

Office of the Vice-Principal Research & Innovation's  
Annual Report (April 2021-March 2022):

# **Perseverance**

We are now in the 3<sup>rd</sup> year of the COVID-19 pandemic.



nature

NEWS | 09 November 2021

# The COVID pandemic has harmed researcher productivity – and mental health

Surveys show that women, parents of young children and people of colour are most affected by pandemic-related disruptions and need more support.

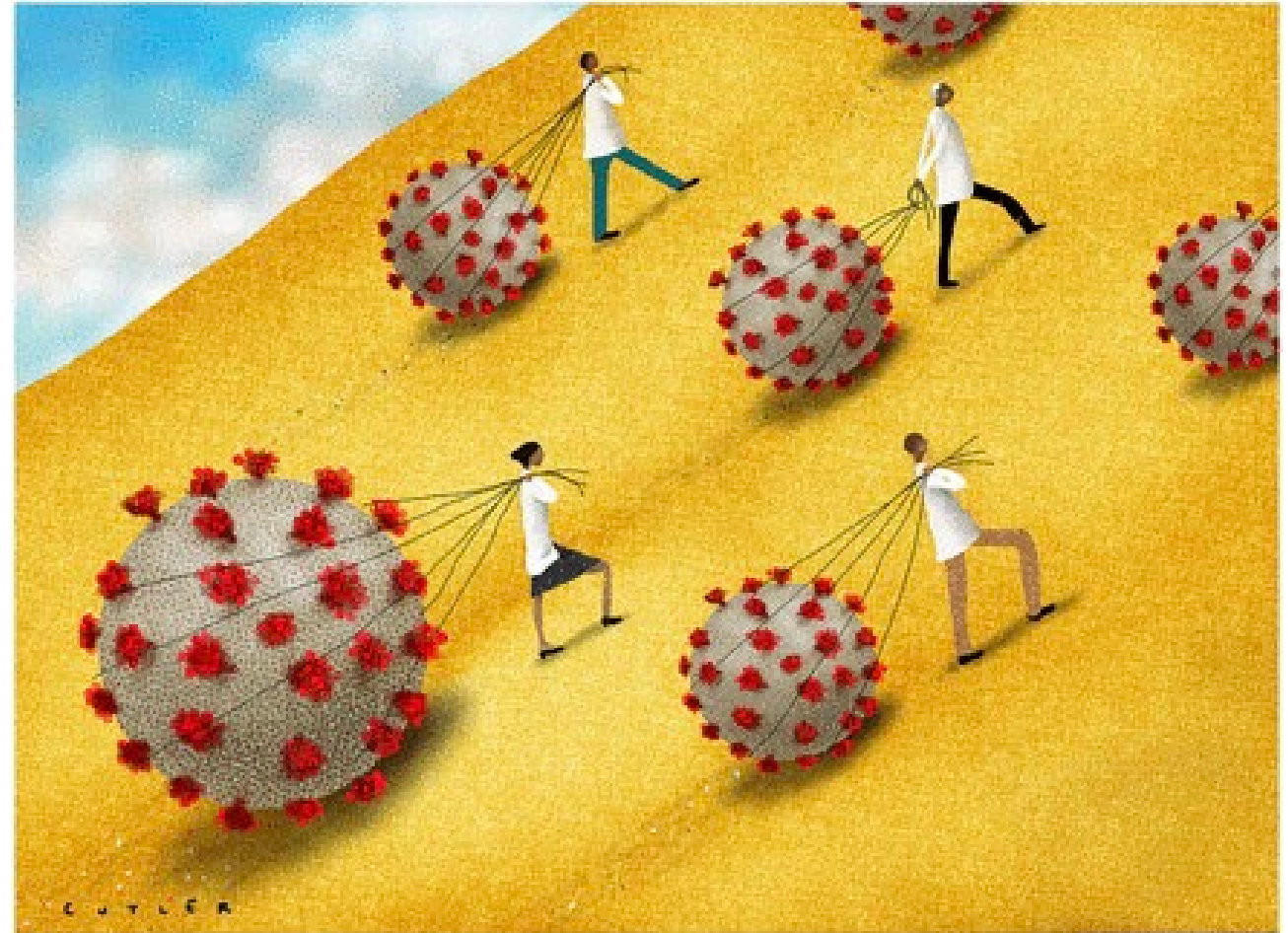


It has also amplified pre-existing inequities in academia.

**PNAS**

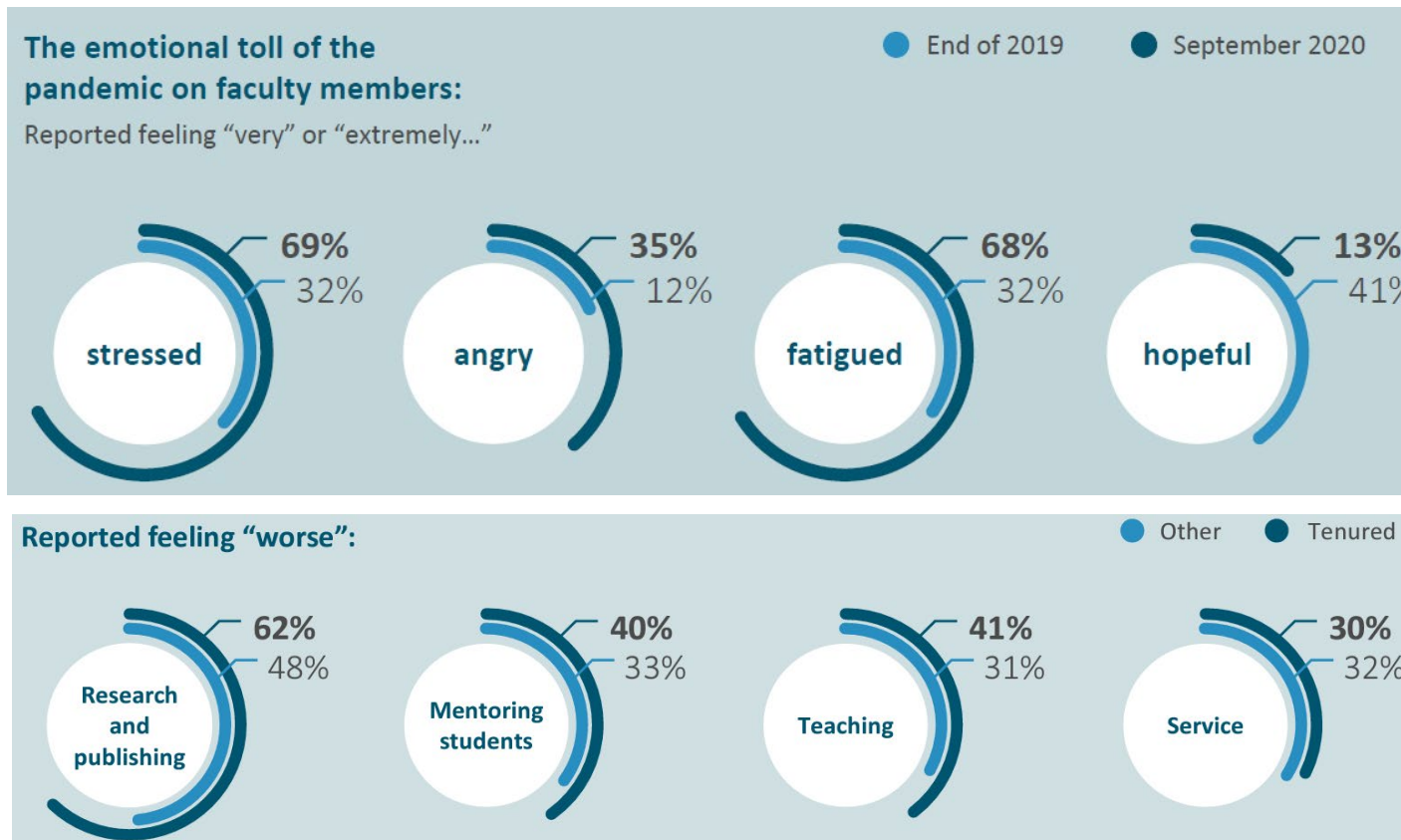
07 July 2020 117: 15378-15381

**Pandemic has amplified  
pre-existing inequities in  
academia**



# As a result, pandemic burnout is rampant in academia.

**Burnout:** a prolonged response to chronic emotional and interpersonal stressors on the job, and is defined by the three dimensions of exhaustion, cynicism, and inefficacy.



# We optimized the support for UTSC faculty by growing the OVPRI team.

## SENIOR LEADERSHIP



Irena Creed  
VPRI



Patricia Landolt  
AVPRI-SI



Shaun Young  
DIRECTOR



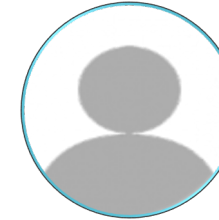
Hillary Chan  
MANAGER OF OPERATIONS  
& PROJECT MANAGEMENT



Kristine Peruzzi  
ASSISTANT TO VPRI



Carmen Siu  
RESEARCH OPERATIONS &  
FINANCIAL OFFICER



Neily Yaghini  
ADMINISTRATIVE  
ASSISTANT



Michelle Wodzak  
DIRECTOR

## ADMINISTRATION

## VIVARIUM

## GRANT DEVELOPMENT

## PARTNERSHIPS



Sharon George  
MANAGER, RESEARCH  
SERVICES & PARTNERSHIPS



Jason Darby  
RESEARCH ADMINISTRATION OFFICERS



Anika Mifsud



TBC  
EDITORIAL & PROPOSAL  
DEVELOPMENT OFFICER



Sonja Persram  
STRATEGIC RESEARCH DEVELOPMENT OFFICERS



TBC



Suhail Asrar  
RESEARCH PARTNERSHIP & BUSINESS DEVELOPMENT OFFICERS



Brice Rousseau

## AWARDS & COMMUNICATION

## STRATEGY

## THE HUB



Amanda Mohabeer  
RESEARCH AWARDS &  
HONOURS OFFICER



Joshua Van Ry  
RESEARCH SERVICES  
OFFICER



Sharad Barkataki



Dolapo Oladiran  
STRATEGIC PROJECT OFFICERS



Kate Withers Hess



Gray Graffam  
DIRECTOR



Donovan Dill  
STRATEGIC COORDINATOR  
& BUSINESS ADVISOR



# We listened to our faculty and created COVID-19 relief supports.

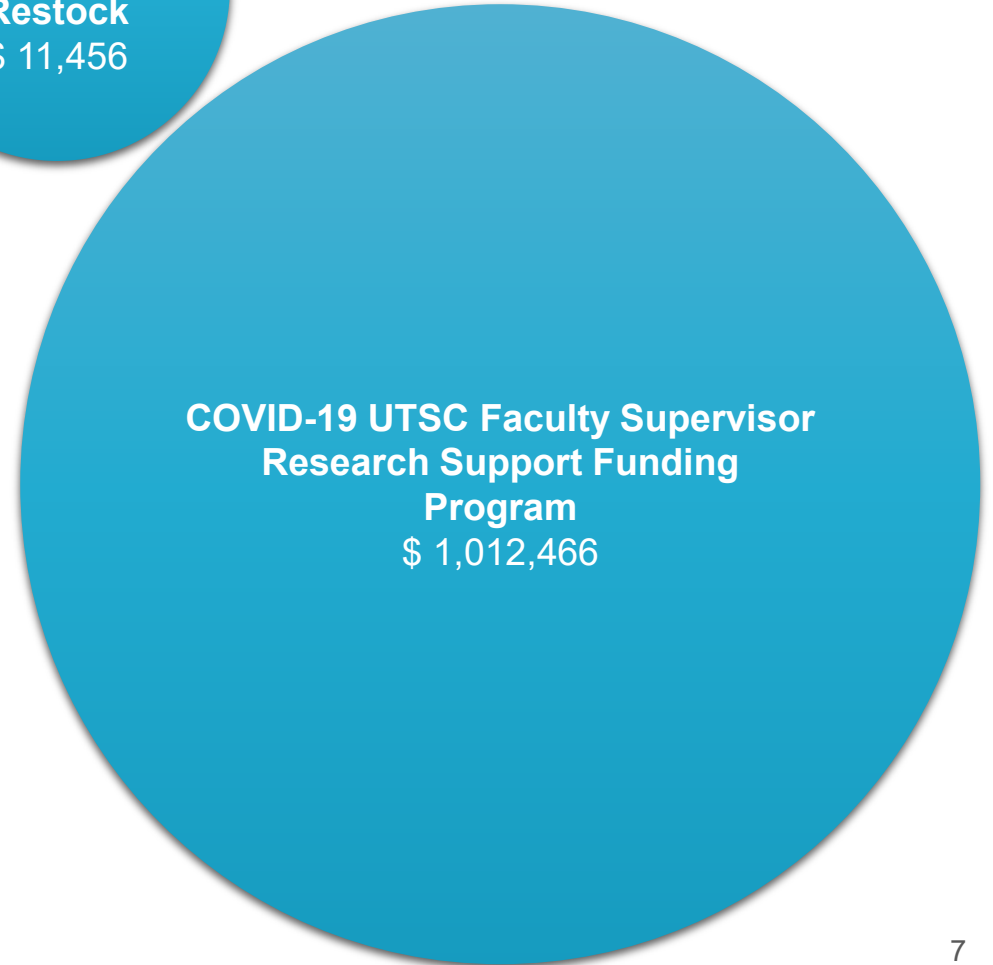
**2019-20**



**2020-21**



**2021-22**



# We invested in supporting our faculty and research community.





# We are establishing GTA-RISE and the three inaugural institutes.

We developed guidelines for institutes, centres, and clusters that will come into effect July 1, 2022.



# We invested in new clusters of scholarly prominence.

## *Flourish: The Arts and Social Wellness Cluster*

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



## *Suburban Mobilities Cluster*

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



## Clusters of Scholarly Prominence Program (CSPP)

2020

2020

2021

## *The Clinical Research and Evaluation Cluster*

**Cluster Leads:**  
Michael Best (Psychology) & Zindel Segal (Psychology)  
**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



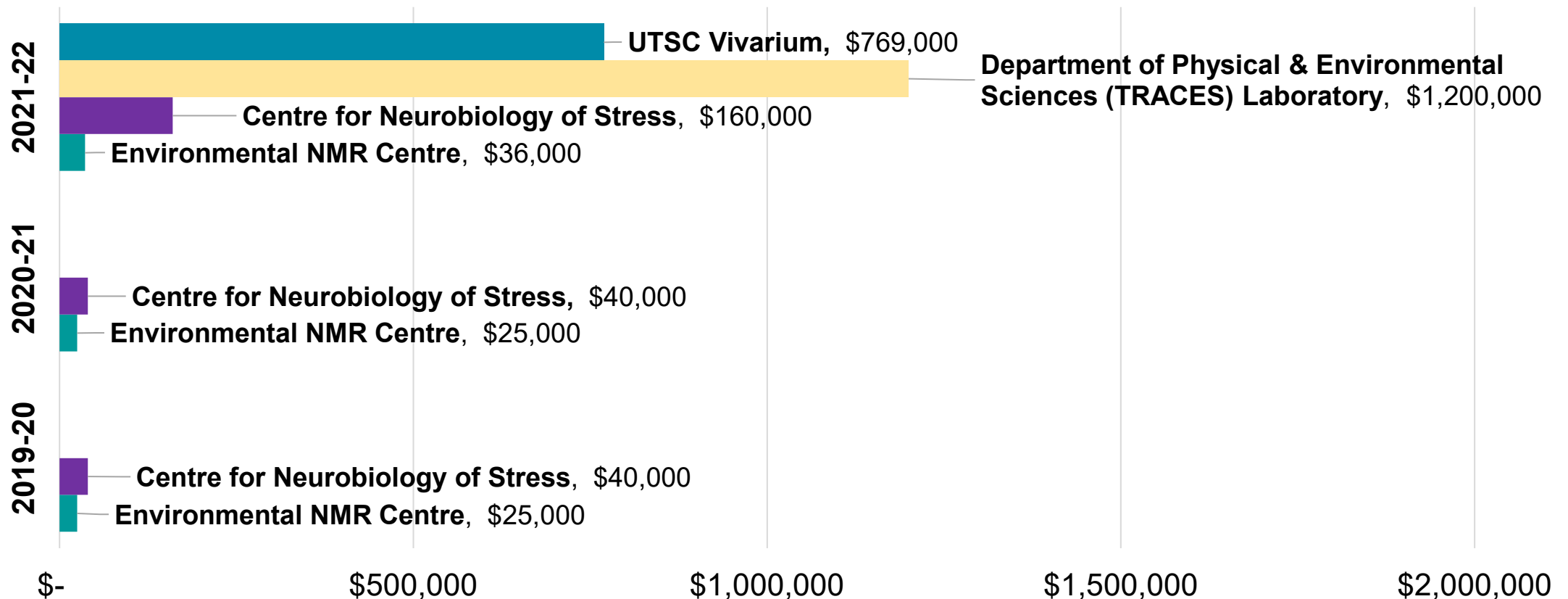
## *Sustainable Food and Farming Futures Cluster*

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



# We invested in core research facilities to ensure our researchers had the needed infrastructure, tools, and techniques.

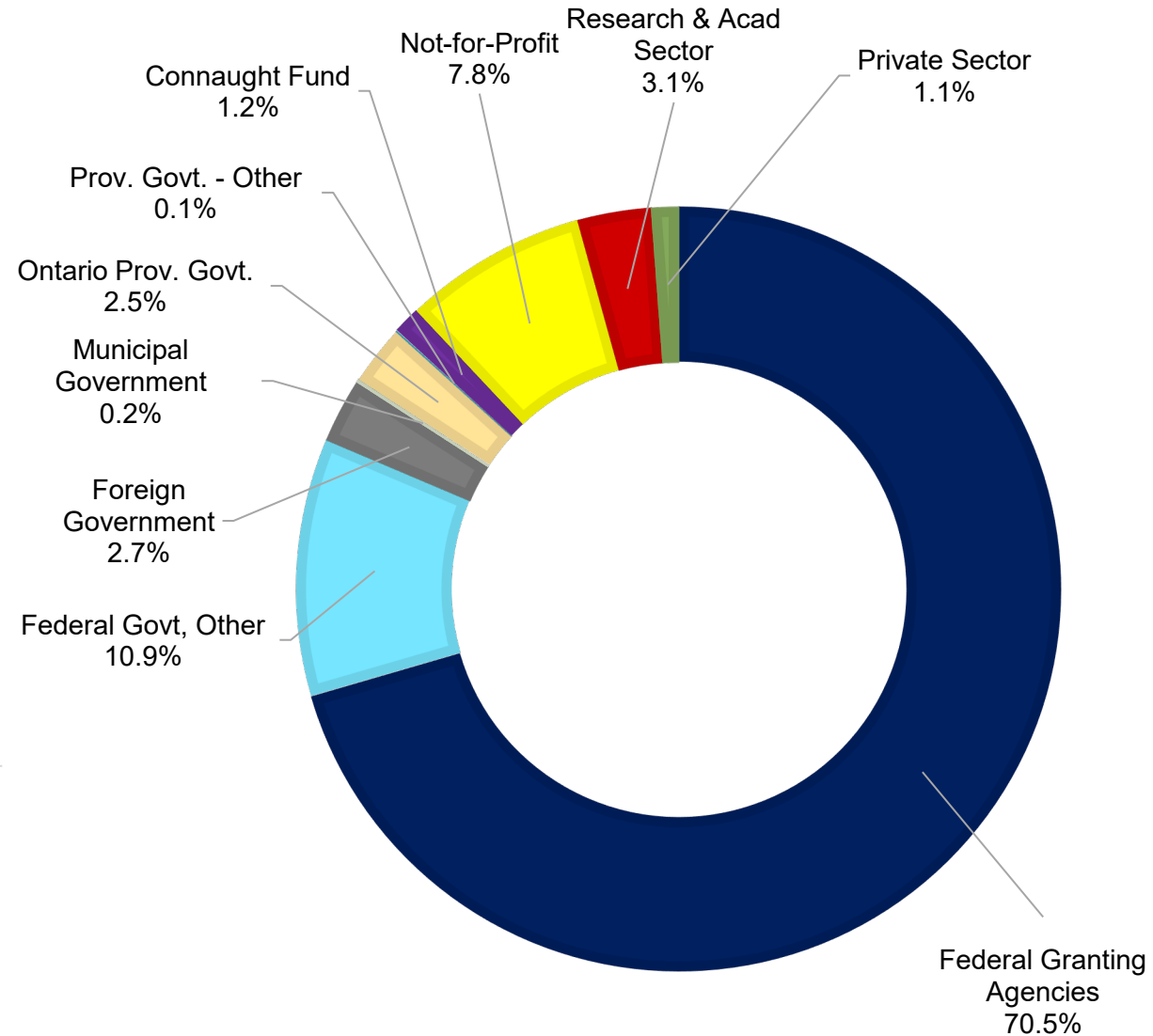
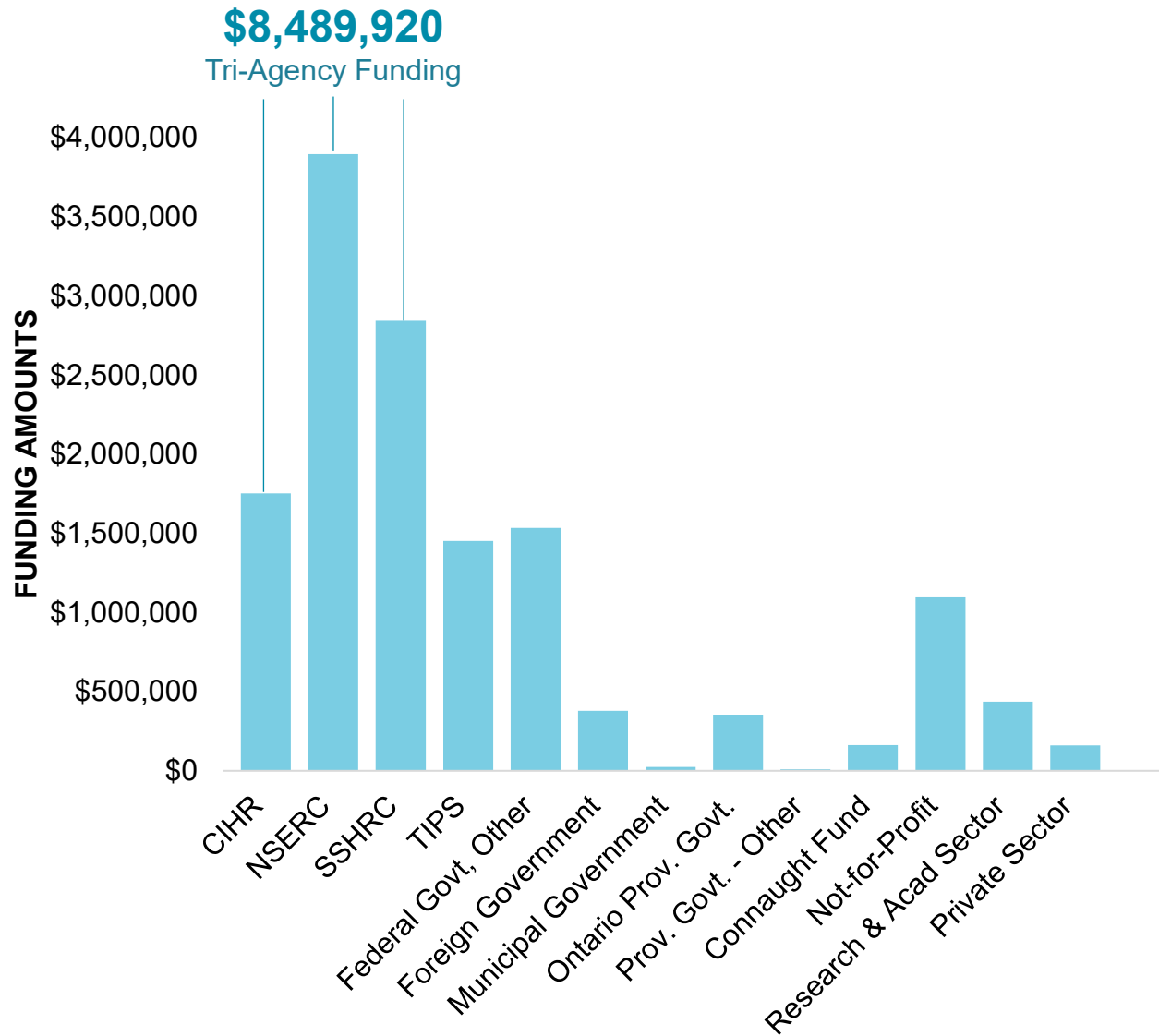
We developed guidelines for core research facilities that will come into effect July 1, 2022.



#### Important Notes:

- OVPRI's investments into core research facilities in 2019-20 and 2020-21 supported operating costs.
- In 2021-22, a total of \$2,089,000 was invested into updating the equipment of OVPRI's core research facilities: \$769,000 into UTSC Vivarium's equipment, \$1,200,000 into the Department of Physical & Environmental Sciences (TRACES) Laboratory's equipment, and \$120,000 into Centre for Neurobiology of Stress's equipment.
- In 2021-22, a total of \$76,000 was invested to support operating costs: \$40,000 into operating the Centre for Neurobiology of Stress and \$36,000 into operating the Environmental NMR Centre.

# Our total research funding was \$14.1 million, with over 60% of it coming from Tri-Agency sources.



Note: 2021-22's final figures are pending upcoming competition results.

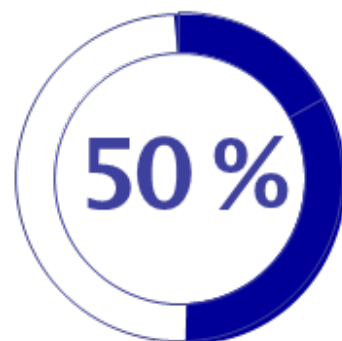
Data source: VPRI Dashboards, May 2022

# Our Tri-Agency success rate exceeded the national success rate.

## CIHR Project Grant (Fall Competition)



NATIONAL

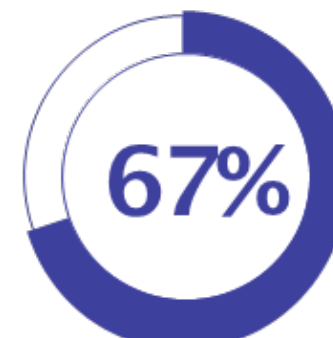


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## SSHRC Insight Grant



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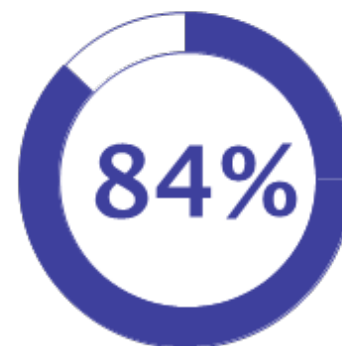


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## NSERC Discovery Grant



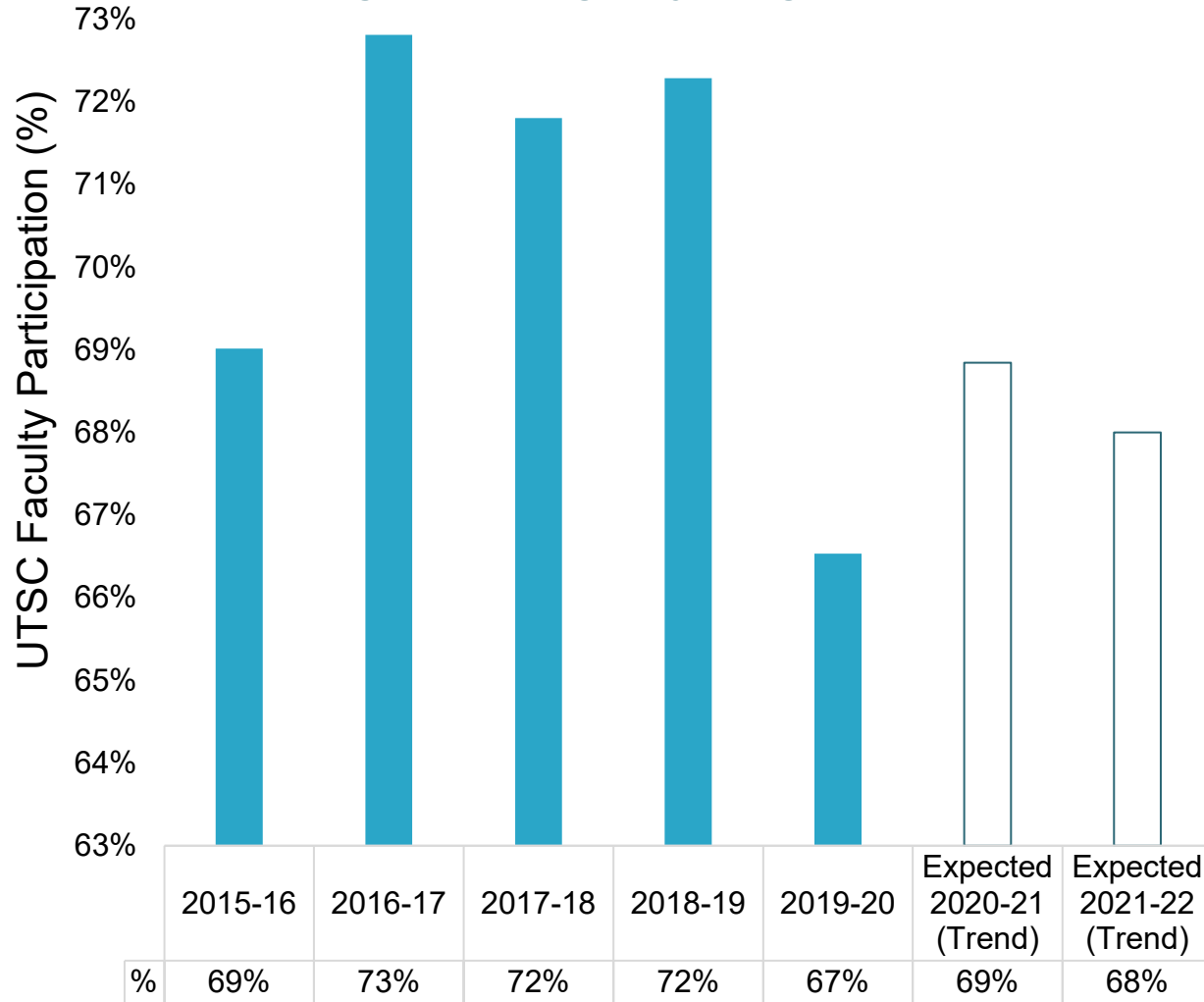
NATIONAL



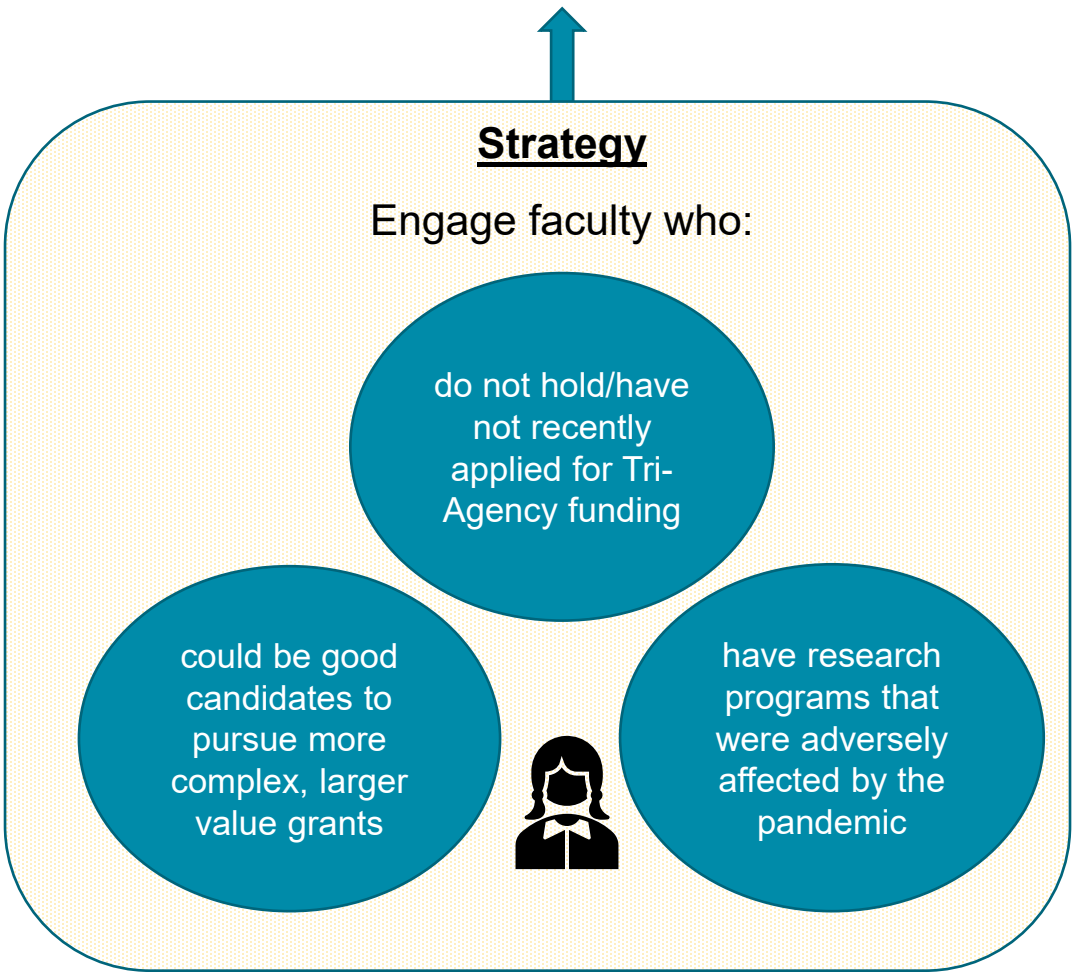
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# We are pursuing areas where we can reach new heights.

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



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

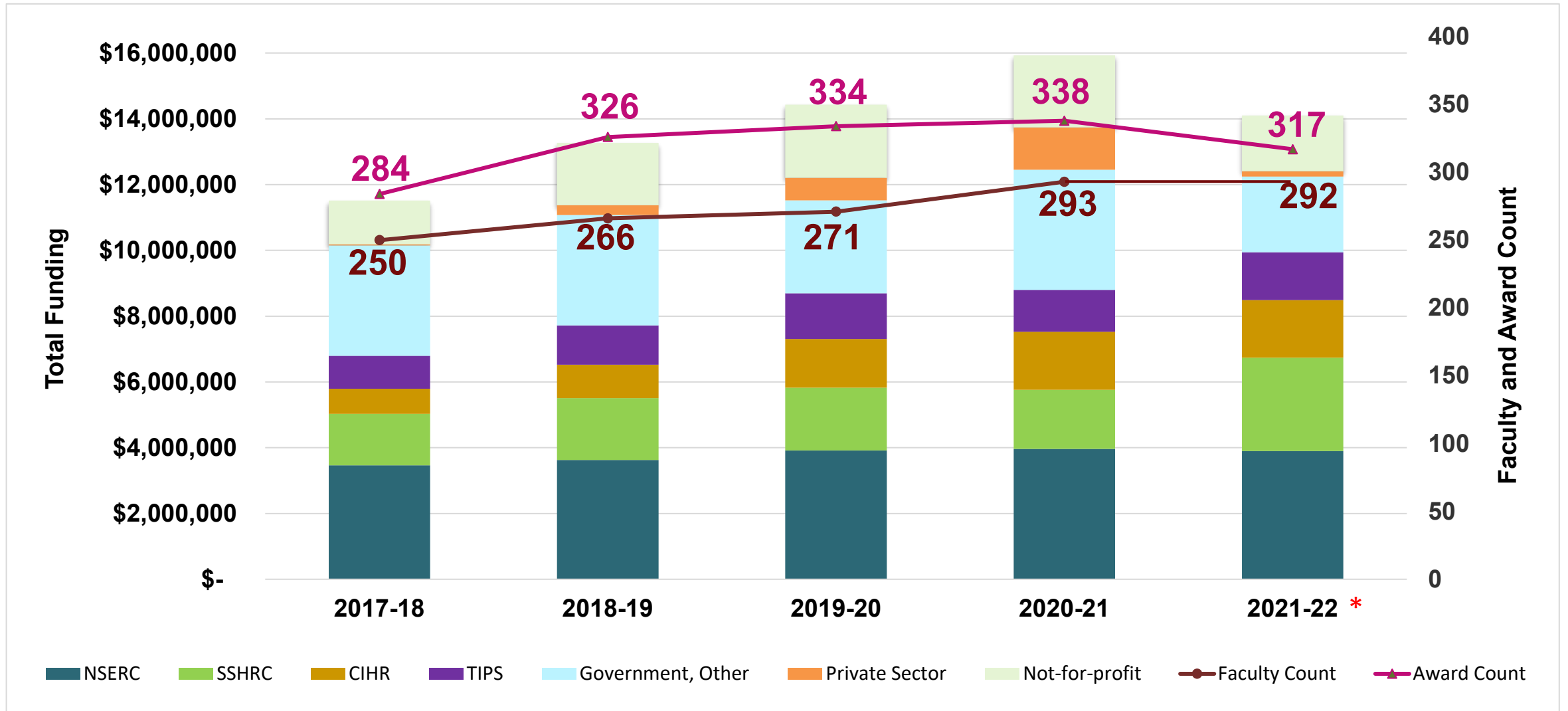


Note: Faculty Participation data is currently only available until 2019-20.

\*CRC-ineligible Tri-Agency Programs: [https://www.chairs-chaires.gc.ca/program-programme/research\\_funding-financement\\_recherche-eng.aspx#exclusions](https://www.chairs-chaires.gc.ca/program-programme/research_funding-financement_recherche-eng.aspx#exclusions)

Data source: VPRI Dashboards, May 2022

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



\* : 2021-22's final figures are pending upcoming competition results; after trend analysis, the estimated total research funding is expected to increase 4.1% from the previous fiscal year



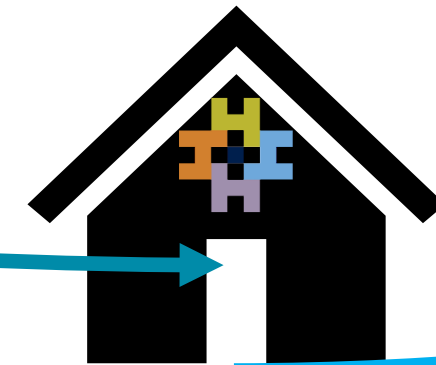
# We continue to support our innovators through the campus accelerator, The Hub.

**22**  
companies  
joined

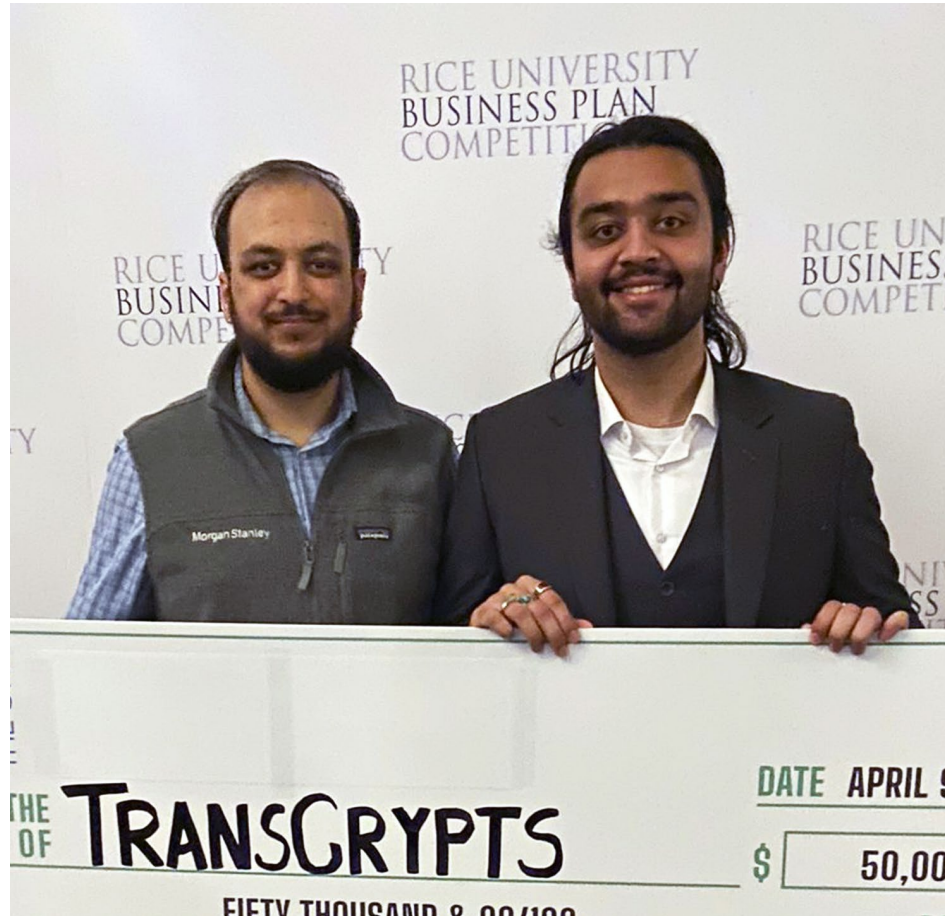
**50%**  
of companies have  
 $\geq 1$  woman founder

**87%**  
of founders identify  
as people of colour

**37**  
companies  
graduated



**46**  
companies presently  
reside in The Hub



## TransCrypts

*The world's first fully decentralized and encrypted file storage platform, powered by blockchain.*



## Snapwrite AI

*An artificial intelligence web application that generates product descriptions for e-commerce products.*

# OVPRI is focused on building regional innovation districts, including EaRTH and HeART







## 2022 EaRTH District Collaborative Research Grant Awardees

*Theme: Water*



### *Impacts of physical processes on water quality in urban ponds*

#### **Team Members:**

- Paul Frost, Trent University
- Mathew Wells, UTSC
- Jing Ren, Ontario Tech University
- Sajjad Din, Centennial College



### *Optimal best management practices for managing nutrient losses*

#### **Team Members:**

- M. Catherine Eimers, Trent University
- Karen Thompson, Trent University
- George Arhonditsis, UTSC
- Maria Dittrich, UTSC
- Andrea Kirkwood, Ontario Tech University
- Steve Boloudakis, Centennial College



### *Demonstration of Smart Water Systems for Sustainable Cities*

#### **Team Members:**

- Hossam Gaber, Ontario Tech University
- Julian Aherne, Trent University
- Maria Dittrich, UTSC
- Connie Zehr, Centennial College
- Sajjad Din, Centennial College
- Andrew Baer, Centennial College

And elicited conversations that are crucial to building a healthier and more equitable future.

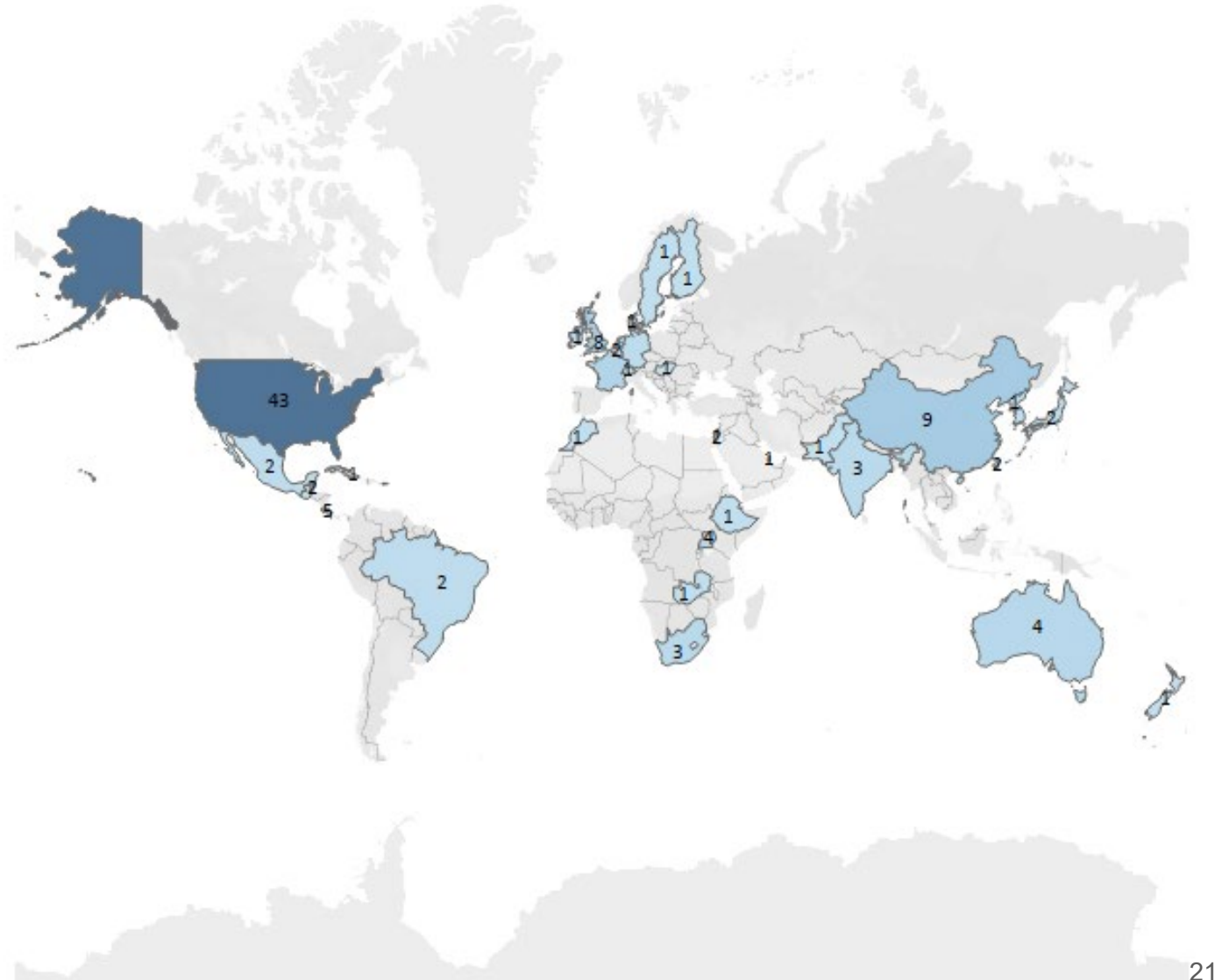
# SUSTAINABLE DEVELOPMENT GOALS



# Our faculty are engaging in more international research.

## Active Awards by Country (2021-22)

- Our faculty is actively engaged in international research
- Top research locations
  - United States- 43
  - China- 9
  - Great Britain- 8
  - Costa Rica- 5
  - France- 5
  - Australia- 4
  - Uganda- 4
  - India- 3
  - South Africa- 3
  - Belgium- 2





# We continued our Celebration of Research Excellence Lecture Series.



**Julie McCarthy**  
UTSC Research Excellence Faculty  
Scholar  
*Management*



**Nicholas Mandrak**  
UTSC Principal's Research Award  
*Biological Sciences*



**Hilary Brown**  
UTSC Pre-Tenure Faculty Research  
Award- Sciences  
*Health & Society*



**Urvashi Chakravarty**  
UTSC Pre-Tenure Faculty Research  
Award- Humanities  
*English*



**Stefanos Aretakis**  
UTSC Pre-Tenure Faculty Research  
Award-Sciences  
*Computer & Mathematical Sciences*



# We awarded our high-performing faculty.

## UTSC Principal's Research Awards



**Alan Saks**  
*Management*



**William Seager**  
*Philosophy*

## UTSC Research Excellence Faculty Scholars



**Jessica Wilson**  
*Philosophy*



**Artur Izmaylov**  
*Physical & Environmental Sciences*

## UTSC Research Recognition Award



**Andrea Charise**  
*Health & Society*

## UTSC Pre-Tenure Faculty Research Awards



**Scott MacIvor**  
*Biological Sciences*



**Mark Campbell**  
*Arts, Culture and Media*

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



## **Marlene Goldman Department of English**

**2021 Elected Fellow of the Royal Society of Canada**

Marlene is an internationally renowned professor, author, and filmmaker. Her interdisciplinary research focuses on feelings of shame and invisibility in relation to aging, especially when it relates to disability and illness.

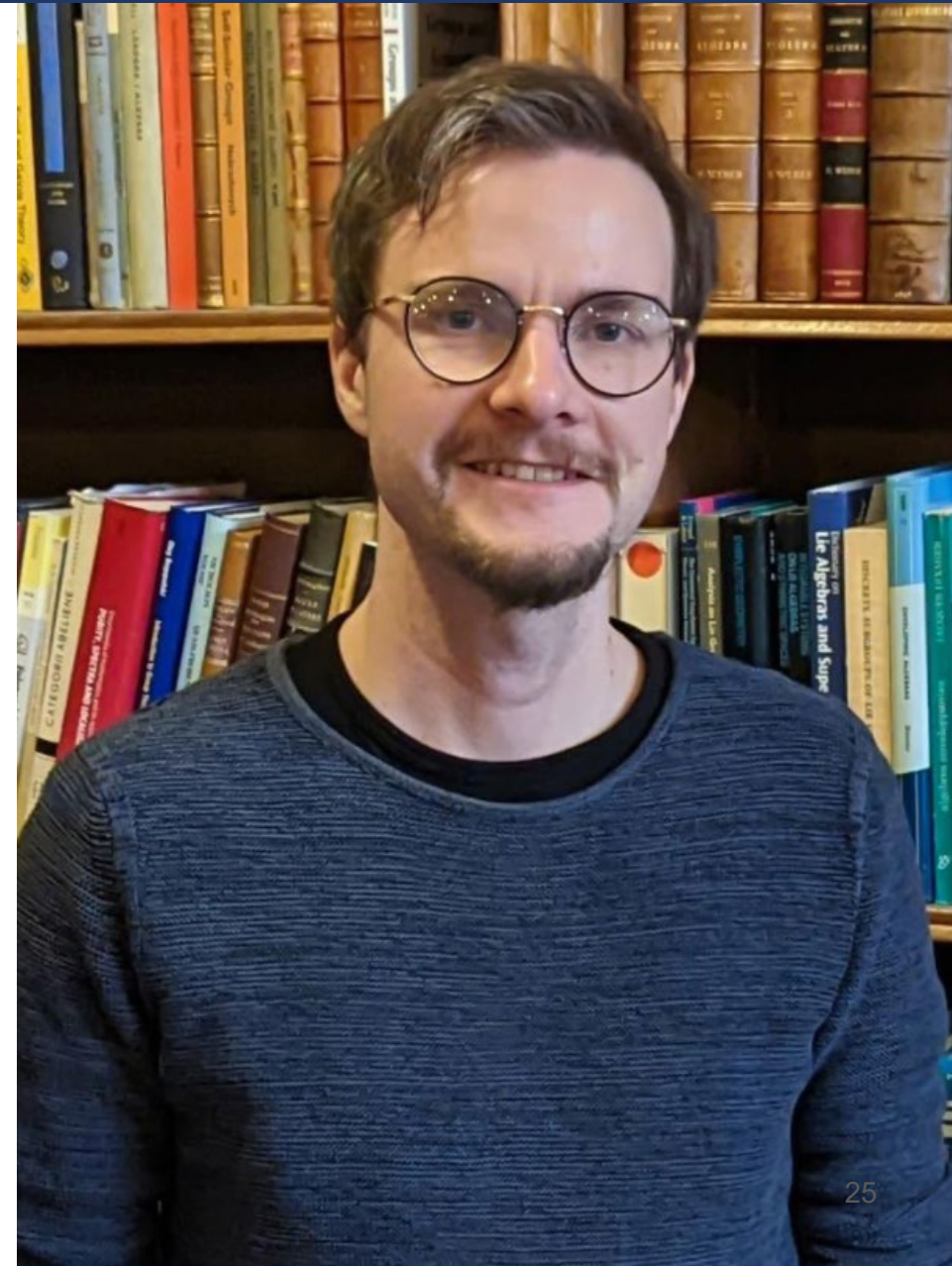


And we celebrated faculty that received prestigious national and international recognitions.

Alexander Kupers  
Department of Computer and  
Mathematical Science

**2022 Sloan Research Fellowship recipient**

Alexander is an early-career professor, scholar, and mathematician. His promising research focuses on the mathematics of algebraic and geometric topology.



## Dr. Gray Graffam, Director of the Hub for over 10 years

- Ally in promoting inclusive excellence in entrepreneurship
- Assisted over 250 companies
- The Hub is now officially a MITACS-Approved Accelerator



# 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.



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



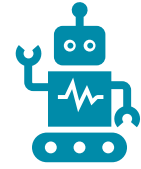
Develop a vision & plan for a Centre for Inclusive Leadership



Develop a vision & plan for a biennial *Scarborough Summit on Inclusive Societies*



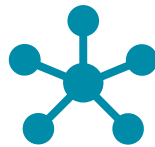
Develop a vision & plan for the EARTH, HeART and Cultural Innovation Districts



Develop a vision & plan for a renewed innovation ecosystem that amplifies the impact of the existing campus-linked accelerators and resources



Optimize the capacity of the OVPRI to fulfil its mandate and facilitate the realization of relevant strategic objectives contained in *Inspiring Inclusive Excellence*



Ensure UTSC research institutes, centres, clusters, and core facilities conform to UTSC guidelines



Develop the GTA-RISE Secretariat to pursue and advance UTSC-based and -led strategic research initiatives



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