

2015 ANNUAL REPORT

RESEARCH & INNOVATION IMPACT

2015.research.utoronto.ca



VIVEK GOEL
VICE-PRESIDENT, RESEARCH AND INNOVATION
ACADEMIC BOARD
MAY 30, 2016

RESEARCH & INNOVATION LEADERSHIP

- **Performance & Reputation Across a Breadth of Disciplines**
- **Award-winning Researchers & Innovators**
- **Research & Innovation Funding**
- **Innovation & Startup Powerhouse**


WORLD-LEADING RESEARCH AND INNOVATION

20% 
of Canada's
most
influential
scientific
minds

7th 
in the world
for
highly cited
papers

38th 
most
innovative
university
in the world

EXCEPTIONAL PERFORMANCE

2015 RANKINGS	WORLD	CANADA
NATIONAL TAIWAN UNIVERSITY	3	1 
U.S. NEWS BEST GLOBAL UNIVERSITIES (2016)	16	1
TIMES HIGHER EDUCATION WORLD UNIVERSITY RANKINGS	19	1
ACADEMIC RANKING OF WORLD UNIVERSITIES	25	1
QS WORLD UNIVERSITY RANKING	34	2

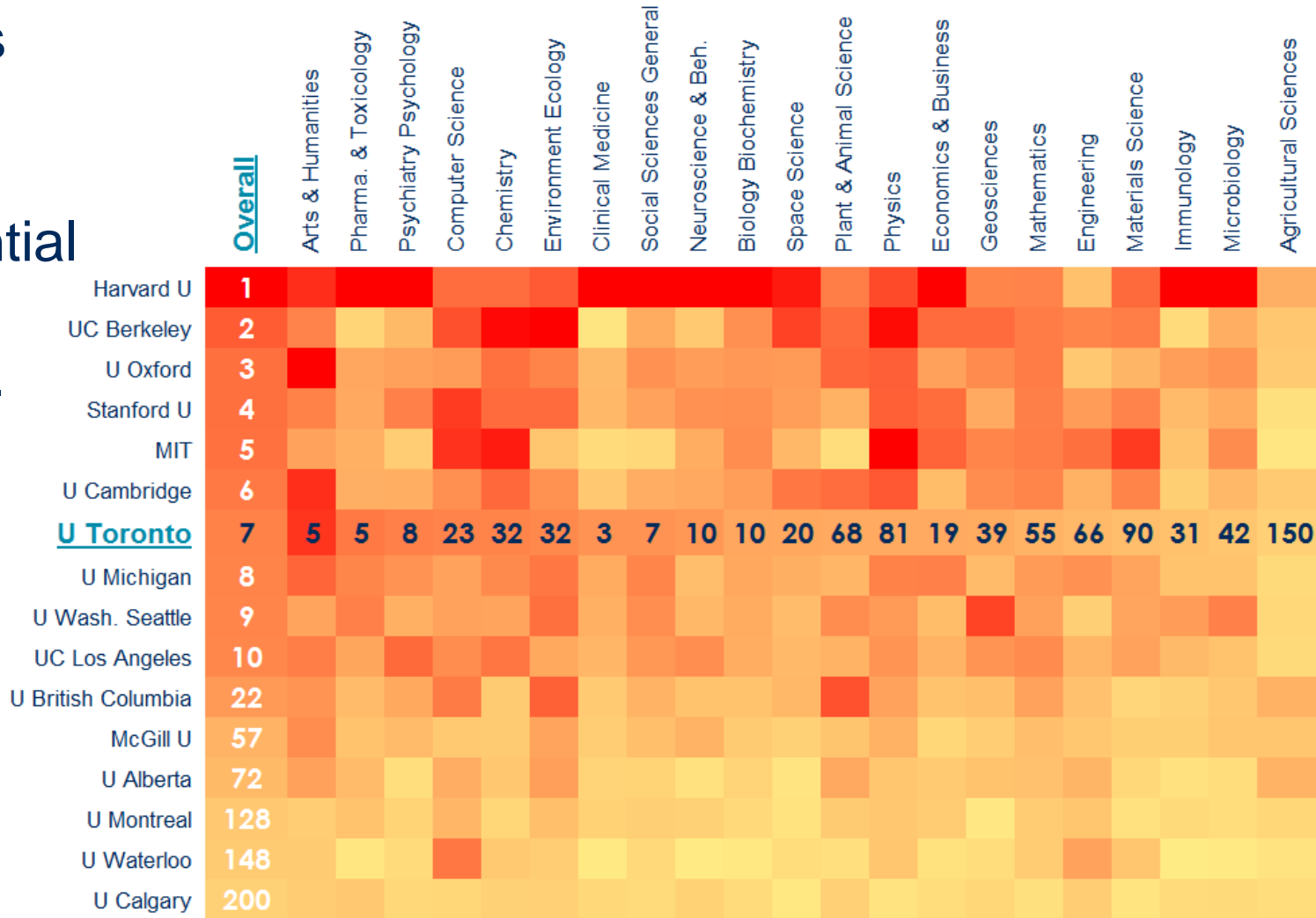
TOP 50 UNIVERSITY ACROSS MAJOR FIELDS

QS		Shanghai		THE		NTU	
Life Sciences & Medicine		Eng & Computer Science		Clinical, Pre-Clinical & Health		Clinical Medicine	
12	1	23	1	11	1	3	1
Arts & Humanities		Clinical Med & Pharmacy		Arts & Humanities		Life Sciences	
22	1	28	1	14	1	7	1
Natural Sciences		Social Sciences		Life Sciences		Social Sciences	
31	1	29	1	17	1	10	1
Social Sciences & Management		Natural Sciences & Math		Social Sciences		Natural Sciences	
41	1	37	1	19	1	28	1
Eng & Tech		Life & Agricultural Sciences		Physical Sciences		Engineering	
49	1	38	2	20	1	39	1
				Eng & Tech		Agriculture	
				25	1	39	3



HIGHLY INFLUENTIAL & HIGHLY CITED

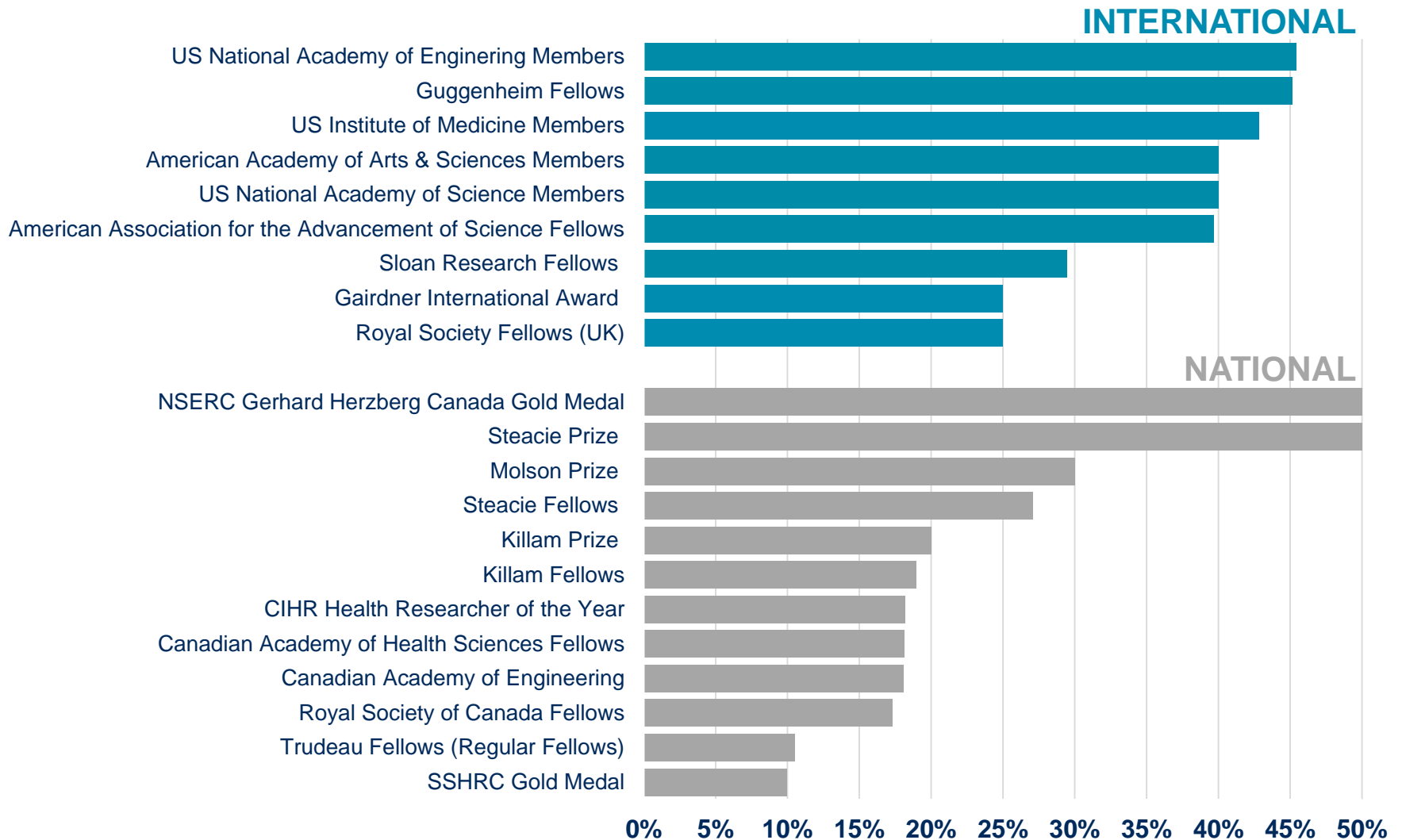
U of T ranks among the **top 10** most influential universities in the world.



AWARD-WINNING RESEARCHERS & INNOVATORS



Although U of T accounts for only 7% of Canada's professorial faculty, they have secured a **dominant share of prestigious honours.**

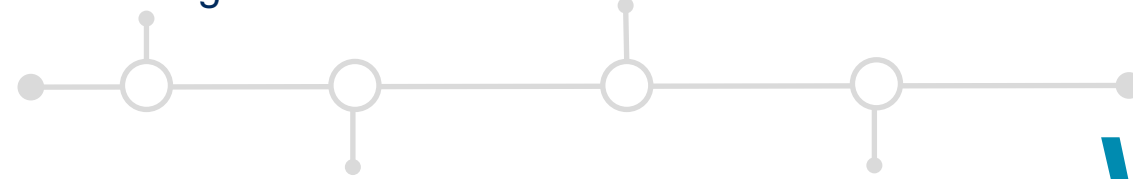




STEPHEN COOK
BBVA Frontiers of
Knowledge Award



VITO FORTE
Manning Innovation
Award



KEREN RICE
Pierre Chauveau
Medal



ANEIL AGRAWAL
Steacie Prize

AWARD WINNERS

17 more Canada Research Chairs for a total of 255

largest number of any university in Canada and
82 more than the next university



ELODIE PASSEPORT

Environmental Engineering
and Stable Isotopes



DANIEL BENDER

Cultural History and
Analysis



PATRICK GUNNING

Medicinal Chemistry

RESEARCH & INNOVATION FUNDING

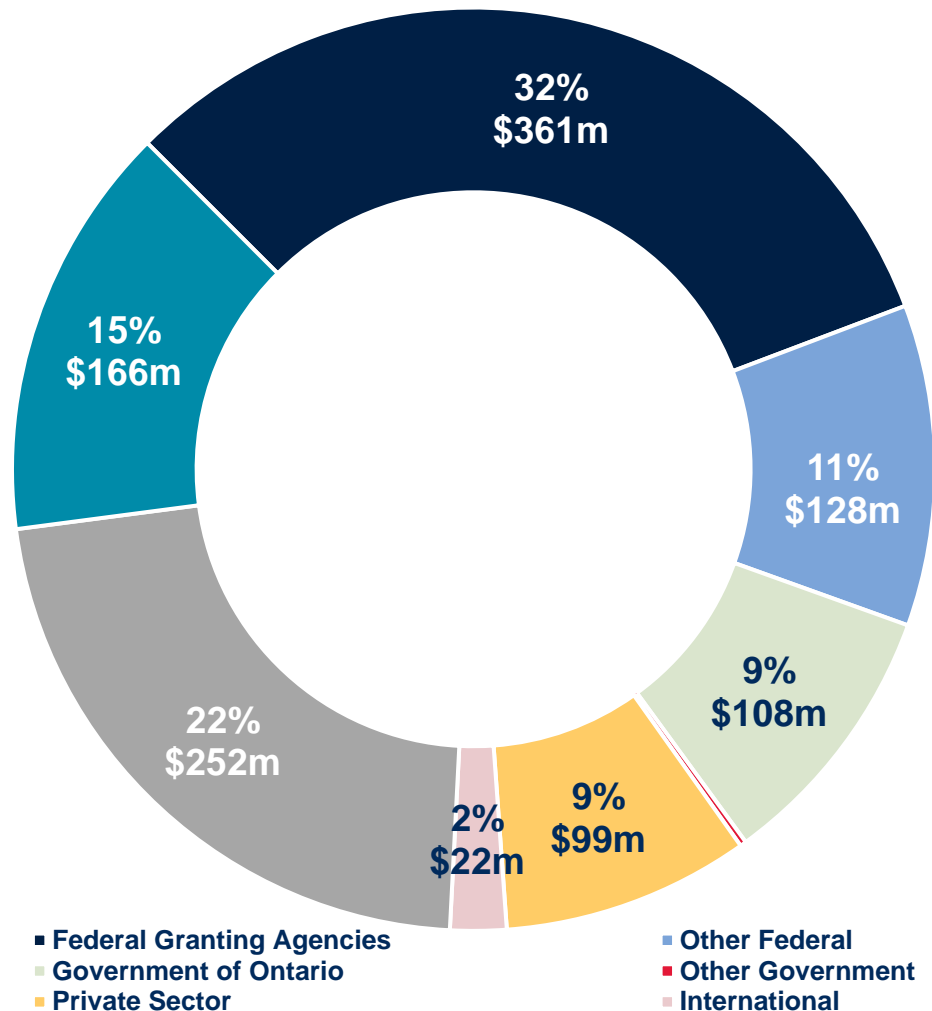


RESEARCH FUNDING

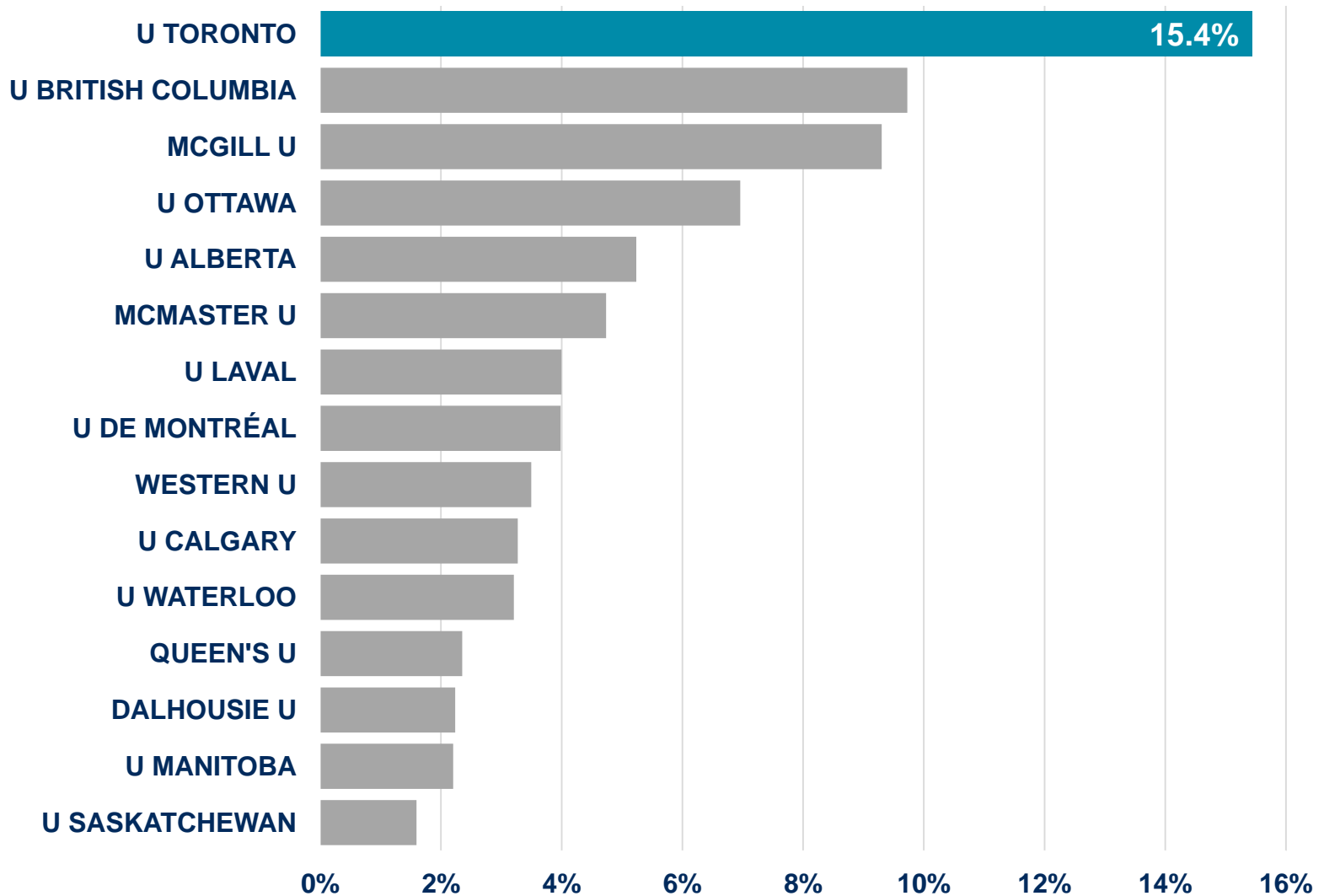
In 2014-15, the total value of research funds awarded to investigators at U of T was \$410 million.

When combined with funding awarded to our partner hospitals, the total was

\$1.1 billion.



TRI-AGENCY FUNDING SHARES



BUILDING ON EXCELLENCE IN REGENERATIVE MEDICINE

MEDICINE BY DESIGN

\$114M investment from Canada First Research Excellence Fund

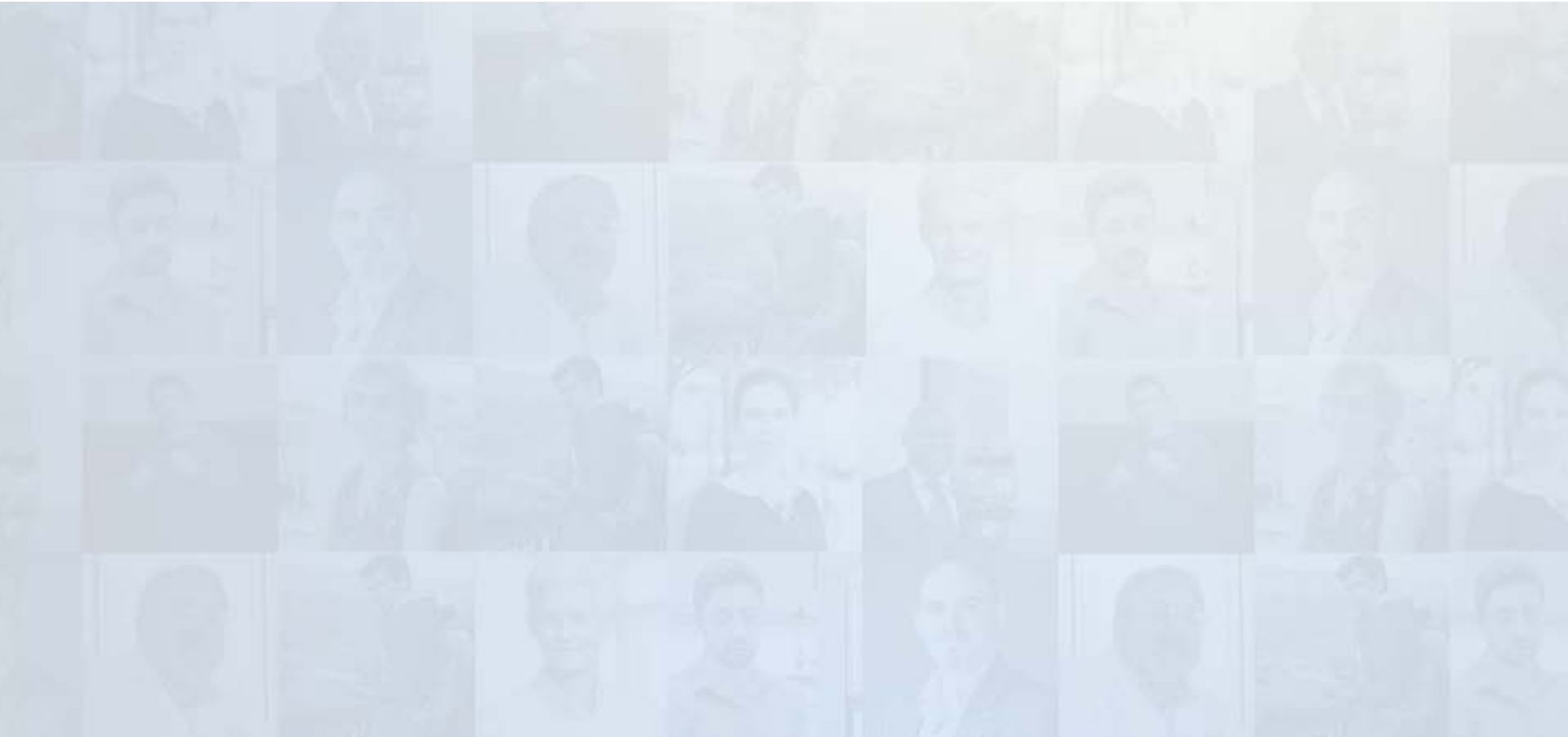
CENTRE FOR ADVANCED THERAPEUTIC CELL TECHNOLOGIES

\$20M from Advanced Manufacturing Fund

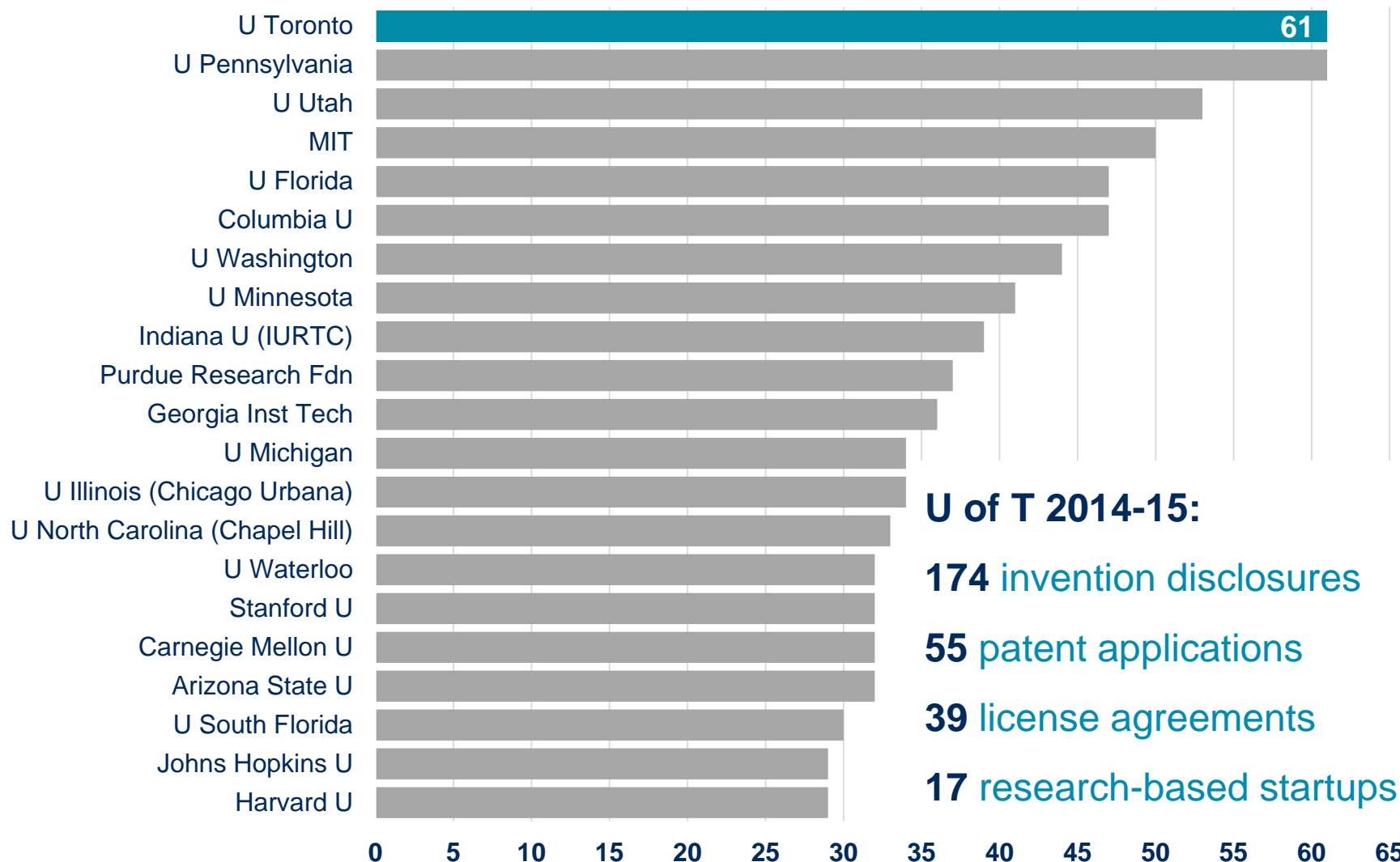
THE TED ROGERS CENTRE FOR HEART RESEARCH

Improving heart health across the lifespan, from childhood to adulthood

AN INNOVATION & STARTUP POWERHOUSE



U of T is a North American leader in the number of new research-based start-ups.



U of T 2014-15:
174 invention disclosures
55 patent applications
39 license agreements
17 research-based startups

STARTUPS @ TORONTO



NAMED "LIFE SCIENCES COMPANY OF THE YEAR" BY LSO



KANG LEE

CHANGING HOW WE DETECT EMOTION

OTI Lumionics

MICHAEL HELANDER

AWARDED \$5.7M FROM SDTC

BANTING & BEST CENTRE FOR INNOVATION & ENTREPRENEURSHIP (BBCIE)

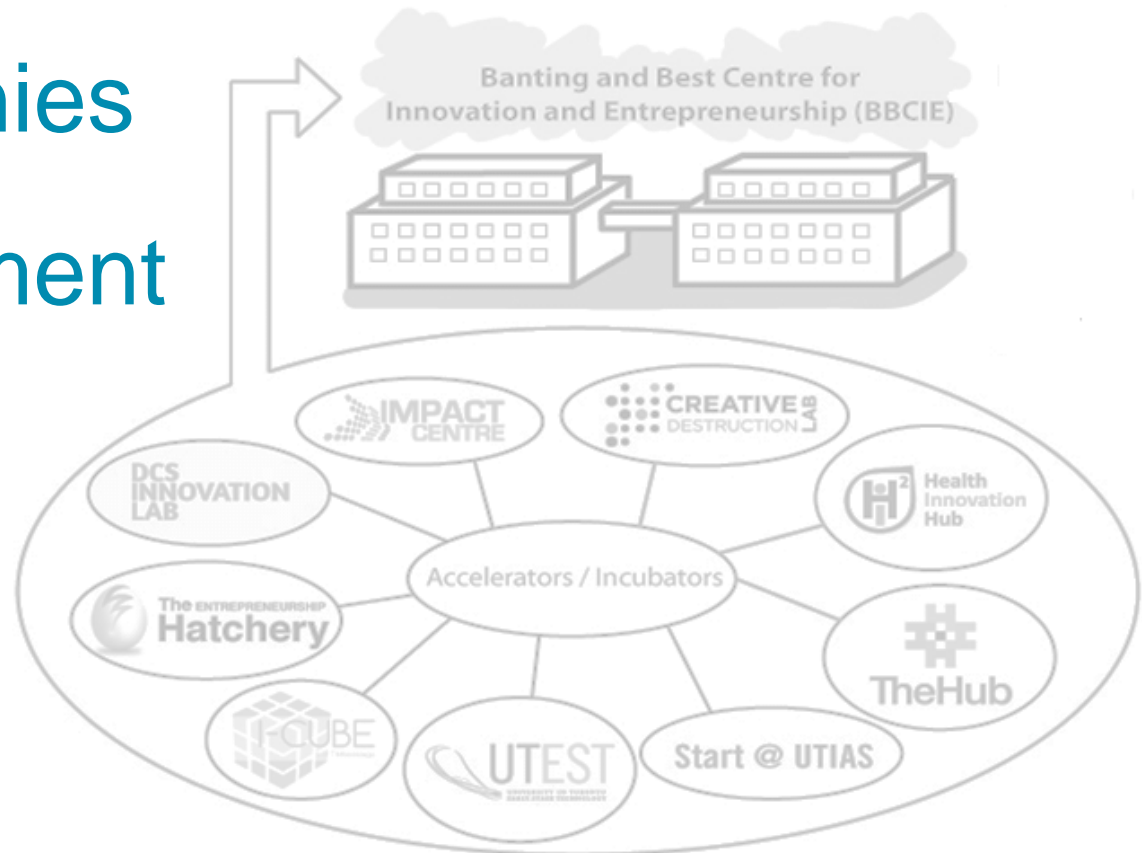
225 student-led startup teams

90 new companies

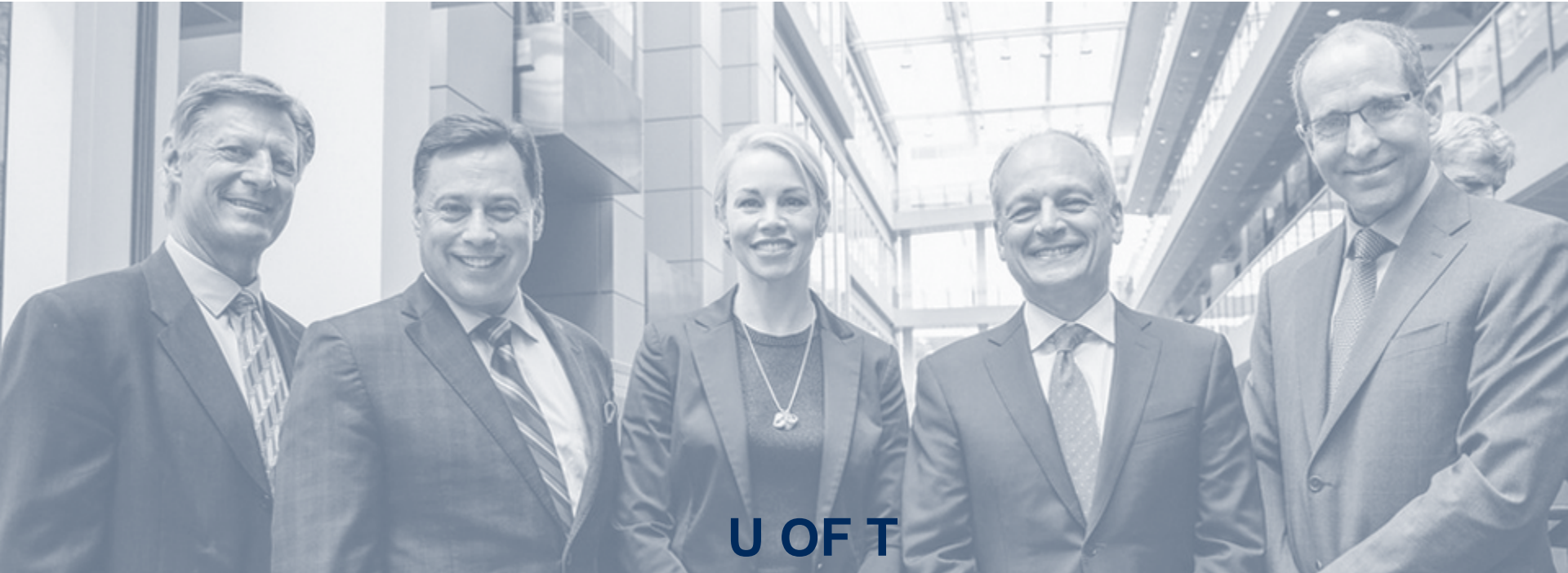
\$19M in investment

\$2.5M in sales

in 2014-15.



JLABS @ TORONTO



U OF T

GOVERNMENT OF ONTARIO

MARS DISCOVERY DISTRICT

JOHNSON & JOHNSON INNOVATION

first JLABS incubator in Canada and the first outside the U.S.

THREE PRIORITIES

Reimagining Undergraduate Education

Leveraging Our Urban Location

International Impact



SERVING THE U OF T COMMUNITY



EACH YEAR...

RESEARCH FUNDING

2,800

principal investigators

900+

sponsors including

3,500

new funding applications

300+

private sector partners

\$400M

in funding awarded

1,700

funding programs

9,000

research funds

INNOVATION & ENTREPRENEURSHIP

150

invention disclosures

225

student-led startup teams

90+

new startup companies

50

priority patent applications

100+

entrepreneurial events

\$19M

in startup investment

40

licensing agreements

12,000+

youth attendees

\$2.5M

in startup sales

250

commercialization projects

100+

volunteer mentors

ACCOUNTABILITY & REPORTING

85

external audits

7,000

financial reports

1,200

new human ethics protocols

550

new animal ethics protocols

75

post-approval laboratory visits

ACCOUNTABILITY AND REPORTING

External Audits

Auditor General of the Ontario: Audit of University Intellectual Property

Tri-Council Agencies (NSERC, SSHRC and CIHR): Monitoring Visit

Canada Foundation for Innovation: Monitoring Visit

Strengthening the Administration of Research

VPRI education program



OPERATIONAL IMPROVEMENTS

The VPRI **supports** research and innovation across U of T and with our partner hospitals through:

**My Research –
Applications (MRA)**
Launched in 2014

**My Research –
Animal Protocols
(MRAP)**
In development

Calendaring Tool
In development

**My Research-Human
Protocols (MRHP)**
In development

**My Research –
Documents**
In development

**My Research –
Intellectual
Properties (MRIP)**
In development

4,000+ current users

1,500 new users
estimated in 2016

Student users

\$520,000 annual
savings

LOOKING AHEAD




Provide input to federal research funding and structural reviews that will shape research and innovation policy.

Develop a new University Strategic Research Plan.

Facilitate and support collaborative research opportunities that are multi-divisional and multi-institutional.

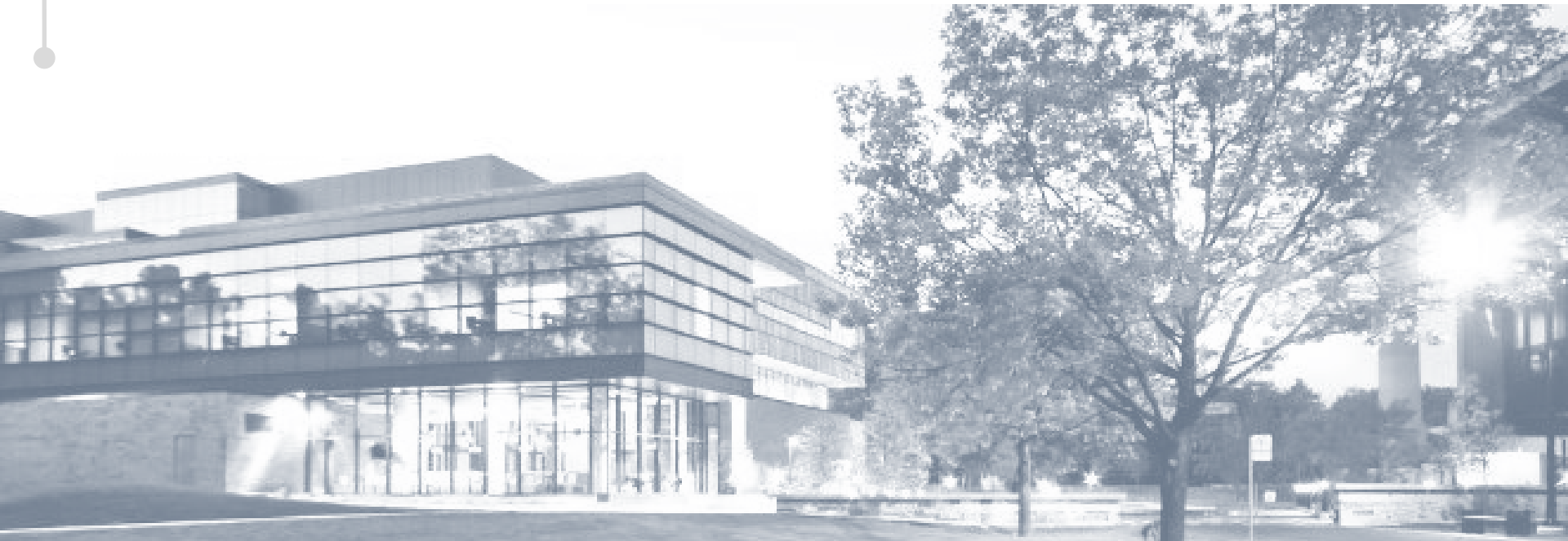




Support development of a regional innovation corridor that captures key academic institutions and ONRamp, a 15,000 square-foot collaborative networking space in the BBCIE that will provide space for student startups.

Emphasize social innovation and entrepreneurship and expand engagement of humanities and social science students.

We will also continue to look for ways to improve the **flow of information** and strengthen research **communications**, including **revamping the VPRI website** to make it more user-friendly and better serve both our internal and external communities.





UNIVERSITY OF
TORONTO