

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

Perseverance

We are now in the 3rd 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.

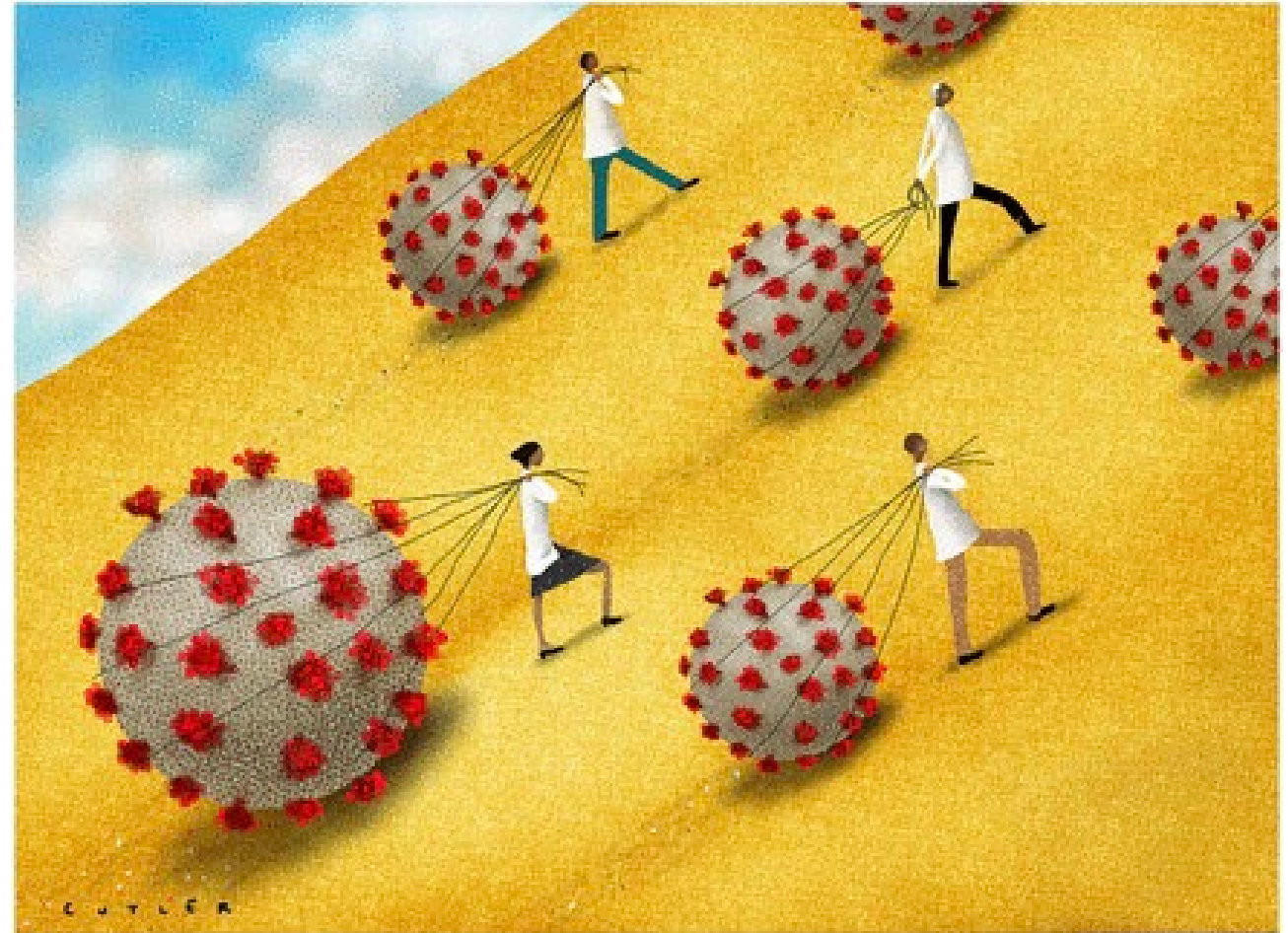


It has also amplified pre-existing inequities in academia.

PNAS

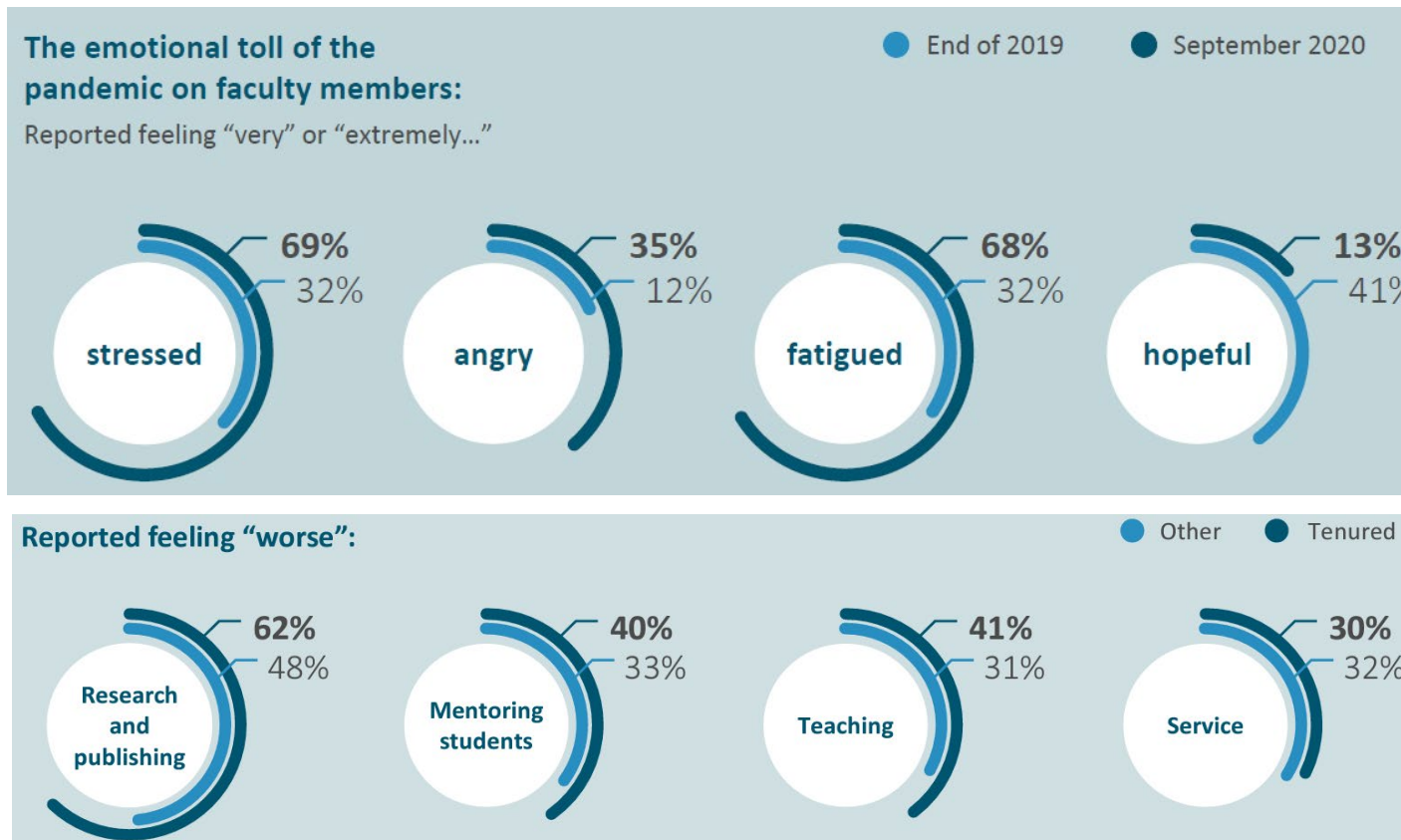
07 July 2020 117: 15378-15381

**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



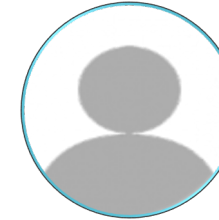
Hillary Chan
MANAGER OF OPERATIONS
& PROJECT MANAGEMENT



Kristine Peruzzi
ASSISTANT TO VPRI



Carmen Siu
RESEARCH OPERATIONS &
FINANCIAL OFFICER



Neily Yaghini
ADMINISTRATIVE
ASSISTANT



Michelle Wodzak
DIRECTOR

GRANT DEVELOPMENT



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

PARTNERSHIPS



Suhail Asrar
RESEARCH PARTNERSHIP & BUSINESS DEVELOPMENT OFFICERS



Brice Rousseau

AWARDS & COMMUNICATION



Amanda Mohabeer
RESEARCH AWARDS &
HONOURS OFFICER



Joshua Van Ry
RESEARCH SERVICES
OFFICER

STRATEGY



Sharad Barkataki



Dolapo Oladiran



Kate Withers Hess

STRATEGIC PROJECT OFFICERS

THE HUB



Gray Graffam
DIRECTOR



Donovan Dill
STRATEGIC COORDINATOR
& BUSINESS ADVISOR

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

2019-20

**COVID-19
Emergency
Travel**
\$ 7,115

2020-21

**COVID-19
Animal
restock**
\$ 5,875

**COVID-19
Equipment
Repair**
\$ 43,210

**COVID-19
Post-doc
Fellowship
Support**
\$ 59,882

**Salary
Support for
Recovery of
Research
Activities**
\$ 48,531

2021-22

**COVID-19
Animal
Restock**
\$ 11,456

**COVID-19 UTSC Faculty Supervisor
Research Support Funding
Program**
\$ 1,012,466

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



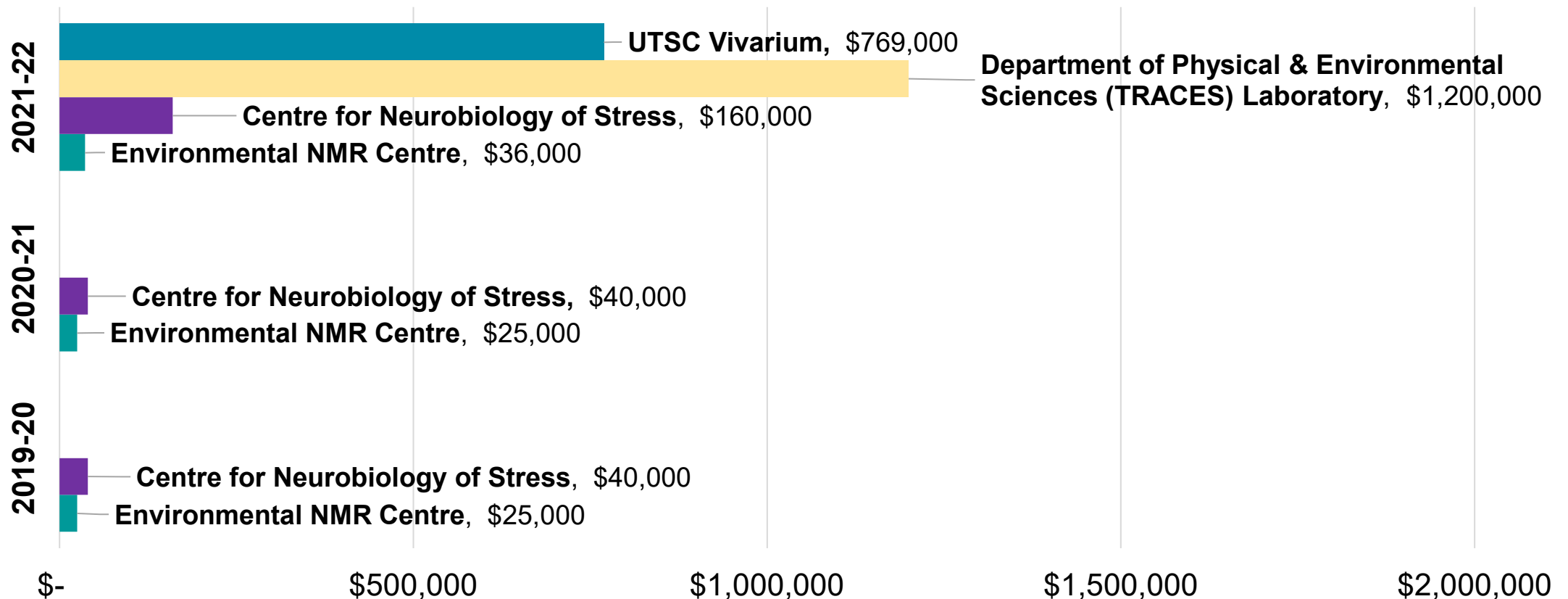
Sustainable Food and Farming Futures Cluster

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.

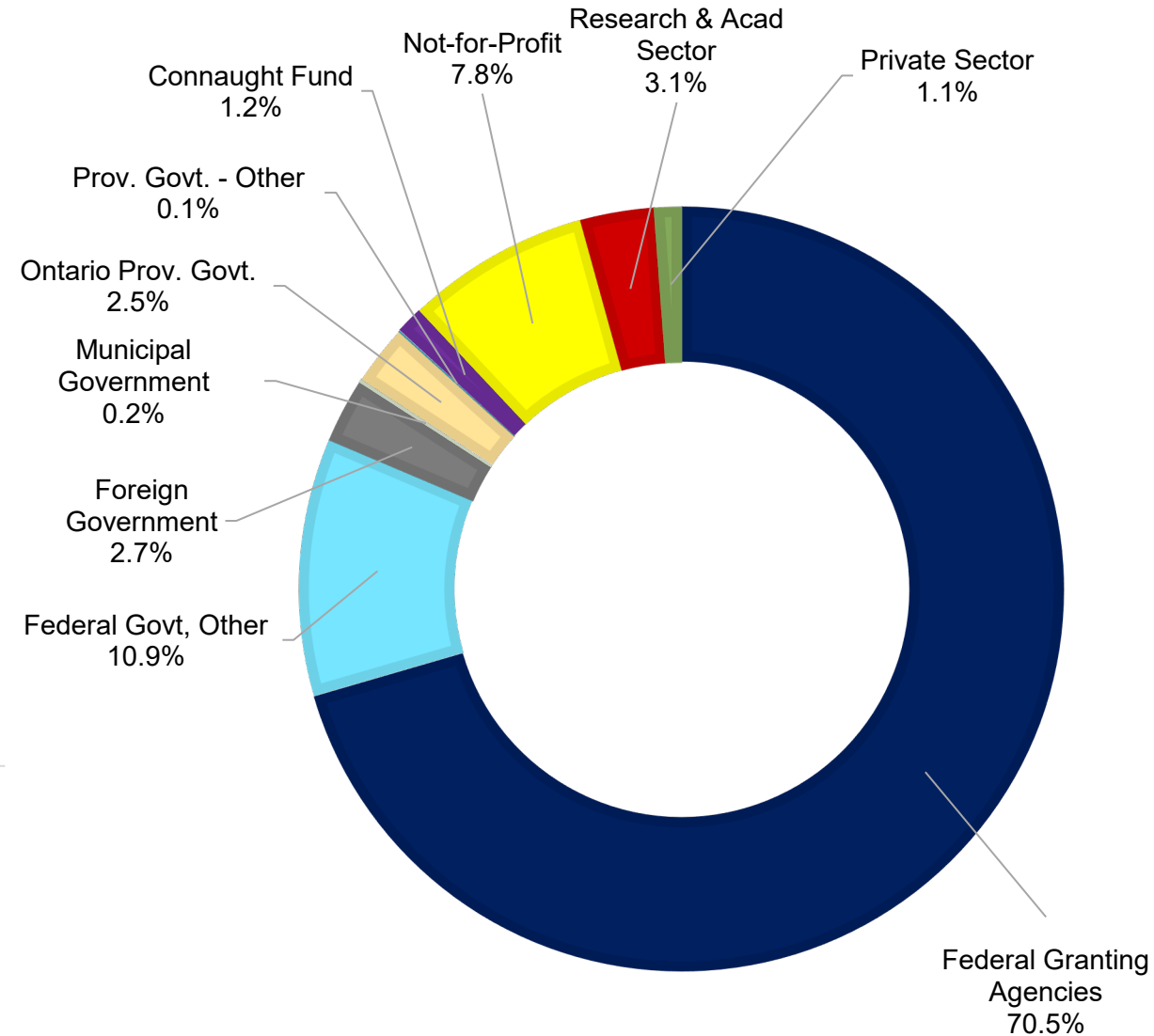
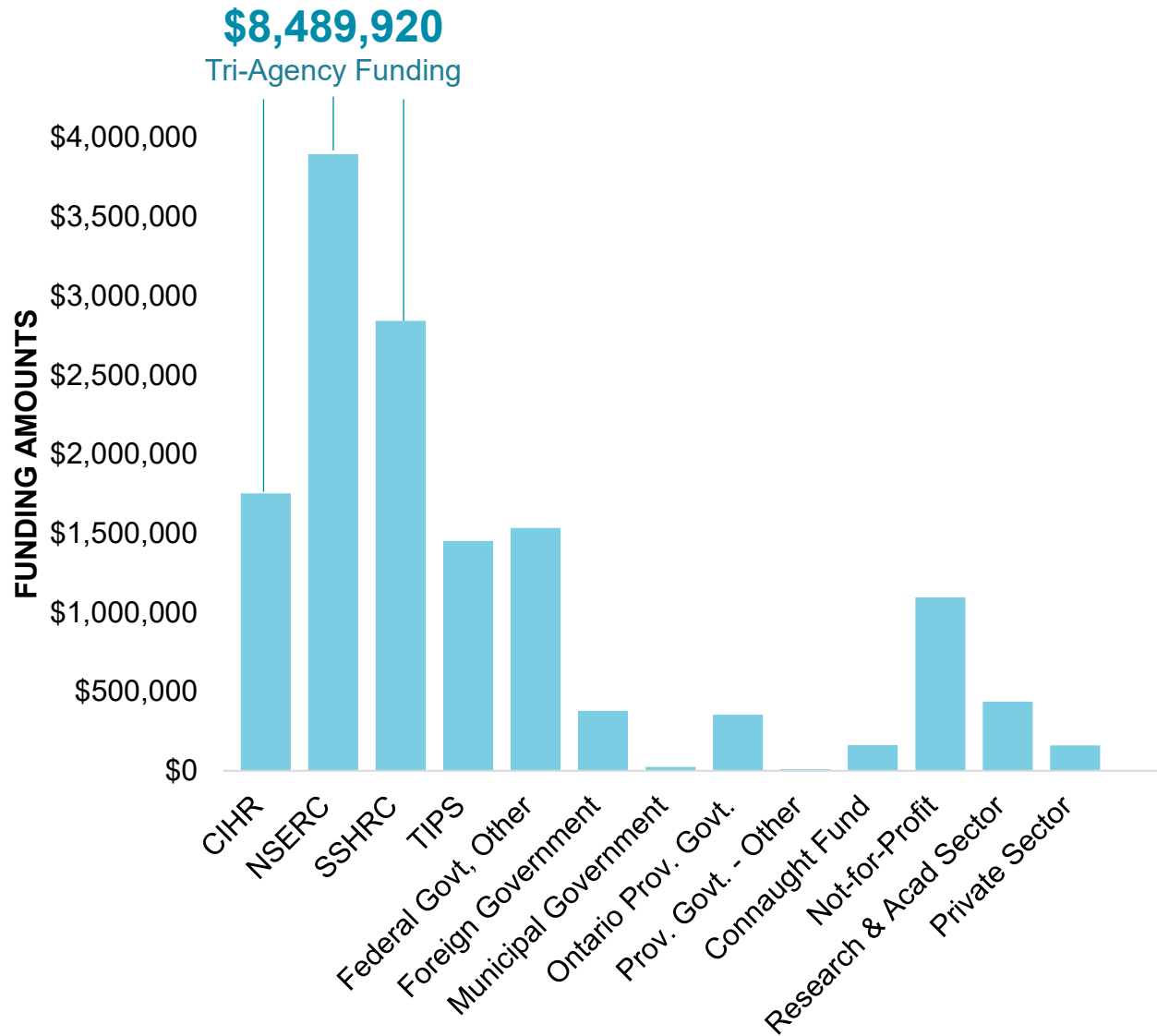
We developed guidelines for core research facilities that will come into effect July 1, 2022.



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.

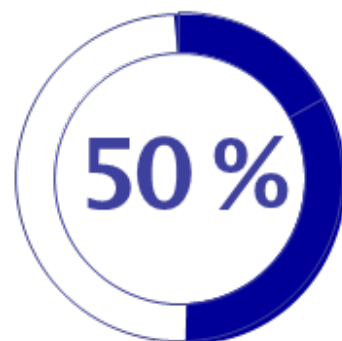
Data source: VPRI Dashboards, May 2022

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

CIHR Project Grant (Fall Competition)



NATIONAL

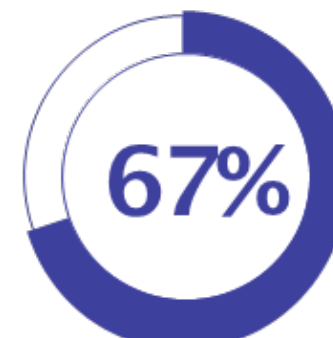


SCARBOROUGH

SSHRC Insight Grant



NATIONAL

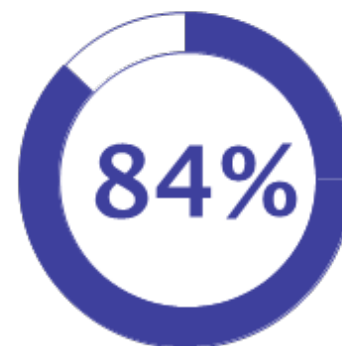


SCARBOROUGH

NSERC Discovery Grant



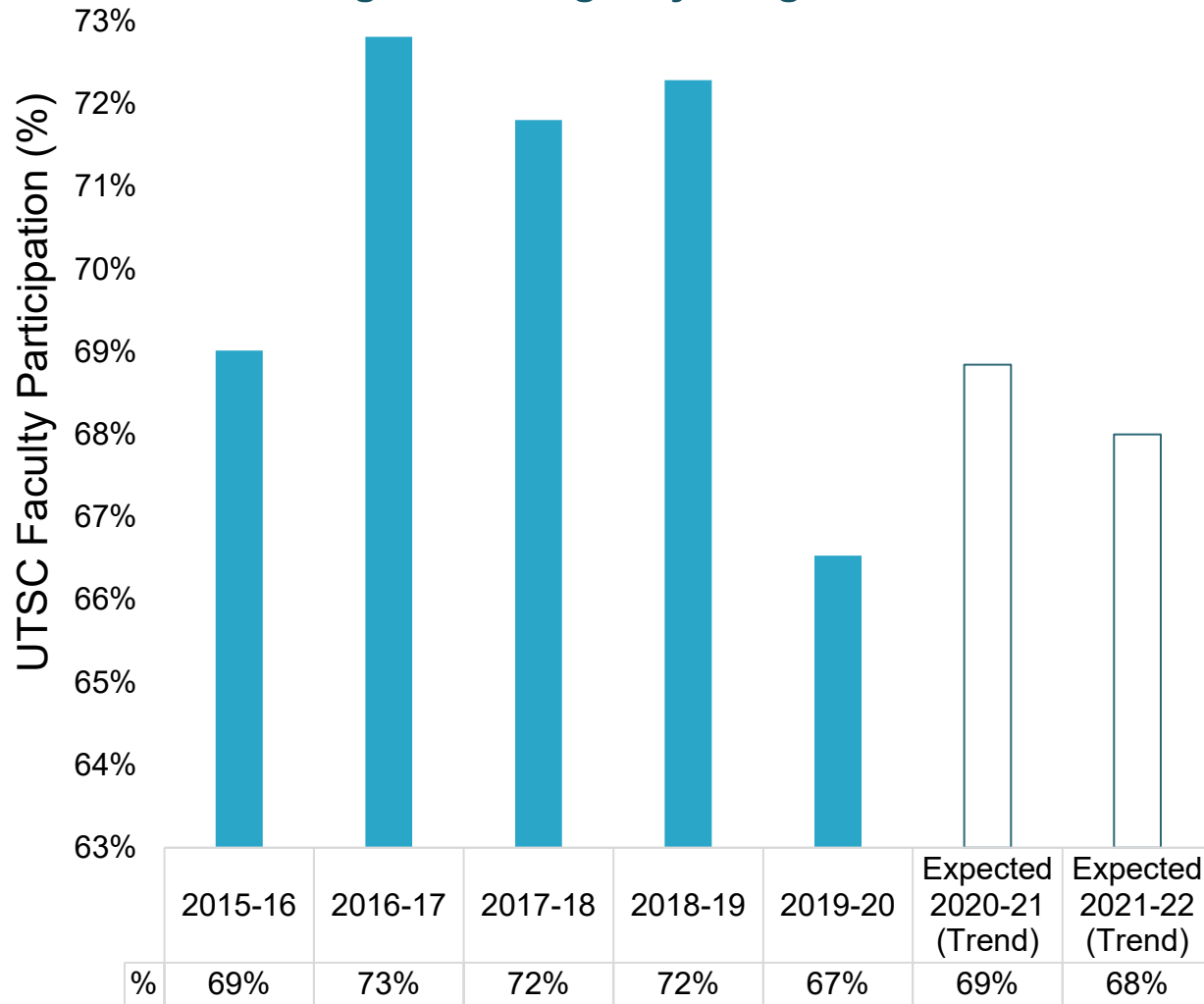
NATIONAL



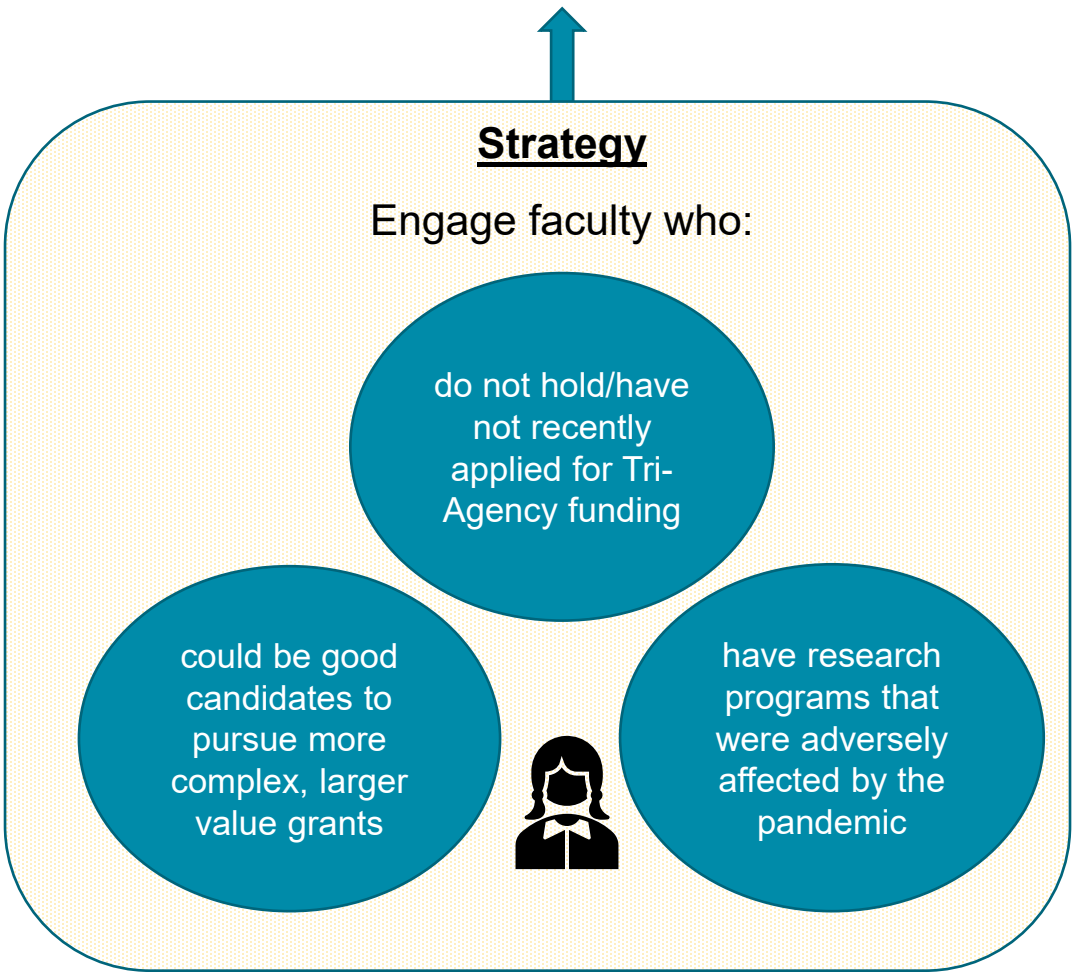
SCARBOROUGH

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

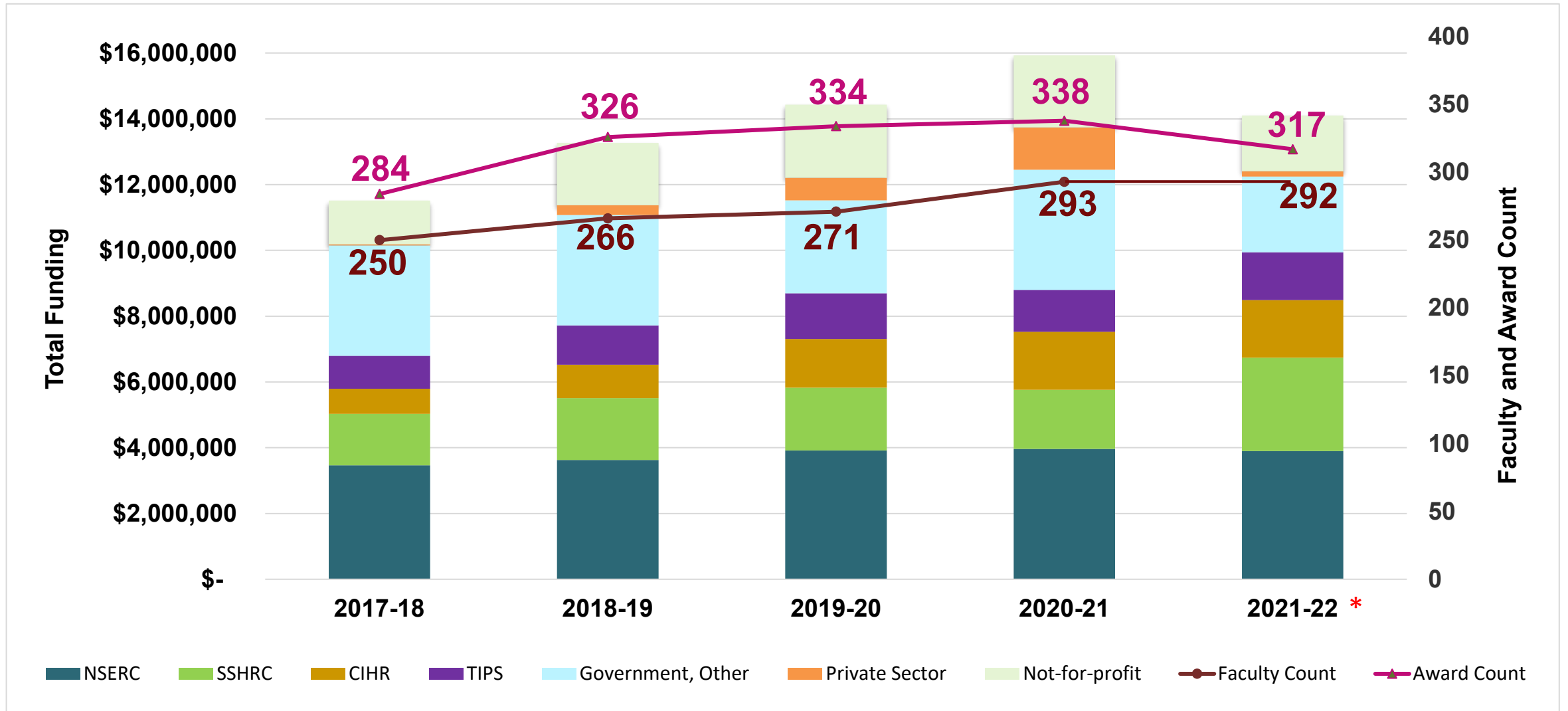


Note: Faculty Participation data is currently only available until 2019-20.

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

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

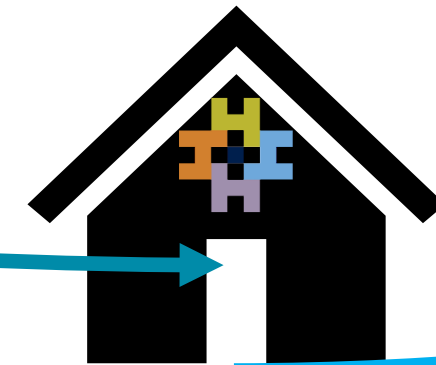
We continue to support our innovators through the campus accelerator, The Hub.

22
companies
joined

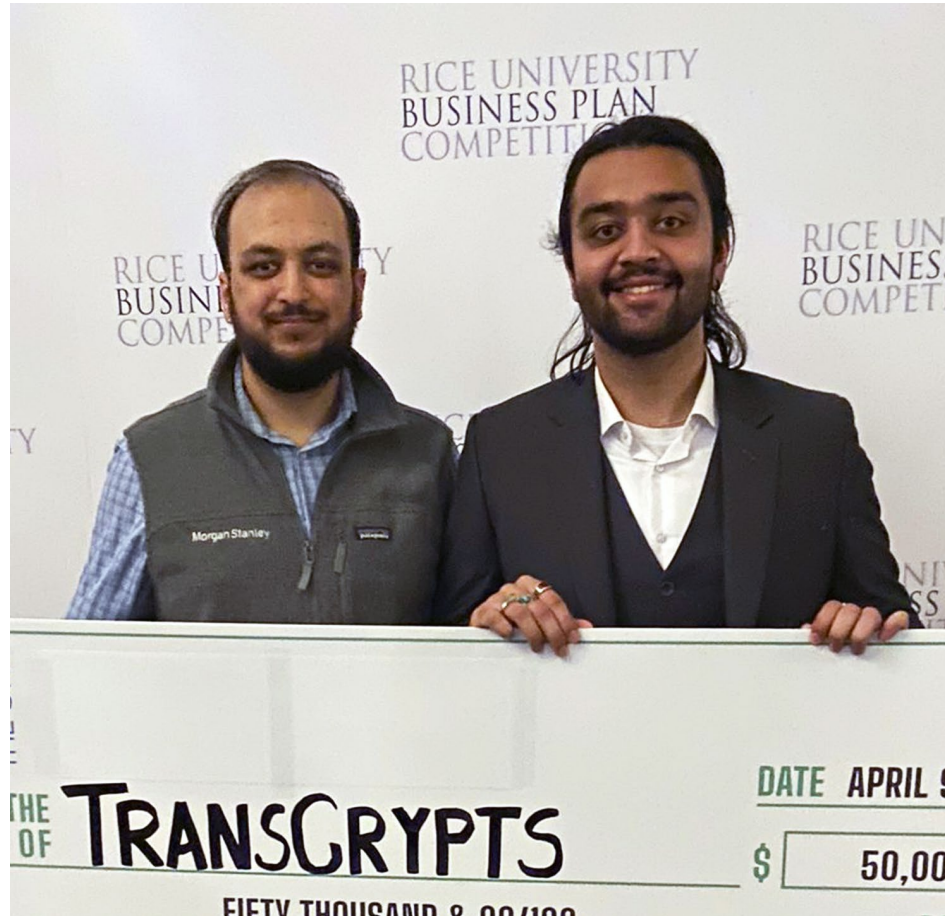
50%
of companies have
≥1 woman founder

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.

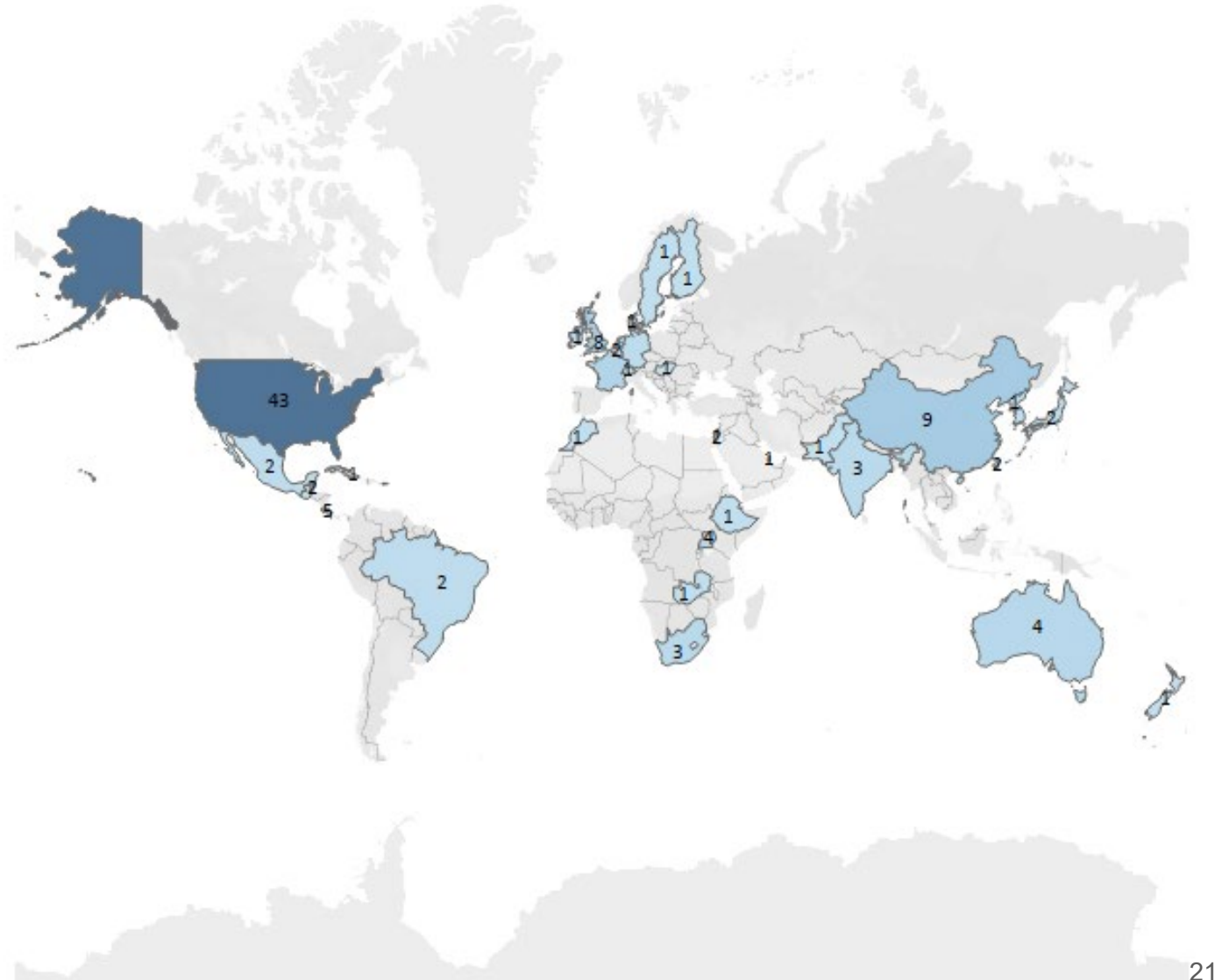
SUSTAINABLE DEVELOPMENT GOALS



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

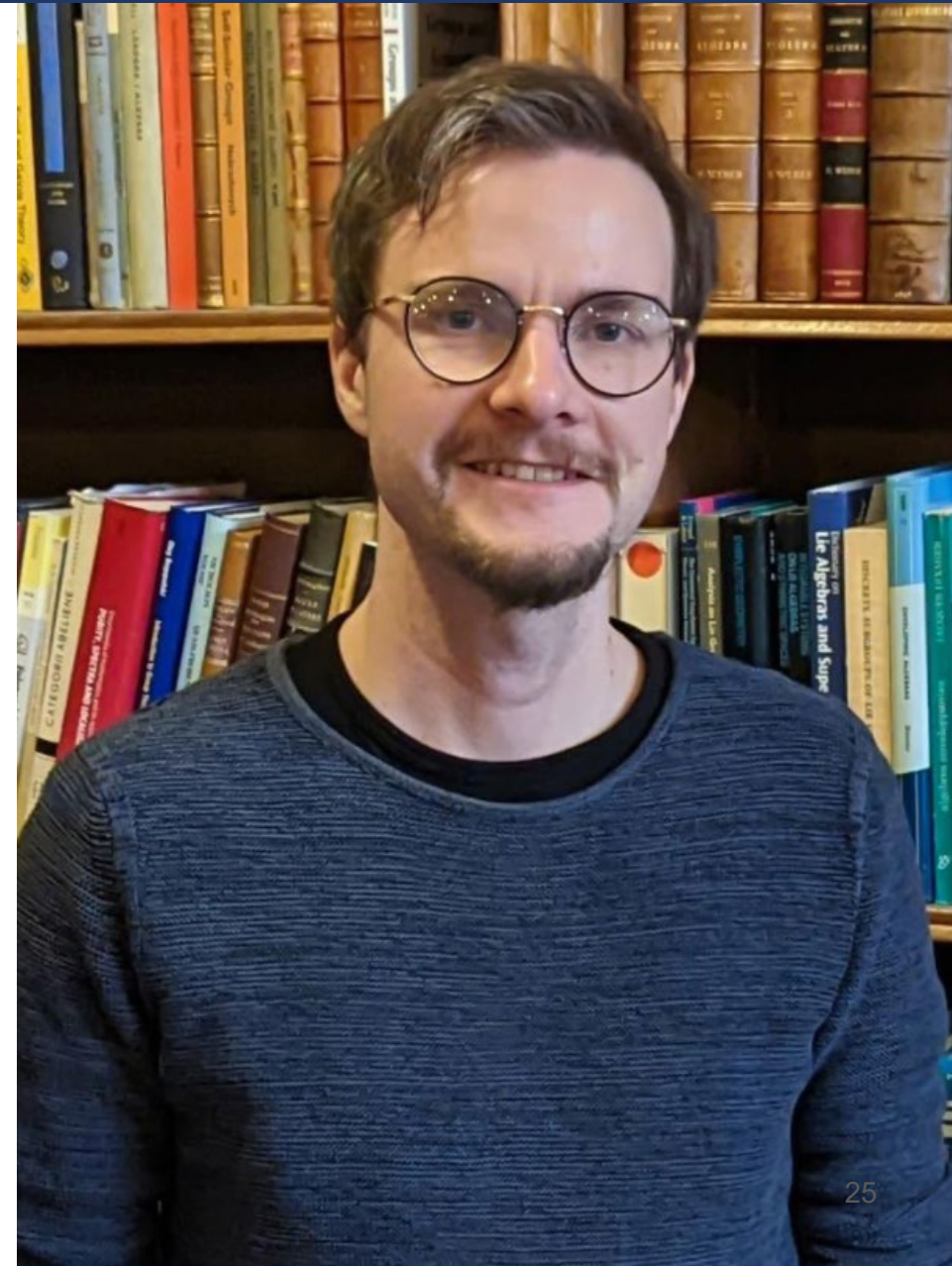
Marlene is an internationally renowned professor, author, and filmmaker. Her interdisciplinary research focuses on feelings of shame and invisibility in relation to aging, especially when it relates to disability and illness.

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



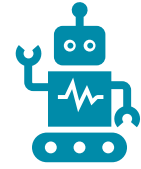
Develop a vision & plan for a Centre for Inclusive Leadership



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



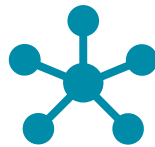
Develop a vision & plan for the EARTH, HeART and Cultural Innovation Districts



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