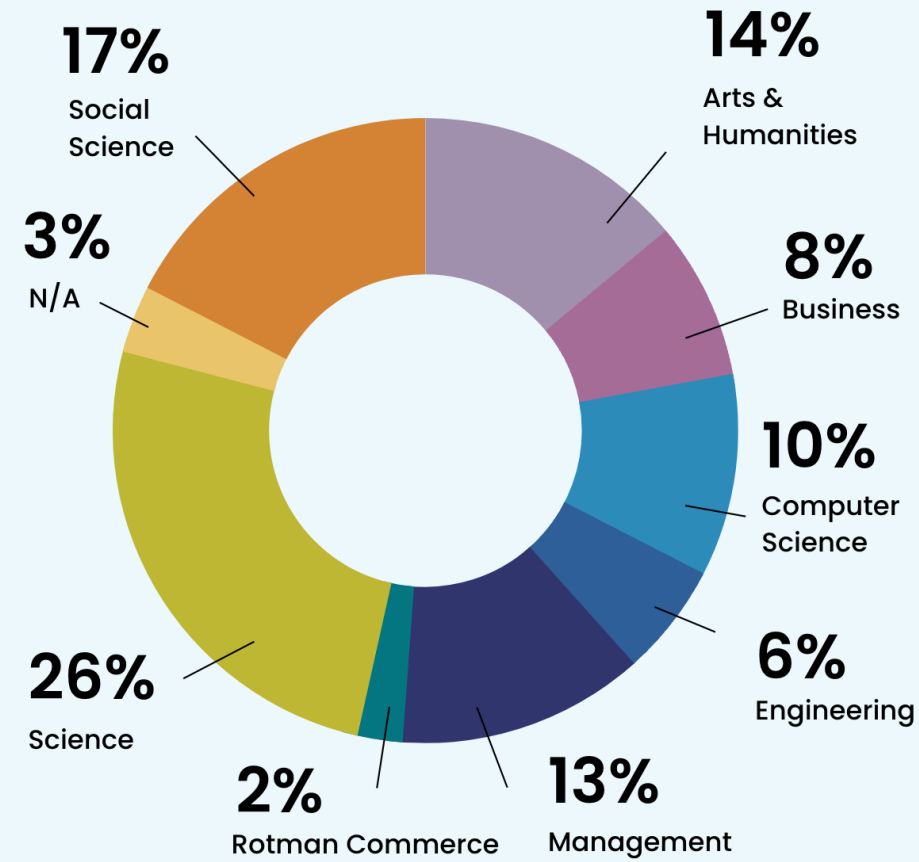
81%

Total participants in Hub events in 2022-23 **993**

Total events **48**

The Hub End of Year Report, 2022 - 2023

Founders in The Hub by discipline, 2022-2023



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 donor-funded **Centre of Inclusive Excellence in Innovation, Entrepreneurship and Leadership (CIEIEL)**

CIEIEL will be an interdisciplinary and intersectoral centre of national and global prominence for intentionally weaving together inclusive excellence in innovation, entrepreneurship and leadership that strengthens the work of our existing academic initiatives and emerging innovation ecosystem.

Life cycle of developing of an entrepreneur



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



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



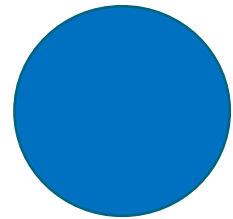
SWITCH: EaRTH flips the switch for cleaner automotive technologies and mobility solutions

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



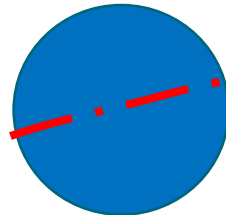
... and are supporting the development of the next generation of workers.

EaRTH SWITCH: CORRIDOR OF PROGRAMMING **\$1.3M PROJECT SUPPORTED BY \$500,000 OVIN FUNDING**



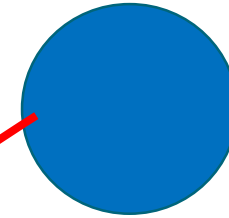
East TORONTO

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



PETERBOROUGH- KAWARTHA LAKES

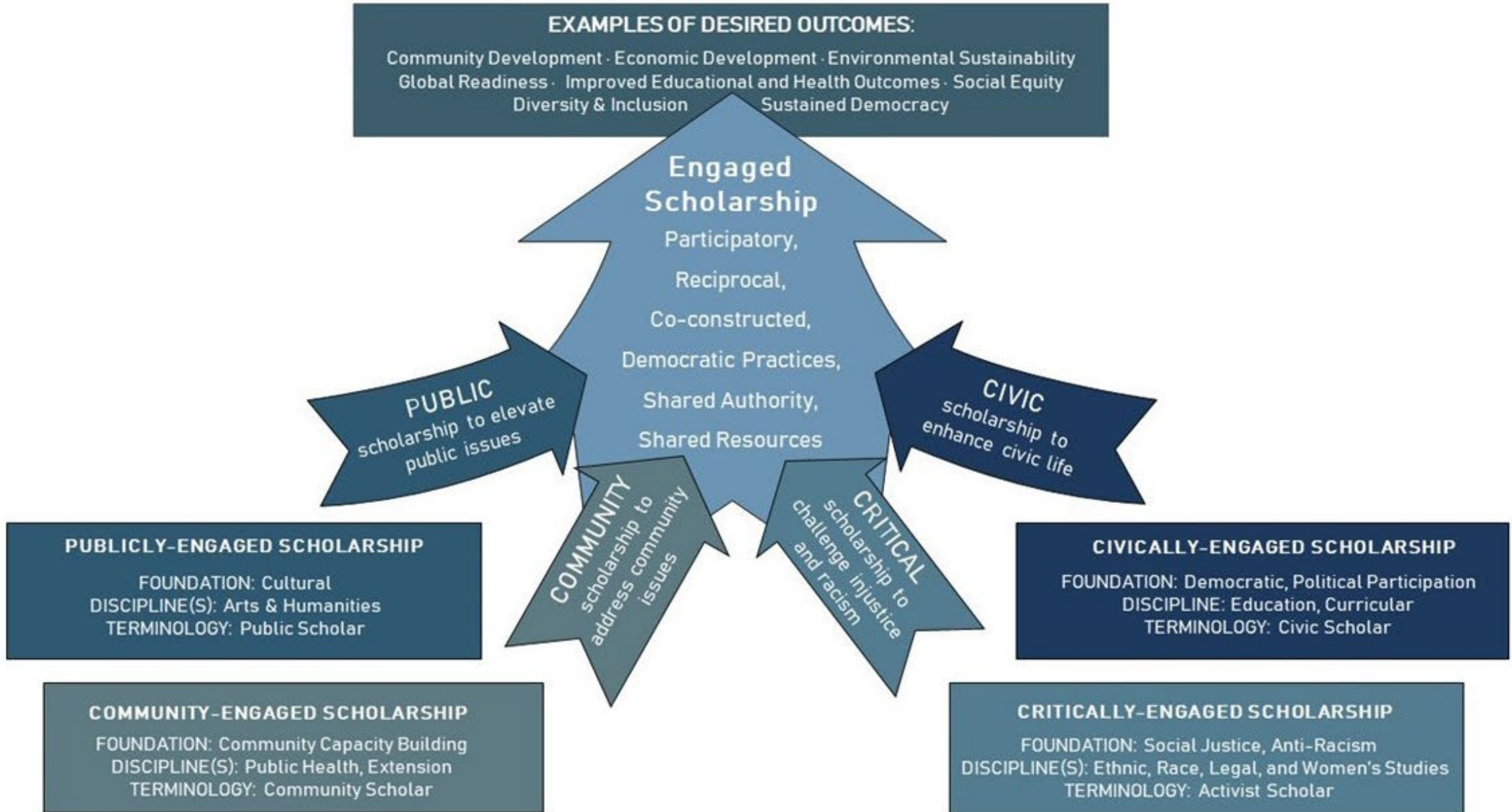
Trent University, Fleming College
240 Grades 10-12 students,
200 Post-secondary students,
4 Internships

Publicly Engaged Scholarship & Innovation: Towards Inclusive Excellence in Research

Working paper



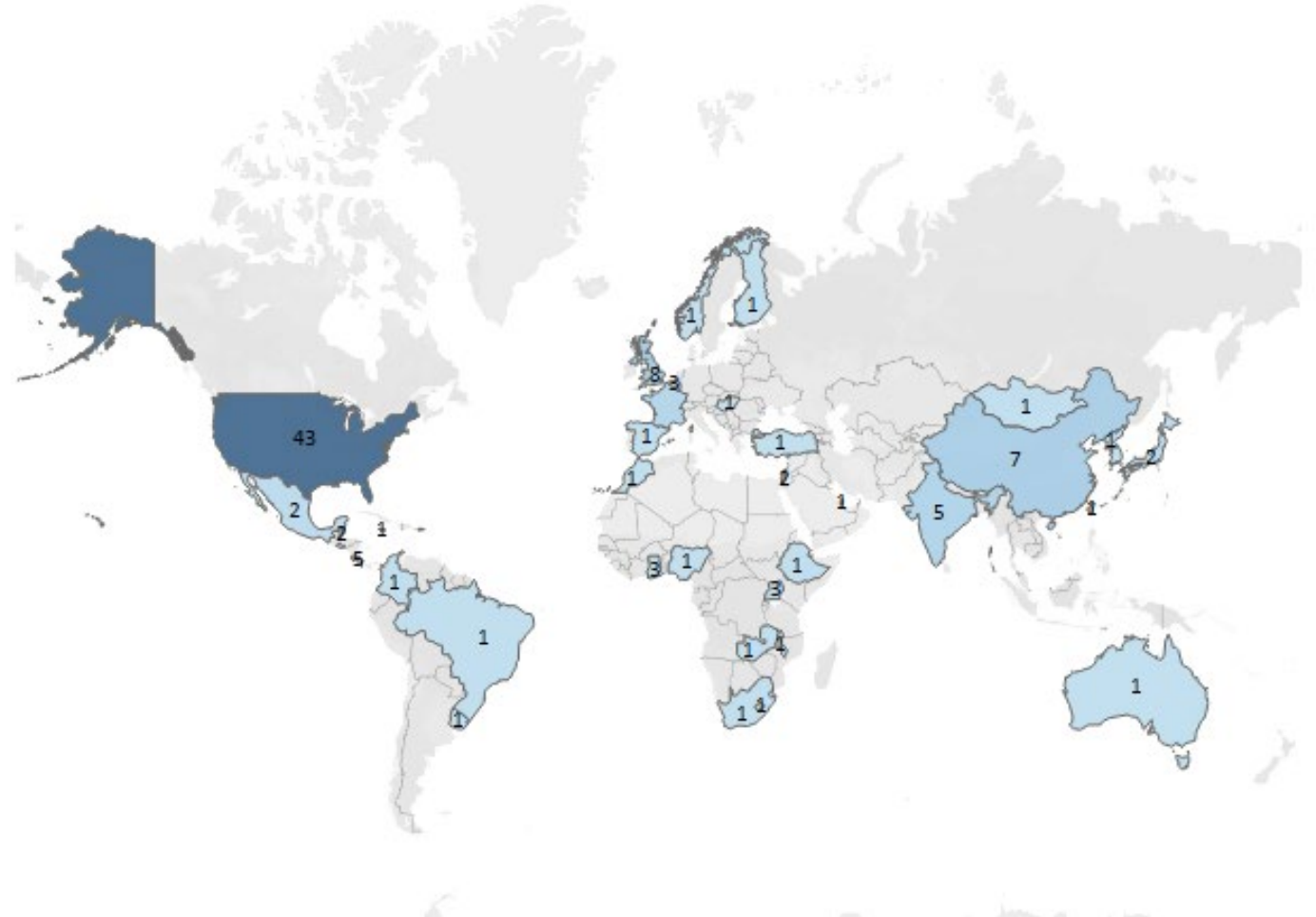
PESI is diverse in practice, focus and scope.



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 MacIvor
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

UTSC Research Excellence Faculty Scholars



Patrick McGowan
Biological Sciences



Hanno Rein
Physical & Environmental Sciences



Christina Guzzo
Biological Sciences



Oleksandr Voznyy
Physical & Environmental Sciences

And we celebrated faculty that received prestigious national and international recognitions.



Notisha Massaquoi Department of Health & Society

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

Notisha is a community-based researcher utilizing mixed methods to interrogate anti-Black racism and highlight the experiences of Black communities navigating institutional structures and systems in Canada, with a primary focus on the social determinants of health and health disparities.



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



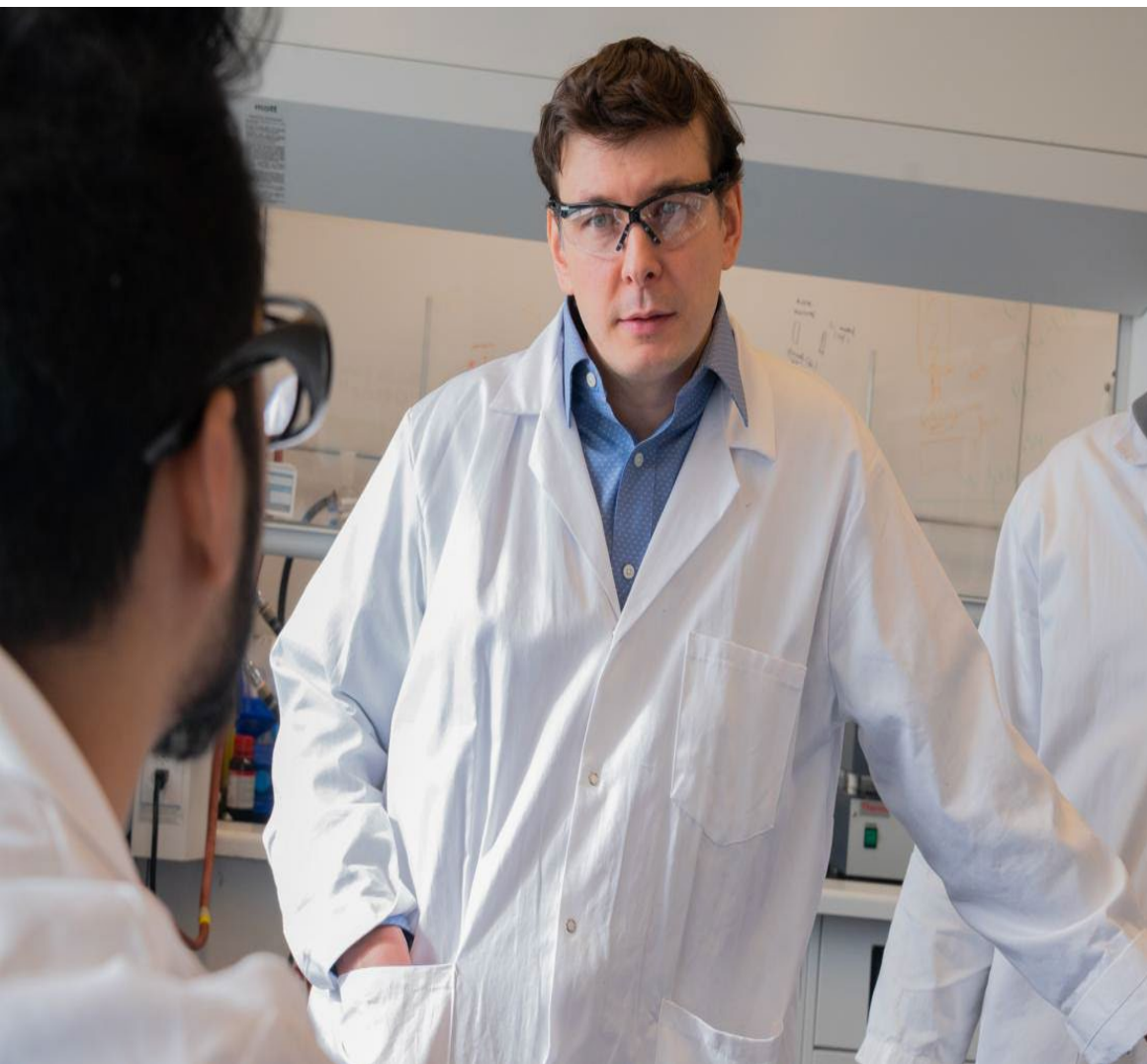
Maydianne Andrade
Department of Biological
Sciences
African Scholars Award
Distinguished African-Caribbean Award



Ashton Anderson Department of Computer and Mathematical Sciences

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

Anderson's research in computational social science focuses on a range of questions at the intersection of artificial intelligence, data and society. He has pioneered computational methods to quantify online phenomena including political polarization and has developed human-centered machine learning systems.



Alex Voznny Department of Physical and Environmental Sciences

**Chemical Institute of Canada
2023 Strem Award**

Alex has made significant contributions to the understanding of colloidal nanocrystals, which are tiny (nanometer-sized) inorganic particles. Due to their properties, these artificially grown particles 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**

Myrna's lab used a series of innovative techniques including nuclear magnetic resonance (NMR) and mass spectrometry to address knowledge gaps related to global environmental change, pollution of the environment and long-term storage of used nuclear fuel.



Aisha Ahmed

Department of Political Science

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

Aisha's scholarly research and advisory work with governments and international actors has focused 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. She also spent three years as chair of the board of Women in International Security Canada and acts as director of the Islam and global affairs initiative at the Munk School of Global Affairs.



Diana Valencia

Department of Physical and Environmental Sciences

Guggenheim Fellowship

Diana's research focuses on the interior of planets, its composition and how it evolves – including ways in which it might enable the emergence of life. She was one of the first scientists to combine geophysics and astrophysics to study exoplanets. Her pioneering work includes developing the first interior model and first mass-radius relationship for rocky exoplanets (1-10 Earth masses). Her exploration into the possibility of plate tectonics on super-Earths spurred a lively debate in the field that continues today.

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.



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



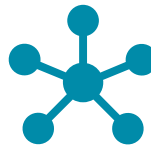
Create & operationalize a new innovation lifecycle website that provides a “one-stop shop” for fundamental information related to the innovation enterprise



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



Complete the optimization of the OVPRI to fulfil its mandate and facilitate the realization of the strategic objectives contained in *Inspiring Inclusive Excellence*



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



Complete the development of a strategic research plan that emboldens our research strengths, maximizes our impact, supports campus sustainability, and uplifts black & Indigenous scholars