

# THE UNIVERSITY OF TORONTO: GLOBAL LEADERSHIP AND IMPACT



UNIVERSITY OF  
TORONTO

BOUNDLESS

**The University of Toronto is one of the world's leading institutions of higher learning. Our tri-campus system is renowned nationally and internationally for groundbreaking research and innovative teaching, which drive economic growth and promote social well-being around the globe.**

**A Worldwide Network of Excellence \_\_\_\_\_ 2**

A constellation of alumni, students and researchers ensures U of T plays a crucial role in our world.

**A Global City \_\_\_\_\_ 4**

Toronto is a dynamic global city, a vibrant and diverse hub of business, culture and innovation.

**A Global University \_\_\_\_\_ 6**

U of T is consistently ranked among the best universities worldwide and is a global leader in transforming innovative ideas into products, services, companies and jobs.

**Incredible Discoveries and Breakthroughs \_\_\_\_\_ 8**

For more than a century, U of T discoveries have been making history.

**Areas of Research Excellence \_\_\_\_\_ 10**

From AI to regenerative medicine to urban studies, U of T leads the way.

**A Transformative Education \_\_\_\_\_ 14**

U of T's excellence, diversity and accessibility set it apart.

**Outstanding Alumni \_\_\_\_\_ 16**

Trail-blazing graduates apply their U of T education to inspire students and shine on the world stage.

**Alumni Impact \_\_\_\_\_ 18**

U of T's extensive alumni network is a significant driver of economic growth and societal well-being.

**Looking to the Future \_\_\_\_\_ 20**

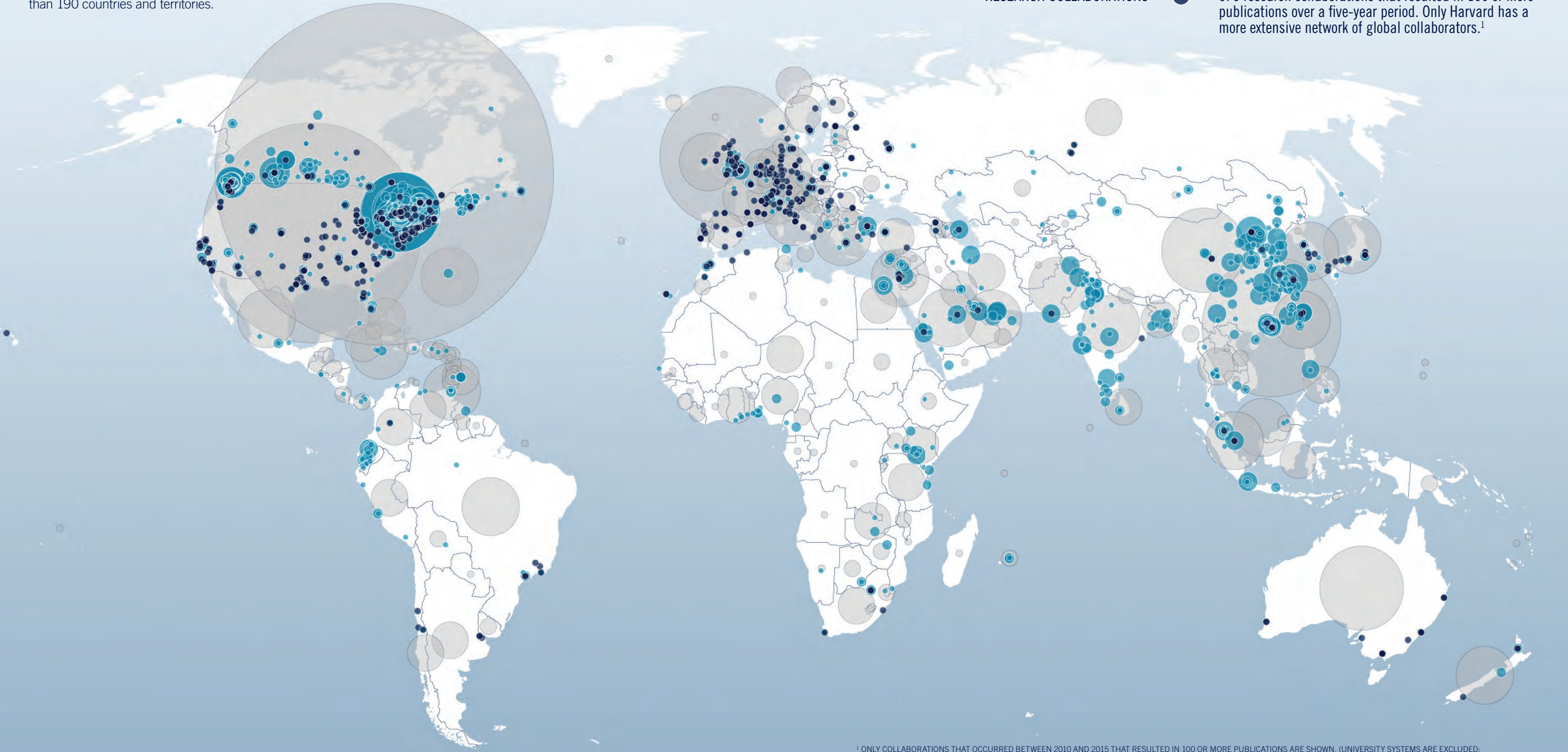
U of T is uniquely positioned to contribute to the world.



# A WORLDWIDE NETWORK OF EXCELLENCE

U of T's network is truly global. Few universities in the world can rival the international diversity of our alumni and student populations, while on the research front, our faculty collaborate with scholars around the globe. Today U of T alumni live, work and contribute to civil society in more than 190 countries and territories.

- ALUMNI** ● More than 570,000 alumni in 190+ countries and territories.
- STUDENTS** ● More than 16,400 first-year students from more than 1,000 municipalities throughout the world.
- RESEARCH COLLABORATIONS** ● 675 research collaborations that resulted in 100 or more publications over a five-year period. Only Harvard has a more extensive network of global collaborators.<sup>1</sup>



<sup>1</sup> ONLY COLLABORATIONS THAT OCCURRED BETWEEN 2010 AND 2015 THAT RESULTED IN 100 OR MORE PUBLICATIONS ARE SHOWN. (UNIVERSITY SYSTEMS ARE EXCLUDED; THEIR INDIVIDUAL CONSTITUENT MEMBERS ARE INCLUDED.)

# A GLOBAL CITY

Toronto is a dynamic global city, a vibrant and diverse centre of business, culture and innovation. Thanks to its attractive combination of livability and ease of doing business, it's becoming one of the world's leading technology startup hubs. U of T and the Greater Toronto Area have grown together, and will continue to do so into the future.



One of the world's most livable cities <sup>1</sup>



3rd in the world "to live and work in tech" <sup>2</sup>



Considered the world's most diverse city <sup>3</sup>



3rd in leading global cities after London and Singapore <sup>4</sup>




A UNESCO Creative City of Media Arts <sup>5</sup>



Considered the best economy for young people <sup>6</sup>



3rd largest ICT cluster in North America <sup>7</sup>



3rd largest design industry in North America <sup>8</sup>



North America's 4th largest city <sup>9</sup>



<sup>1</sup> THE ECONOMIST INTELLIGENCE UNIT, 2017; <sup>2</sup> FAST COMPANY, 2016; <sup>3</sup> BBC RADIO, 2016 & CITY OF TORONTO DATA; <sup>4</sup> PwC CITIES OF OPPORTUNITY 7 REPORT, 2016

<sup>5</sup> UNESCO CREATIVE CITIES NETWORK; <sup>6</sup> THE ECONOMIST INTELLIGENCE UNIT, 2015; <sup>7</sup> GOVERNMENT OF CANADA DATA; <sup>8</sup> CITY OF TORONTO DATA; <sup>9</sup> STATISTICS CANADA

# A GLOBAL UNIVERSITY

## RANKED AMONG THE BEST IN THE WORLD

The University of Toronto is Canada's leading university and consistently ranked among the best universities worldwide.

**#3**  
in the world for  
clinical medicine<sup>1</sup>

1	Harvard
2	Johns Hopkins
3	<b>University of Toronto</b>
4	UC San Francisco
5	University of Pennsylvania

### U OF T'S POSITION IN WORLD UNIVERSITY RANKINGS

	2013-14	2014-15	2015-16	2016-17	2017-18
National Taiwan University Ranking	8	4	3	4	4
US News Best Global Universities	–	14	16	21	20
Times Higher Education World University Rankings	20	20	19	22	22
Academic Ranking of World Universities	28	24	25	27	23
QS World University Rankings	17	20	34	32	31

## DEMONSTRATED RESEARCH EXCELLENCE

U of T is an international leader in generating influential evidence-based knowledge, which plays an important role in attracting research funding. Our faculty consistently win more awards and prizes than their peers at any other Canadian university.

**#3**  
in the world for  
research output<sup>3</sup>

	CITATIONS	PUBLICATIONS
1	Harvard	Harvard
2	Stanford	<b>University of Toronto</b>
3	<b>University of Toronto</b>	Pierre & Marie Curie University
4	MIT	São Paulo
5	Oxford	University College London

Only **3**  
universities in the world  
rank in the top 30 for  
11 key fields.<sup>2</sup>

Stanford, the University of Toronto  
and Columbia

**\$1.2B**  
in research funding  
– U of T and partner  
hospitals

**275**  
Canada Research  
Chairs

**8**  
Nobel Laureates  
associated with U of T

## A LEADING ENGINE FOR INNOVATION AND ENTREPRENEURSHIP

U of T is the top Canadian university on the world's most innovative list.<sup>4</sup> We're a global leader in transforming innovative ideas into products, services, companies and jobs.



U of T Entrepreneurship ranks among top 5 university-managed  
business incubators in the world<sup>5</sup>



More than 750 patent applications  
filed since 2010



3/4 of U of T inventions are  
co-developed by students or post-docs

A leader among North American  
universities for research-based startups



Entrepreneurial hubs across 3 campuses  
assist more than 200 student-led startup  
teams each year



In the last 10 years  
U of T startup companies  
have raised almost \$1B



More than 150 new startups  
in the past 5 years

## DRIVER OF ECONOMIES

U of T's activities generate significant economic benefit for Canada, while our graduates are highly employable, thanks to their world-class educational experience.

**97.6%**  
of alumni are employed  
compared to 93.6%  
for the total Canadian  
workforce

**\$368B**  
in annual revenues  
by alumni-founded  
ventures globally

**13th**  
in global employability of  
our graduates (5th among  
public universities)<sup>6</sup>

**3.7M**  
jobs created by  
alumni globally

<sup>1</sup> NTU RANKING FOR CLINICAL MEDICINE, 2017; <sup>2</sup> TIMES HIGHER EDUCATION WORLD UNIVERSITY RANKINGS BY SUBJECT, 2018; <sup>3</sup> INCITES™, CLARIVATE ANALYTICS (2012–2016), INCLUDING WEB OF SCIENCE CONTENT INDEXED THROUGH 2017-09-30.

<sup>4</sup> THOMSON REUTERS, WORLD'S MOST INNOVATIVE UNIVERSITIES, 2017; <sup>5</sup> UBI GLOBAL WORLD BENCHMARK STUDY 2017/18; <sup>6</sup> TIMES HIGHER EDUCATION GLOBAL EMPLOYABILITY UNIVERSITY RANKING, 2017

# INCREDIBLE DISCOVERIES AND BREAKTHROUGHS

For over a century, University of Toronto researchers have been making discoveries that have changed life for the better. Here are just some of the U of T breakthroughs that have enhanced the world's collective knowledge.



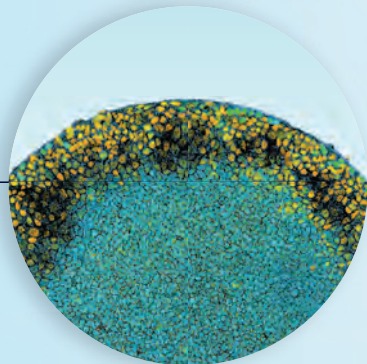
## Cosmic Rays, 1903

John Cunningham McLennan's work on radioactivity contributed to the discovery of a penetrating radiation that passes through the atmosphere, now known as cosmic rays.



## World's First Electronic Pacemaker, 1950

W.G. Bigelow invented the revolutionary pacemaker, and also demonstrated that lowering the body's core temperature and oxygen requirements made open-heart surgery possible.



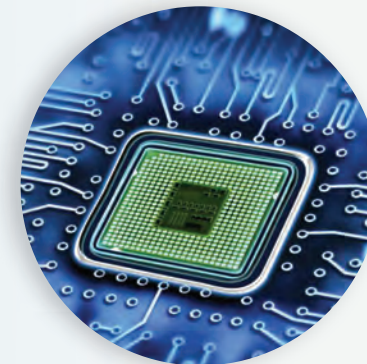
## Stem Cells, 1961

U of T researchers James Till and Ernest McCulloch uncovered the existence of transplantable stem cells, which are a vital source of treatments for a variety of diseases and conditions.



## Infrared Chemiluminescence, 1986

John Polanyi was awarded the Nobel Prize for his discovery of infrared chemiluminescence, a method for understanding how molecules are reborn in a chemical reaction.



## Deep Learning, 2006

Geoffrey Hinton developed this machine-learning paradigm that underpins technology used for everything from speech recognition to self-driving cars.



## Seismic-Resistant Systems, 2007

Jeffrey Packer, Constantin Christopoulos, Michael Gray and Carlos de Oliveira founded the startup Cast ConneX Corporation, which is the industry leader in the use of cast steel components in constructing buildings and bridges.



## Two-Billion-Year-Old Water, 2013–2014

Barbara Sherwood Lollar discovered the oldest known water on the planet, flowing two to three kilometres deep in the most ancient rocks of the Precambrian era.

## Insulin, 1921

In what is perhaps the most famous partnership in U of T history, Frederick Banting, Charles Best, J.J.R. Macleod and James Bertram Collip discovered insulin—which has saved millions of lives around the globe.



## Anatomy of Criticism, 1957

Northrop Frye changed the face of literary criticism with his seminal work, *Anatomy of Criticism*.



## Understanding Media, 1964

Marshall McLuhan's influential study forever altered views about the effects of media upon people and their lives.

## Two Genes Responsible for Early-Onset Alzheimer's, 1995

In addition to playing a primary or partial role in discovering the approximately 20 genes associated with Alzheimer's, Peter St George-Hyslop and his team have achieved success in determining the functions of amyloids, harmful proteins that build up in the brains of Alzheimer's patients.



## Uncovered GhostNet, 2009

Ron Deibert uncovered GhostNet, a cyberespionage network that infiltrated government, economic and media systems around the world.

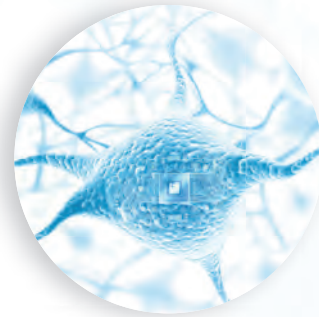


## Indigenous Languages Preservation, Present Day

Keren Rice is one of the world's leading experts in the linguistic analysis and preservation of Indigenous languages in Canada's Northwest Territories.

## AREAS OF RESEARCH EXCELLENCE

U of T is fortunate to enjoy exceptional strengths in a number of research disciplines. Here we have highlighted a few examples. All of these have global relevance and some are closely tied to the Toronto region's leading industry hubs.



### Artificial Intelligence & Machine Learning

We are world leaders in AI, and U of T graduates are some of the most sought-after people in the industry.



### Cleantech & Renewable Energy

We have an outstanding record of global leadership in fields related to climate change, cleantech and biofuels.



### Regenerative Medicine

We are internationally renowned for our work in regenerative medicine, which is addressing some of the most important health questions facing our society.



### Children's Health & Development

Our expertise on the well-being of children covers the very early days of life, empathy in young children and how to combat bullying.



### Urban Studies

More than 220 of our faculty focus on urban issues, creating solutions for real-world challenges facing 21st-century cities.



### Legal Studies

Law at U of T is ranked 10th in the world,<sup>1</sup> reflecting outstanding legal studies and exceptional scholarship in a range of research groups.



### Fintech

Our researchers are developing frameworks that will underpin the next generation of fintech applications.



### Genomics

Our groundbreaking work in genomics includes the discovery of a "genetic formula" that can help identify the likelihood a mutation will cause Autism Spectrum Disorder.



### Advanced Materials & Manufacturing Technology

We are a hub for advanced materials and manufacturing research and test new ideas for boosting productivity, saving money and reducing environmental impact.



### Philosophy & Medieval Studies

Our philosophy group is ranked 13th in the world,<sup>2</sup> while our medieval studies group is recognized as an international authority.

<sup>1</sup> TIMES HIGHER EDUCATION WORLD UNIVERSITY RANKINGS BY SUBJECT, 2018

<sup>2</sup> QS WORLD UNIVERSITY RANKINGS BY SUBJECT, 2018

What we know is surely only a tiny fraction of what remains to be known. At the centre of the atom, in the nucleus of the living cell and at the outer edges of the universe lie new worlds awaiting their discoverer.

— John Polanyi, Nobel Prize winner and U of T Professor of Chemistry

**The University of Toronto is very fortunate to be situated in the midst of one of the world's truly great metropolitan regions, with three campuses in three different parts of the Greater Toronto Area. This means that on our doorstep we have fantastic opportunities for both teaching and research, and our students benefit from being able to work on real problems with partners in the community around us.**

— Meric S. Gertler, President, University of Toronto



The student-led Blue Sky Solar Racing team, assisted by alumni volunteers, promotes environmental awareness and innovation in technology throughout the Greater Toronto Area and further afield.



# A TRANSFORMATIVE EDUCATION

U of T's global outlook and cosmopolitan location provide students with a transformative educational experience. We continue to reinvent the way we educate students, equipping them with the knowledge and skills needed to navigate our rapidly changing world.

Top students from across Canada and around the globe are drawn to U of T for many reasons, but what sets this University apart is our excellence, our diversity and our accessibility.

Nearly  
**94%**  
of U of T accomplished scholars teach undergraduates

**69%**  
of first-year students identify as a visible minority

At least  
**50%**  
of first-year Canadian undergraduates come from families with incomes of <\$50,000

## Tri-Campus System

Our tri-campus system spans the Greater Toronto Area, which allows students to take part in work-integrated learning and specialized programming throughout one of the world's most diverse urban regions.

## Smaller Learning Communities

Smaller learning communities enhance core programs, which is why every student within the Faculty of Arts & Science is affiliated with one of seven colleges.

## World-Class Hospitals and Health-Care Sites

Our nine fully affiliated hospitals and 12 community-affiliated hospitals and health-care sites offer teaching and research experiences for our health-sciences students and are among the best in North America.

## Programs and Opportunities

U of T offers its students hundreds of programs and more than a thousand clubs, organizations, activities and volunteer opportunities, including student-run legal and dental clinics and other community-based projects.



Students in Professor Joyce Poon's lab gain hands-on experience in photonics, which is revolutionizing how data is transmitted.

# OUTSTANDING ALUMNI

U of T alumni include some of the most influential thought leaders of our time, as well as award-winning authors, leaders in public office, advocates for global issues, stars of arts and culture, Olympic athletes and astronauts—and these are just some of the fields in which our graduates have excelled.



Margaret Atwood (BA 1961, Hon DLITT 1983), Author



Raymond Moriyama (BArch 1954, Hon LLD 1994), Architect



Rosie MacLennan (BPHE 2011), Olympic Athlete



Julie Payette (MAsc 1990, Hon DSc 2001), Astronaut & 29th Governor General of Canada



Jeffrey Skoll (BAsc 1987, Hon LLD 2003), 1st President of eBay



Margaret MacMillan (BA 1966, Hon PhD 2009), Historian



Malcolm Gladwell (BA 1984, Hon LLD 2011), Thought Leader



Samantha Nutt (PGMT 2000), Founder, War Child Canada



Atom Egoyan (BA 1982, Hon DSACL 1998, Hon LLD 2003), Filmmaker



Richie Mehta (BA 2001 UTM), Filmmaker



Measha Brueggogsmann (MUSP 1999), Soprano



Donald Sutherland (BA 1958, Hon LLD 1998), Actor



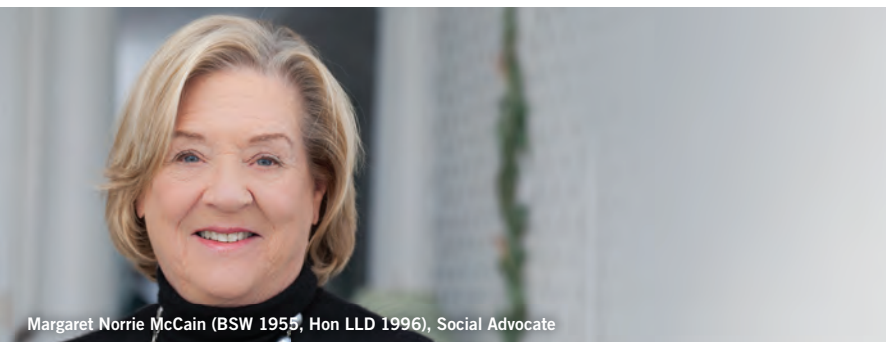
Vaira Vike-Freiberga (BA 1958, MA 1960, Hon DSCAL 2000, Hon LLD 2008), 6th President of Latvia



Mark Rowswell "Dashan" (BA 1988), Entertainer



Rosalie Silberman Abella (BA 1967, LLB 1970, Hon LLD 1990), Supreme Court Justice



Margaret Norrie McCain (BSW 1959, Hon LLD 1996), Social Advocate



Paul Martin (BA 1961, JD 1964, Hon DSACL 1998, Hon LLD 2011), 21st Prime Minister of Canada



Vicky Sunohara (BPHE 2010), Olympic Athlete



Lin Chi-ling (BA 1997), Supermodel & Actor



David C. Onley (BA 1975 UTSC, Hon LLD 2009), 28th Lieutenant Governor of Ontario



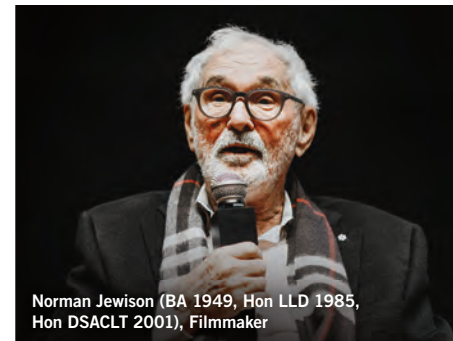
Sunet Singh Tuli (BAsc 1990), Founder, President & CEO, DataWind Ltd.



Barbara Hannigan (MUSP 1993, MusM 1999), Opera Singer & Conductor



Lyse Doucet (MA 1982, Hon LLD 2009), Chief International Correspondent, BBC



Norman Jewison (BA 1949, Hon LLD 1985, Hon DSACL 2001), Filmmaker



Roberta Bondar (PhD 1974 UTM, Hon DSC 1992, Hon DSACL 1993), Astronaut



Lorne Michaels (BA 1966, Hon LLD 2002), Creator, Saturday Night Live



Michael Ondaatje (BA 1965), Author



Preet Banerjee (BSc 2001 UTSC), Television Host and Financial Expert

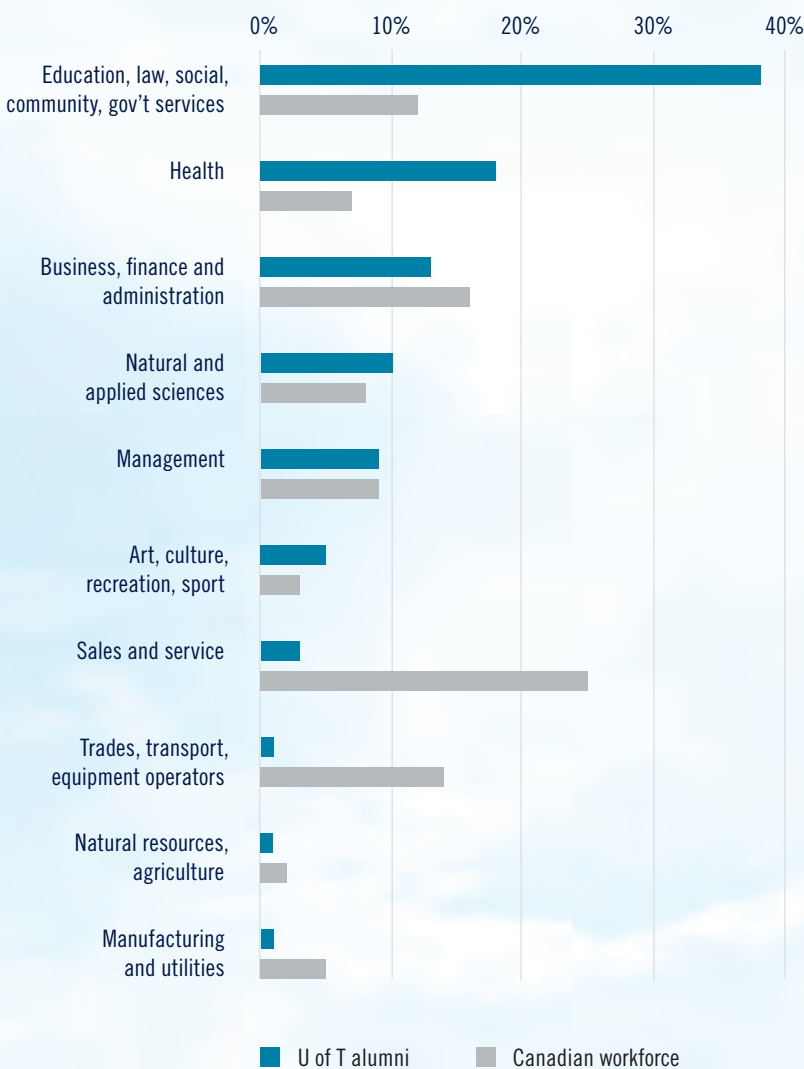


# ALUMNI IMPACT

A distinguished network of more than half a million University of Toronto graduates is making valuable economic, social and cultural contributions around the world. For more information on the impact of our alumni, please visit [uoft.me/alumni-impact](http://uoft.me/alumni-impact)

## EMPLOYMENT, ENTREPRENEURSHIP & INVESTMENT

U of T alumni start flourishing and profitable companies, invest in innovative startups, and are employed in meaningful and important work.



**97.6%** of alumni are employed, compared to 93.6% for the total Canadian workforce

**197K** ventures created

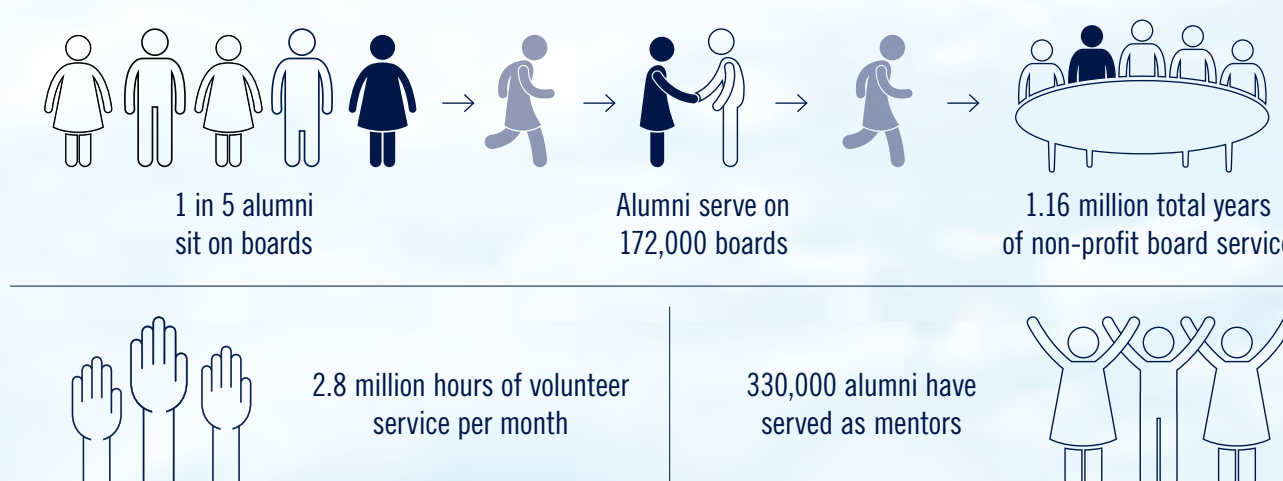
**\$368B** in annual revenues

**1 in 4** alumni have founded at least one company

**3.7M** jobs created globally

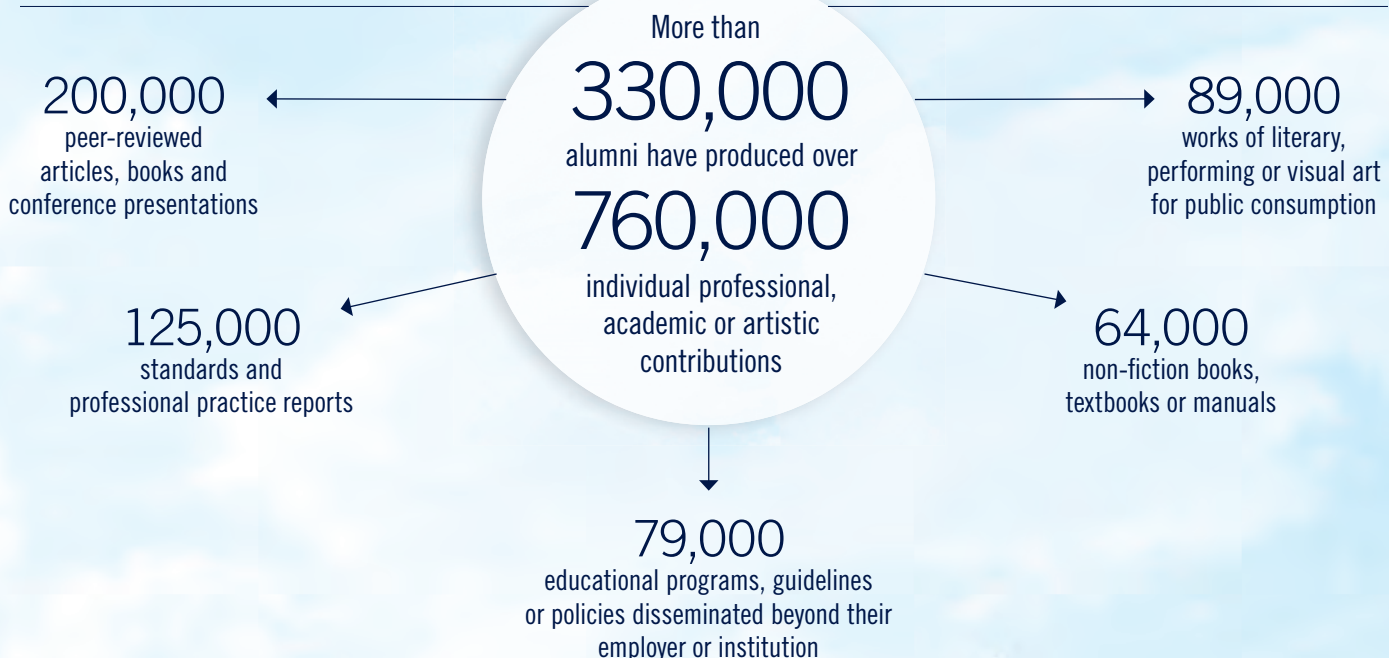
## BOARD SERVICE, VOLUNTEERISM & MENTORSHIP

University of Toronto alumni lead by example, sharing their time and expertise to help others as board members, volunteers and mentors in their respective communities.



## ACADEMIC, PROFESSIONAL & CULTURAL WORKS

U of T alumni create hundreds of thousands of academic publications, professional and public policy documents, and artistic and cultural works.



# LOOKING TO THE FUTURE

There are very few universities around the world that combine the strengths, excellence and global stature of U of T with the uncommon level of openness found in its partnerships, programs and policies. This University values accessibility, diversity and tolerance, and does all it can to ensure that its campuses and the Toronto area are places where people feel they can participate in meaningful ways. We are uniquely equipped to educate globally minded citizens and tackle the biggest challenges affecting our health, our environment and our civil society.

Being Canada's leading university in Canada's largest city gives us a unique platform from which to contribute to the world. As U of T looks to the future, it will continue to celebrate the rich and remarkable relationship it enjoys with the Toronto city-region, create opportunities for young people to excel and capitalize on their talents, and help to build a healthier and more equitable society by making a difference in our global community.



President Meric S. Gertler is an internationally renowned expert on how innovation and creativity drive cities and their economies.

utoronto.ca



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