



FOR INFORMATION

PUBLIC

OPEN SESSION

TO: Academic Board

SPONSOR: Professor Vivek Goel, Vice-President, Research & Innovation
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PRESENTER: See above
CONTACT INFO:

DATE: May 17, 2017 for May 29, 2017

AGENDA ITEM: 3

ITEM IDENTIFICATION: 2016 Annual Report, Division of the Vice-President, Research & Innovation

JURISDICTIONAL INFORMATION: The Academic Board is one of the three Boards of the Governing Council. It is responsible for matters affecting the teaching, learning and research functions of the University, the establishment of University objectives and priorities, the development of long-term and short-term plans and the effective use of resources in the course of these pursuits.

GOVERNANCE PATH:

1. **Academic Board [For Information] (May 29, 2017)**

PREVIOUS ACTION TAKEN:

This report is provided annually to the Academic Board.

HIGHLIGHTS:

The University of Toronto is Canada's leading research-intensive university and is recognized as one of the top universities worldwide. Our impressive performance nationally and internationally in research and innovation is a reflection of the excellence of our faculty and students and their collaborations with leading researchers, institutions and partners.

Academic Board - 2016 Annual Report, Division of the Vice-President, Research & Innovation

U of T celebrated numerous significant achievements in research and innovation in 2016, and the Vice-President, Research and Innovation portfolio is proud to have played a supportive role in helping our researchers and innovators do what they do best—acquire and apply new knowledge and advance understanding. Our Annual Report highlights their accomplishments and the impact of their research, as well as key performance metrics. The Report also highlights the activities and service improvements we have implemented in order to support research and innovation.

Please explore <http://2016.research.utoronto.ca/> to learn more about how we continue to build a portfolio that serves a world-class institution that aspires to even higher levels of achievement.

FINANCIAL AND/OR PLANNING IMPLICATIONS:

None

RECOMMENDATION:

For Information

DOCUMENTATION PROVIDED:

Executive Summary of 2016 Annual Report – Research and Innovation Impact, Division of the Vice-President, Research & Innovation

Link to full online report: <http://2016.research.utoronto.ca>



Top 25

U of T ranks 25th or better
in 25 QS 2016 subjects

6th

in the world and
1st in Canada for highly
cited research

18th

in the world and 1st in
Canada in universities
working with the world's
most innovative companies

A North American Leader

for Research-Based
Start-up Companies

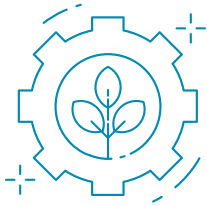
#4

in North America
for Research Libraries

We're bringing together the best ideas to meet the world's biggest challenges.

The University of Toronto is Canada's research and innovation powerhouse. We are recognized as one of the top universities in the world, one of a handful with both depth and breadth of excellence across a broad range of subjects.

Key measures of our researchers' excellence include global rankings, prestigious national and international honours, and the ability of our researchers to secure competitive, peer-reviewed research grants and apply their knowledge in practice, policy and the marketplace.



Research & Innovation Leadership

U of T Rankings in the Most Prominent Global Rankings Systems

Global Rankings Canadian Rankings

1-10 11-20 21-30 31+

2016 Rankings	2012		2013		2014		2015		2016	
	National Taiwan University Ranking	7	1	8	1	4	1	3	1	4
US News Best Global Universities	-	-	-	-	14	1	16	1	21	1
Times Higher Education World University Rankings	21	1	20	1	20	1	19	1	22	1
Academic Ranking of World Universities	27	1	28	1	24	1	25	1	27	1
QS World University Rankings	19	1	17	1	20	1	34	2	32	2

Exceptional performance and reputation across a breadth of disciplines

U of T is the only Canadian university to rank among the **top 50 globally** across all premier international field rankings. It is the highest-ranked Canadian university in 21 out of 24 such fields. **U of T ranks among the top 10 most influential universities in the world** on a prestigious list that includes Harvard, Oxford, UC Berkeley, Stanford and Cambridge.

U of T 2016 Major Field Ranking Results

W = World Rankings C = Canadian Rankings

1-10 11-20 21-30 31+

QS 2015*	W	C	Shanghai (ARWU) 2016	W	C	THE 2016	W	C	NTU 2016	W	C
Life Sciences & Medicine	12	1	Social Sciences	20	1	Clinical, Pre-clinical & Health	14	1	Clinical Medicine	3	1
Arts & Humanities	22	1	Clinical Medicine & Pharmacy	31	1	Arts & Humanities	15	1	Life Sciences	7	1
Natural Sciences	31	1	Life & Agriculture Sciences	38	2	Computer Science	17	1	Social Sciences	9	1
Social Sciences & Management	41	1	Engineering & Computer Science	50	1	Social Sciences	19	1	Natural Sciences	33	1
Engineering & Technology	49	1	Natural Sciences & Math	51-75	1	Business & Economics	21	2	Engineering	43	1
						Life Sciences	22	1	Agriculture	49	4
						Physical Sciences	25	1			
						Engineering & Technology	31	1			



U of T faculty comprise only 7% of Canada's professoriate, yet they secure a **dominant share of prestigious honours nationwide among Canadian faculty.**

40%

of Canada's Prestigious International Research Awards

Award-Winning Researchers & Innovators



Rosemary Sullivan
Plutarch Award



Graham Collingridge
Brain Prize



Geoffrey Ozin
World Technology Award in Energy



Nancy Reid
Royal Statistical Society Guy Medal in Silver



\$1.2B

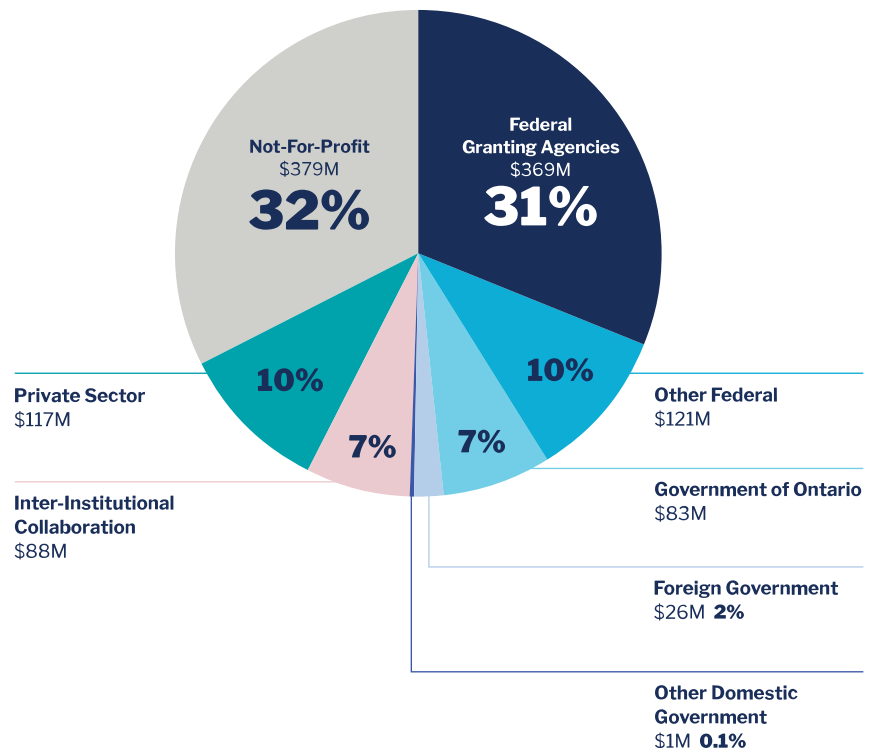
Across three campuses and nine partner hospitals.

15%

of Canada's Tri-Agency Research Funding

Research and Innovation Funding

Research Funds Awarded to U of T and Partner Hospitals by Sector (2015-16)





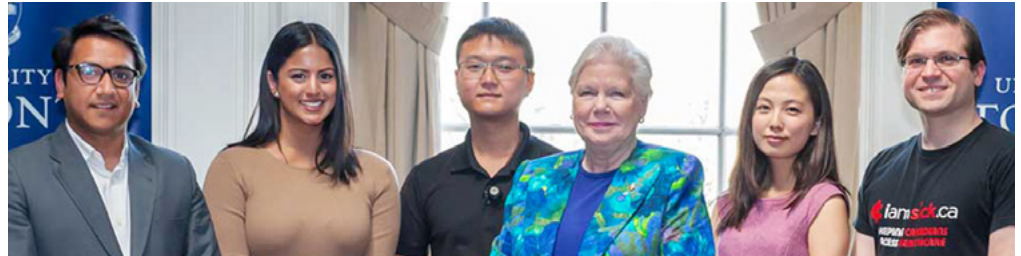
Research that feeds innovation, entrepreneurship and commercialization is thriving at U of T.

2012-13 to 2014-15:
1239 disclosures
396 licenses & options
64 IP-based startups

Innovation and Startup Powerhouse

U of T is a North American Leader in the number of new IP-based startups, the number of new invention disclosures, and in the number of new licenses and options. Since 2010, the number of patent applications filed per year by our faculty has nearly doubled.

U of T Celebrates Innovation event recognized [four ground-breaking inventions in medicine, electronics, and energy production](#) that were created by some of our most entrepreneurial faculty and students: Dr. Feihan Fay Dai, Dr. Kacey Prentice and Prof. Michael Wheeler (CMPF); Dr. Babak Alipanahi, Dr. Andrew Delong and Prof. Brendan Frey (DeepBind); Prof. Cynthia Goh and Dr. Cheng Lu (Phantin); and Mr. Varun Perumal Chadalavada and Dr. Daniel Wigdor (Printem).



Current and former U of T students Dikshant Batra (Nova Sentio), Rhea Puri (SoCity), Bin Liu (iMerciv), Christina Cai (Knowtions), and Ryan Doherty (iamsick.ca) with Ontario Lt.-Gov. Elizabeth Dowdeswell at U of T Celebrates Innovation. (Photo by Lisa Sakulensky)



The VPRI helps make U of T a world-leading public research and innovation-intensive university by creating an environment that enables our researchers, scholars and learners across our three campuses and affiliated hospitals to do what they do best: advance understanding and apply new knowledge.

Serving The U of T Community

Each year the VPRI portfolio supports the U of T community by managing, negotiating and supporting the activities highlighted below:

Research Funding



2,700

principal investigators

3,700

new funding applications

\$400M

in funding awarded

9,100

research funds

900

sponsors including

300+

private sector partners

1,700

funding programs

130

workshops and info sessions

Innovation & Entrepreneurship



160

invention disclosures

50

priority patent applications

40

licensing agreements & options

150

commercialization projects

200+

student-led startup teams

~300

entrepreneurial events

26,000+

youth attendees

~200

volunteer mentors

~90

new startup companies*

\$38.7M

in startup investment

\$5.1M

in startup sales

Accountability & Reporting



35

external audits

7,000

financial reports

1250+

new human ethics protocols

550

new animal ethics protocols

20

post-(ethics) approval reviews - human

46

post-(ethics) approval reviews - animal