

FOR INFORMATION

PUBLIC

OPEN SESSION

TO: UTSC Campus Council

SPONSOR: Bernie Kraatz, Vice-Principal, Research
CONTACT INFO: 416-208-4835; vpresearch@utsc.utoronto.ca

PRESENTER: See Sponsor.
CONTACT INFO:

DATE: March 3, 2020 for March 10, 2020

AGENDA ITEM: 8

ITEM IDENTIFICATION:

Annual Report: Office of the Vice-Principal, Research, UTSC

JURISDICTIONAL INFORMATION:

Under section 5.1 of the Council's Terms of Reference, research planning is within the Council's area of responsibility

GOVERNANCE PATH:

1. **UTSC Campus Council [For information] (March 10, 2020)**
2. UTSC Academic Affairs Committee [For information] (March 25, 2020)

PREVIOUS ACTION TAKEN:

No previous action has been taken on this item.

HIGHLIGHTS:

The annual report presentation for the Office of the Vice-Principal Research provides an overview of UTSC faculty research outputs, funding and awards for 2018-19. In addition, the presentation highlights the Office's supports, services and other initiatives for the UTSC community.

In 2018-19, the Office of the Vice-Principal Research supported 266 research faculty at UTSC. Our services include professional grant reviews, funding information sessions, administrative support for grant submissions and a variety of internal funding programs.

We invite you to review the annual report presentation and learn about:

- **22 research stories** featuring UTSC faculty, postdoctoral fellows and students across the departments and disciplines
- UTSC's newest **Canada Research Chairs**, Professor Hilary Brown (ICHS) and Professor Myrna Simpson (DPES), and other CRC holders from UTSC
- Recipients of prestigious **external research awards and honours**:
 - Royal Society of Canada – Fellow
 - Royal Society of Canada – College of News Scholars, Artists and Scientists
 - CIFAR AI Chairs
- Recipient of **UofT research awards and honours**:
 - Connaught Global Challenge Award
- Recipients of **UTSC research awards and honours**:
 - Principal's Research Award
 - Research Excellence Faculty Scholar
 - Research Recognition Award
- **Publications** by UTSC research faculty:
 - 625 journal articles
 - 12 Books
 - 54 Book chapters
 - 147 Other publications (reviews, conference papers, editorials, notes, letters, short surveys, exhibitions)
- **Research funding** obtained by our research faculty: over \$13M in total for 2018-19
- **Statistics** related to funding sponsors, grant success, commercialization, entrepreneurship and faculty supervision at UTSC
- Recipients of **student awards** and student **outreach activities**
 - UTSC Undergraduate Research Poster Forum
 - UTSC Undergraduate Research Prize
 - UTSC Graduate Student Research Award
 - Let's Talk Science and Science Rendezvous
- Research **lectures and events**:
 - Celebration of Research Excellence Lecture Series
 - New Frontiers Seminar Series

FINANCIAL IMPLICATIONS:

N/A

RECOMMENDATION:

Presented for information.

DOCUMENTATION PROVIDED:

PowerPoint presentation - Research and Innovation at U of T Scarborough

UTSC Research Excellence

Recent Awards and Honours



Anne-Emanuelle Birn (2018)
*Centre for Critical Development
Studies*
Canadian Women in Global
Health Award, Canadian Society
for International Health



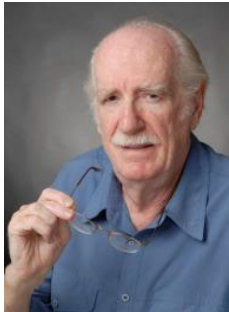
Barry Freeman (2018)
Arts, Culture and Media
Nathan Cohen Award for
Excellence in Critical Writing,
Canadian Theatre Critics
Association



Gerald Chaim Cupchik (2018)
Psychology
Gustav Theodor Fechner
Award, International
Association of Empirical
Aesthetics



Rudy Boonstra (2018)
Biological Sciences
Lifetime Achievement Award,
Canadian Council of University
Biology Chairs



Ian Brown (2018)
Biological Sciences
Senior Fellow, Cell Stress Society
International



Diana Fu (2019)
Political Science
International Political Sociology
Book Award, International
Studies Association

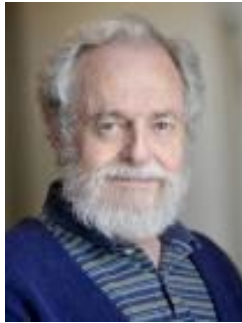


Anthony Charles Ruocco (2019)
Psychology
Mid-Career Investigator Award,
North American Society for the
Study of Personality Disorders



Michael Lambek (2019)
Anthropology
Elliott P. Skinner Book Award,
Association for Africanist
Anthropology

Royal Society of Canada Fellows



John Friedlander (1988)
*Computer & Mathematical
Sciences*



Lisa Jeffrey (2007)
*Computer &
Mathematical Sciences*



John Kennedy (2005)
Psychology



H. Bernie Kraatz (2019)
*Physical & Environmental
Sciences*



Michael Lambek (2000)
Anthropology



Judith Teichman (2014)
*Political Science /
Centre for Critical
Development Studies*



Frank Wania (2017)
*Physical & Environmental
Sciences*

Members of the College of New Scholars, Artists and Scientists



Katie Larson (2018)
English



Nathalie Rothman (2014)
Historical and Cultural Studies

Medals and Awards



Nick Eyles (2013)
Physical & Environmental Sciences
RSC McNeil Medal



Balint Virag (2014)
Computer & Mathematical Sciences
John L. Synge Award

UTSC Principal's Research Award



Marlene Goldman (2019)
English

UTSC Research Recognition Award

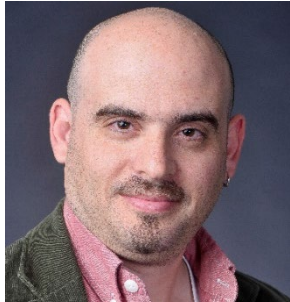


Rutsuko Ito (2019)
Psychology

UTSC Research Excellence Faculty Scholar



Jason Weir (2019)
Biological Sciences



Daniel Bender
*Historical and
Cultural Studies*



Brian Connelly
Management



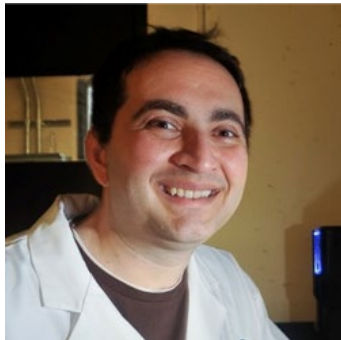
Hilary Brown
*Interdisciplinary Centre for
Health and Society*



Cendri Hutcherson
Psychology



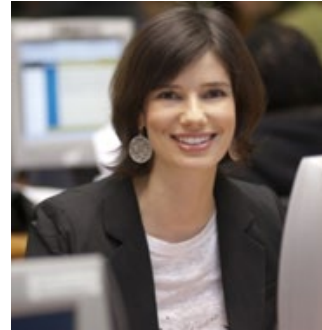
Marney Isaac
*Physical & Environmental
Sciences / Centre for Critical
Development Studies*



Kagan Kerman
*Physical & Environmental
Sciences*



Michael Lambek
Anthropology



Bianca Schroeder
*Computer & Mathematical
Sciences*



Myrna Simpson
*Physical and Environmental
Sciences*



Bebhinn Treanor
Biological Sciences

UTSC Research Advisory Board 2019-20



Julie Teichroeb/
Girish Daswani
Anthropology



Mark Campbell
Arts, Culture and Media



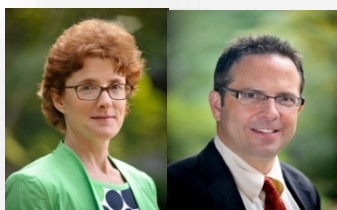
Ken Welch
Biological Sciences



Lisa Jeffrey
*Computer and
Mathematical Sciences*



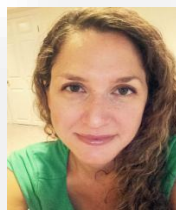
Judith Teichman/
Anne-Emanuelle Birn
Centre for Critical Development Studies



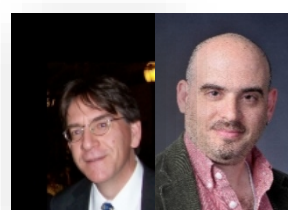
Marlene Goldman/Neal Dolan
English



Rena Helms-Park
*Centre for French
and Linguistics*



Michelle Silver
*Interdisciplinary Centre
for Health & Society*



Russell Kazal/
Daniel Bender
Historical and Cultural Studies



John Trougakos
Management



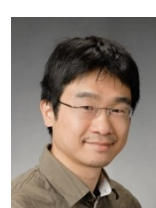
William Seager
Philosophy



Artur Izmaylov
*Physical &
Environmental Sciences*



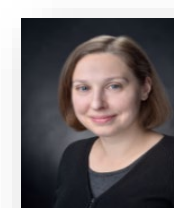
Lucan Way/ Matt Hoffman
Political Science



Andy Lee
Psychology

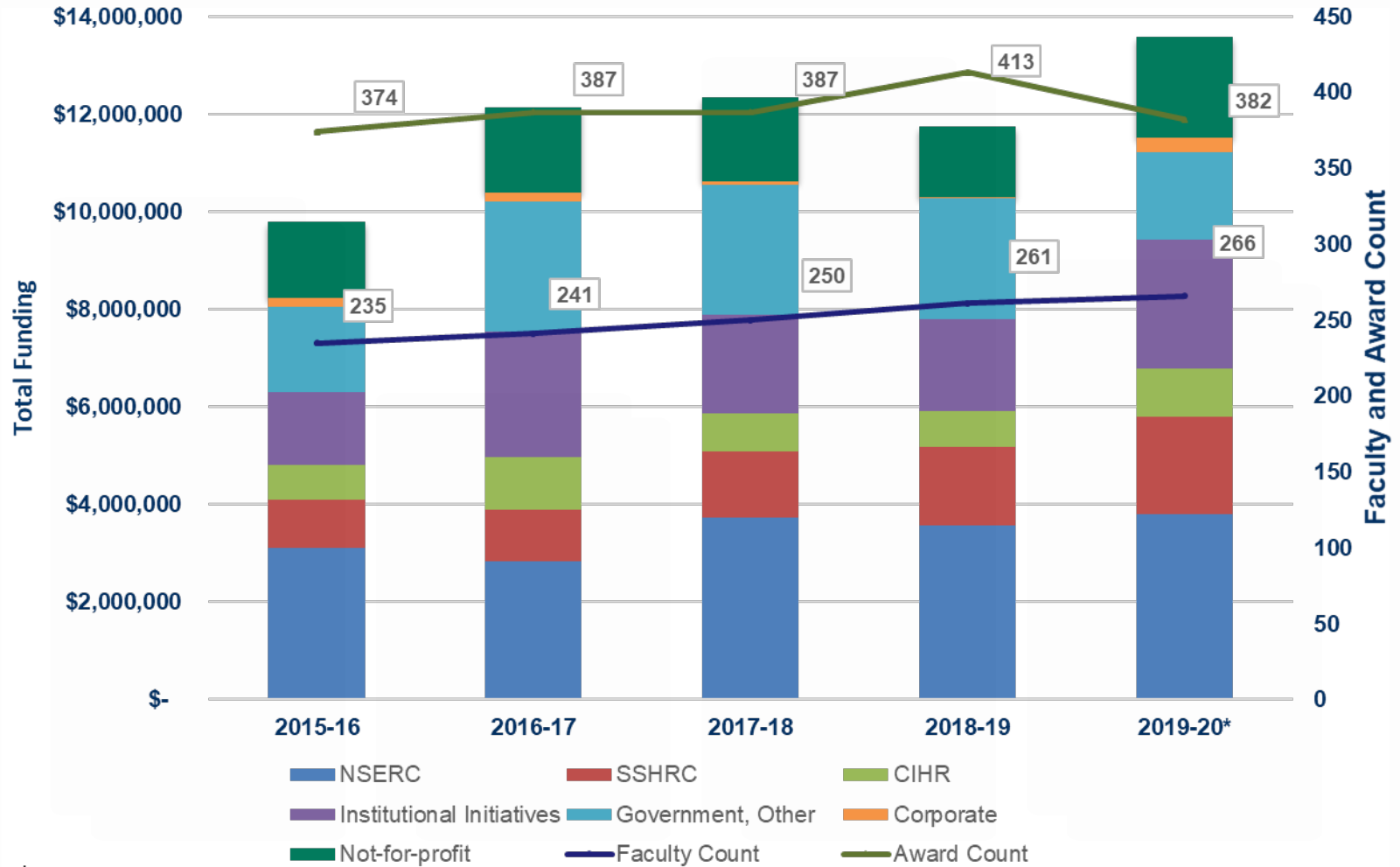


John Hannigan
Sociology



Sarah Forbes
Library Representative

UTSC Research Funding



*Preliminary numbers

- Data Source: UTBI Research Cube; prorated; total budget allocated by the sponsor during Grant Year April 1 - March 31; last system refresh February 5, 2020

- Affiliated hospitals data are updated with a one year

UTSC Research Funding

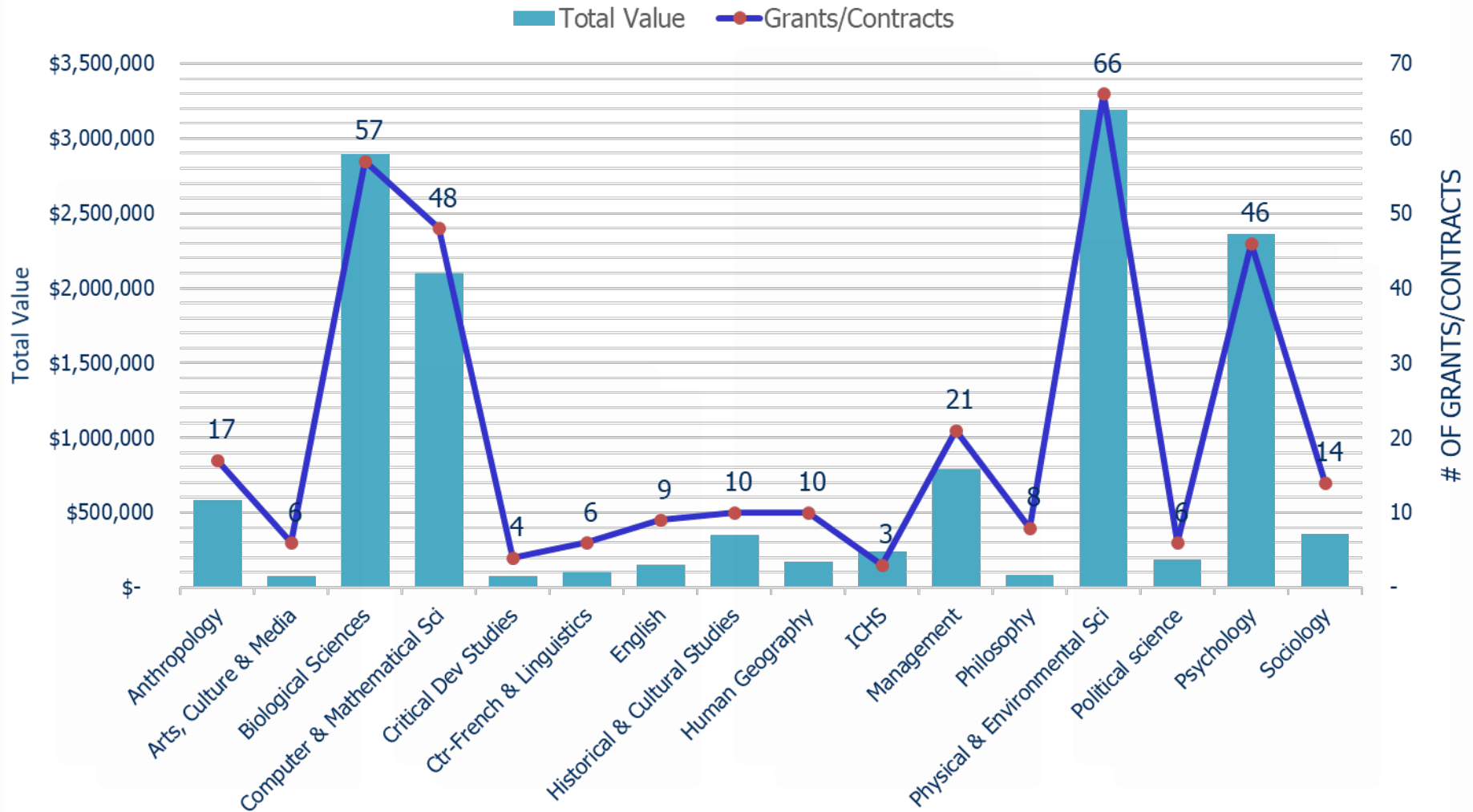
	2015-16	2016-17	2017-18	2018-19	2019-20*
NSERC	\$ 3,111,844	\$ 2,836,057	\$ 3,726,473	\$3,573,744	\$3,788,028
SSHRC	\$ 974,664	\$ 1,061,959	\$ 1,369,850	\$ 1,596,533	\$2,019,808
CIHR	\$ 715,781	\$ 1,066,502	\$ 765,089	\$ 732,110	\$981,801
TIPS					\$125,000
Tri-Council	\$ 4,802,289	\$ 4,964,518	\$ 5,861,412	\$ 5,902,387	\$ 6,914,637
CFI	\$219,388	\$943,711	\$637,007	\$340,800	\$757,888
CRC	\$827,147	\$716,667	\$1,000,000	\$1,000,001	\$1,070,000
OGI	\$75,000	\$0	\$0	\$0	\$0
MRIS	\$379,760	\$927,133	\$378,078	\$541,459	\$811,742
Institutional Initiatives	\$1,501,295	\$2,587,511	\$2,015,085	\$1,882,260	\$2,639,630
Government, Other	\$1,754,205	\$2,649,804	\$2,680,665	\$2,483,695	\$1,792,403
Corporate	\$161,834	\$194,064	\$67,702	\$34,817	\$297,824
Not-for-profit	\$1,569,840	\$1,734,428	\$1,708,233	\$1,436,563	\$2,050,368
Total Research Funding:	\$9,789,463	\$12,130,325	\$12,333,097	\$11,739,722	\$13,694,862
Faculty Count	235	241	250	261	266
Award Count	374	387	387	413	382

*Preliminary numbers

- Data Source: UTBI Research Cube; prorated; total budget allocated by the sponsor during Grant Year April 1 - March 31; last system refresh February 5, 2020

- Affiliated hospitals data are updated with a one year

Research Funding by Department 2019-20*

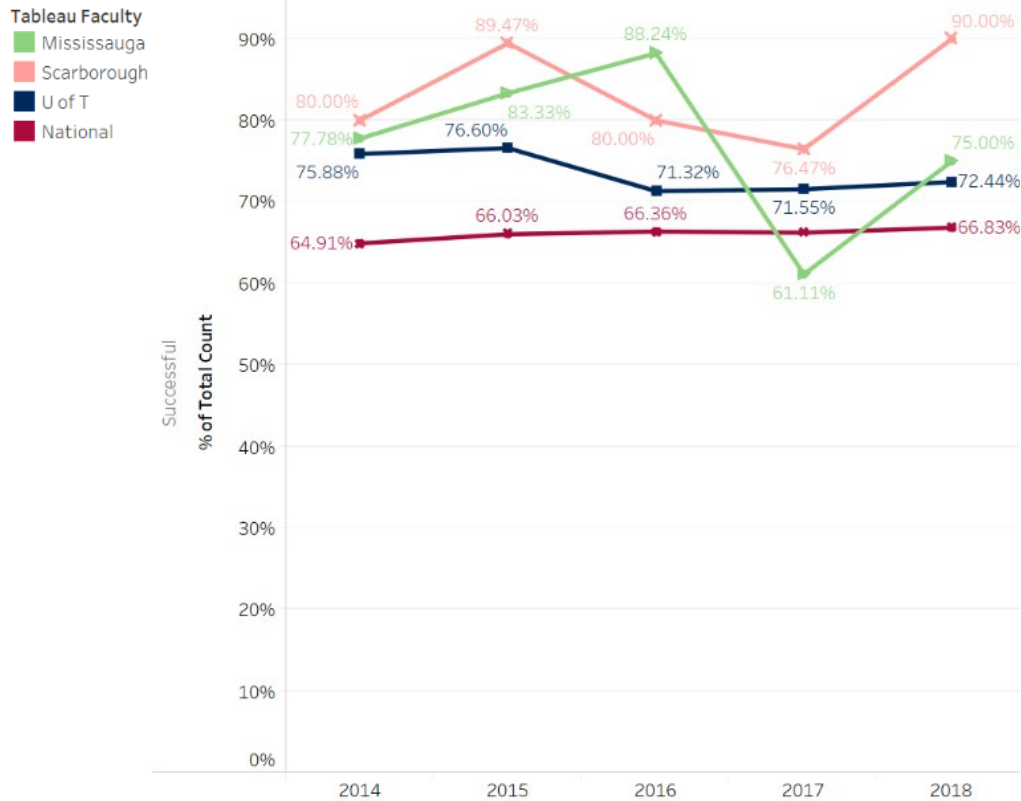


*Preliminary numbers

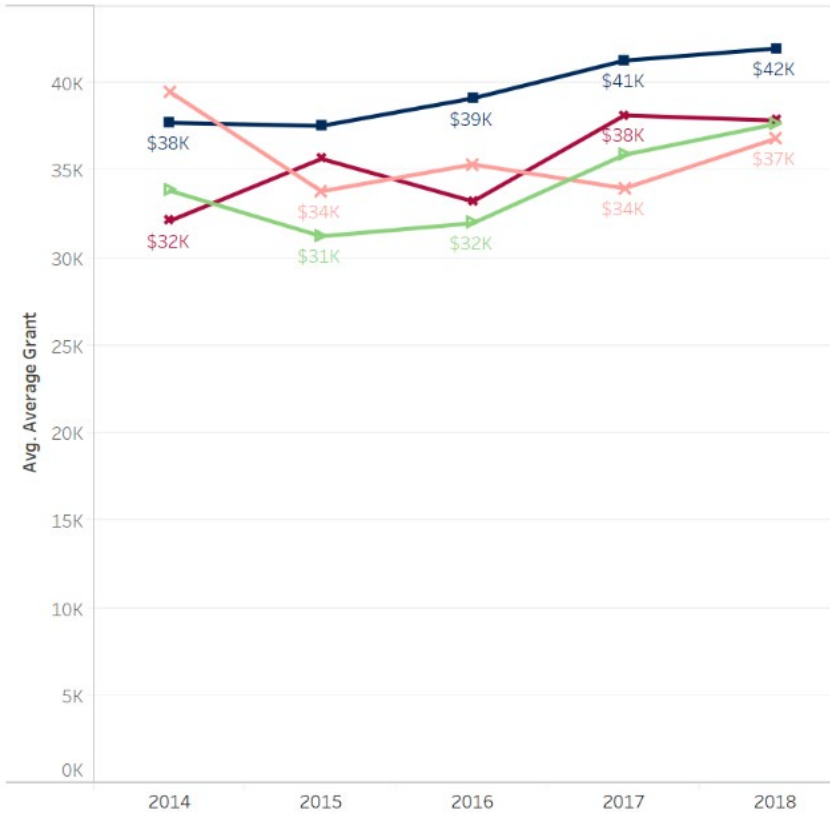
- Data Source: UTBI Research Data Cube (last updated February 5, 2020), pro-rated, April 1 – March 31
 - Research data is dynamic and changes with each refresh

NSERC Discovery Grant (DG) Competitions

Discovery Grant (DG) Success Rate



DG Average Grant



*Preliminary numbers

Data Source: U of T Marketshare Data Mart (Tableau); retrieved February 5, 2020

SSHRC Insight Grant (IG) Success Rate

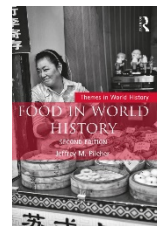
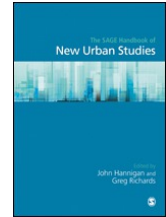
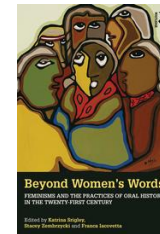
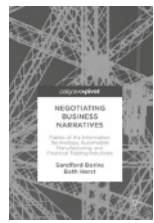
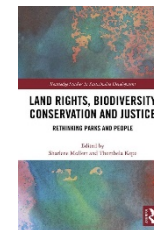
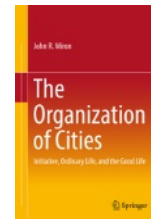
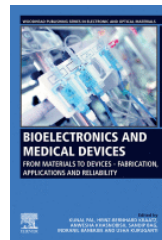
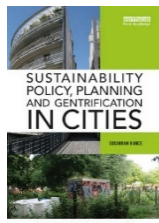
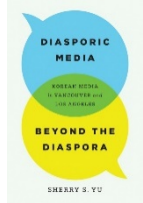
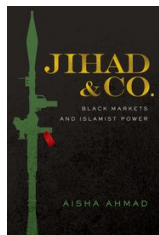
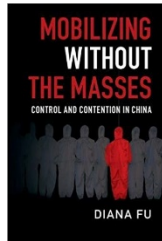
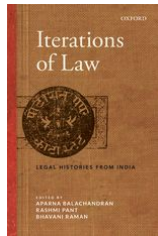
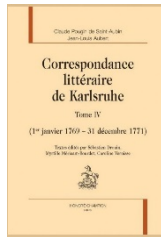
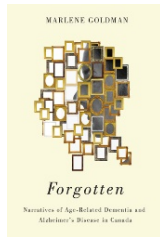


Insight Development Grant (IDG) Success Rate



Data Source: U of T Marketshare Data Mart (Tableau); retrieved February 5, 2020

	2016	2017	2018	2019
Journal articles	298	350	357	431
Books	20	9	4	7
Book chapters	10	17	24	30
Other	77	84	74	115
TOTAL	405	460	459	583

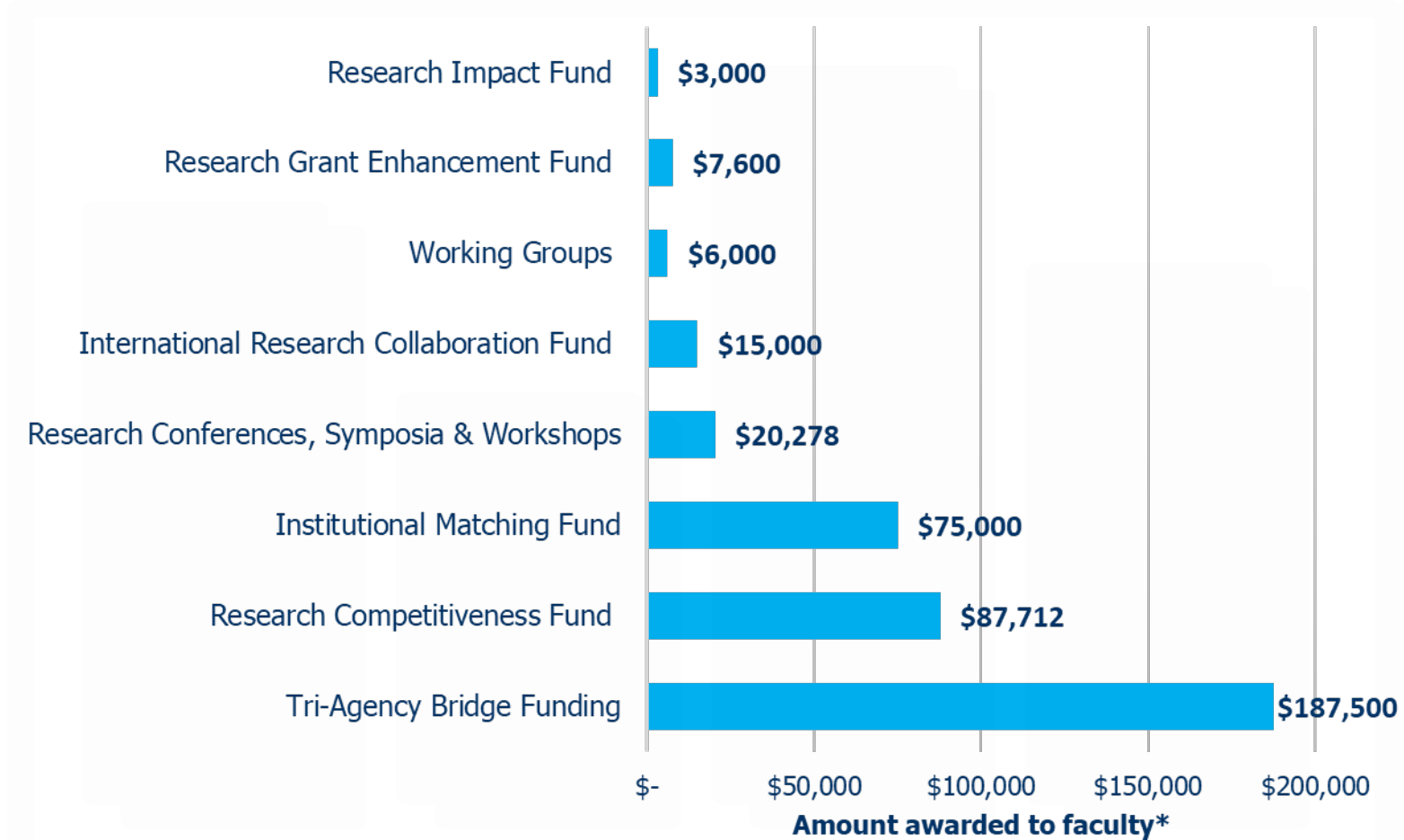


In 2019-20*, more than \$1.2M has been allotted for faculty, postdocs, students and centres through our internal programs, awards, and sponsorships

Internal Programs, Awards and Sponsorships



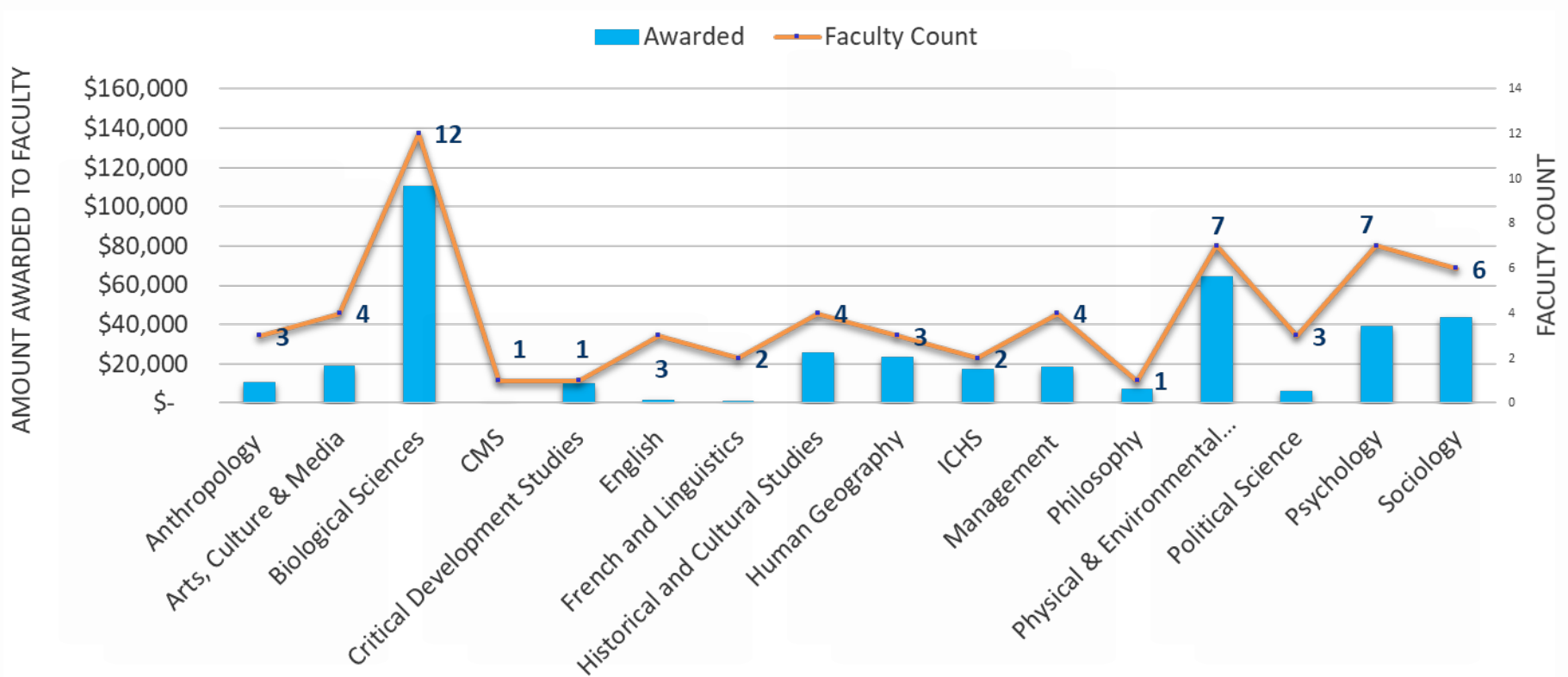
*Preliminary numbers as of February 25, 2020



*Preliminary numbers as of February 25, 2020

Funding Across All Disciplines 2019-20*

The internal funding programs supported UTSC faculty across all disciplines



*Preliminary numbers as of February 25, 2020

Encourage participation in funding opportunities

Help with writing winning proposals

Support and cultivate partnerships

Support institutional initiatives

Grant writing and editing support

Grant workshops for faculty

Research Officers and Financial Specialists

- Faculty training and research proposal development services and support
- Seed funding to enhance, stimulate and promote faculty research
- Recognition and promotion of faculty research excellence
- Support student research and innovation activities (The Hub **and the Bridge**)

New Funding Initiatives 2019-20

UTSC Clusters of Scholarly Prominence Program (CSPP)

- Following extensive conversations with faculty, the Research Advisory Board and the Chairs and Directors group, the UTSC CSPP was developed.
- Purpose: to provide UTSC faculty with a mechanism to help pursue the creation of self-sustaining, interdisciplinary, inter-departmental, collaborative clusters of scholarship in areas of established and emerging research strength at UTSC.
- Value: \$100,000-\$200,000 per year for three years/can apply for an additional two years of funding.
- Inaugural Competition Deadlines:
 - NOI: May 4, 2020
 - Full Application: June 15, 2020

- In the past year (May 1, 2019 to February 14, 2020)
 - Administrative oversight of **~120** external grant applications Review for compliance with UT protocols for indirect costs if applicable
 - MRA approval process support
- Enhanced processing of **~40** applications
 - Proposal development and editing support
 - Review and feedback on narrative sections of proposal and/or budget review and feedback

OVPR Information Sessions and Workshops 2019-20

Topic	Date
NSERC Discovery Grant Information Session: Preparing an NOI	June 11, 2019
NSERC Discovery Grant and Research Tools & Instruments Grant Panel Discussion	June 12, 2019
SSHRC Insight Grants Information Session	June 17, 2019
NSERC Alliance Grant Program Information Session: Live Stream	June 26, 2019
New Frontiers in Research Fund - Exploration Stream: Webinar Information Session	July 17, 2019
New Faculty Orientation <ul style="list-style-type: none"> • Building Research Excellence: Research funding opportunities, grant support & communications • Building your Research Profile: Research Award Nominations and Communicating Impact 	August 7-9, 2019

OVPR Information Sessions and Workshops 2019-20

Topic	Date
NSERC Discovery Grant Panel Session: Preparing an Application	September 9, 2019
NSERC Discovery Grant and Research Tools & Instruments Grant Panel Discussion	September 9, 2019
SSHRC Insight Grants Panel Session	September 11, 2019
MRA/MROL Information Session/Workshop	September 11, 2019
SSHRC Insight Development Grant Panel Session	January 13, 2020
Presentations at 8 Departmental Meetings	September 2019 – February 2020

Marlene Goldman, *English*

Principal's Research Award 2019

Cendri Hutcherson, *Psychology*

Canada Research Chair in Decision Neuroscience

Bebhinn Treanor, *Biological Sciences*

Canada Research Chair in Spatially-Resolved Biochemistry

Jason Weir, *Biological Sciences*

Research Excellence Faculty Scholar 2019

Rutsuko Ito, *Psychology*

Research Recognition Award 2019

Daniel Bender, *Historical & Cultural Studies and Culinarium Research Centre*

Canada Research Chair in Cultural History and Analysis

Julie McCarthy, *Management*

Research Excellence Faculty Scholar 2018

2018-19

U OF T SCARBOROUGH UNDERGRADUATE
RESEARCH POSTER FORUM

(Co-sponsored by the Library and the Office of the Vice-Principal Research)

1ST PLACE

NAZIA MOHSIN
Psychology

Centre for French and Linguistics
Phonetic Symbolism in Urdu

2ND PLACE

SHENHAB ZAIG
Psychology

Mechanisms of opioid-induced respiratory
depression and analgesia in zebrafish

3RD PLACE

DILAKSHAN SRIKANTHAN
Psychology

Elucidating the Efficacy of Intrathecal
Delivery of CAR-T immunotherapy in
preclinical models of Medulloblastoma

Student Awards

U OF T SCARBOROUGH
UNDERGRADUATE
RESEARCH PRIZE 2018-19

(Co-sponsored by the Library and the Office
of the Vice-Principal Research)



PRAVEEN JAYARAJAN
Biological Sciences



JUDY PERPOSE
Arts, Culture and Media



GRADUATE STUDENT
RESEARCH AWARD 2018-19

TAHIRA GULAMANI
Psychology, Masters level



**JOÃO PEDRO FONTENELLE DE
ARAÚJO FREIRE DA SILVA**
Physical & Environmental Sciences,
Doctoral level



Science Rendezvous at the Toronto Zoo

Attendance
~5,800

Number of Event Volunteers
75

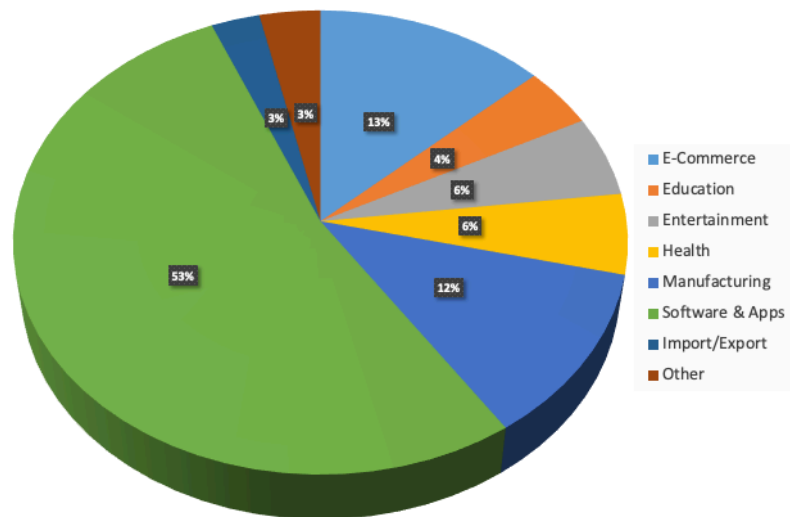
Volunteer Hours Spent Planning
1,400

Social Media Reach
21,000+ impressions



- 148 startups formed (265 students / founders)
- Majority from Computer Science
- 33% incorporated
- Combined value at graduation of \$1.6 million
- Combined valuation today of top 5 companies over \$30 million

HUB companies by industry



52% Apps/Software
13% E-Commerce
12% Manufacturing
6% Health
6% Arts

Accelerate

- 18 students forming 5 startups
- One-on-one coaching, advising

Incubate

- 66 students forming 46 startups
- Workshops, group sessions

Engage

- 800 students
- Boothing, presentations, lectures and events



The process followed by The Hub is to create a funnel, engaging students primarily via presentations and boothing. A pool of 200 highly motivated students is identified. There is a conversion rate of 30% that draws them into The Hub, where they focus on building their prototype of their idea, attending workshops and group advising sessions. Roughly 25% go on to accelerate their company, which is the point where revenues kick in, and there is advising and one on one coaching.

Women Entrepreneurs

- 6 of this year's 8 winning teams included women founders

Inclusivity

- The Hub is broadly inclusive by gender, cultural diversity, and discipline focus

This year's star entrepreneur

- Lynne Corvaglia

Lynne – a student from IDS, currently on placement in Costa Rica – has created a social enterprise to recycle 64 tons of leather from Southwest Airlines. She pitched her idea at the Startup Intake, and won first place.

