

THE UNIVERSITY OF TORONTO: GLOBAL LEADERSHIP AND IMPACT



UNIVERSITY OF
TORONTO

The University of Toronto is one of the world's leading institutions of higher learning. Our tri-campus system is renowned internationally for groundbreaking research and innovative teaching that provides students with a comprehensive global education. We 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.

A Life-Saving Discovery is Born _____ 8

2021 marks the 100 year anniversary of insulin—one of the most significant advances in medical history.

Incredible Breakthroughs _____ 10

U of T researchers have made an astounding number of revolutionary discoveries that have changed life for the better.

At the Forefront of Combatting COVID-19 ____ 13

Since March 2020, U of T has been marshalling its resources with our hospital partners to make significant contributions to the worldwide battle against COVID-19.

Areas of Research Excellence _____ 15

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

A Comprehensive Global Education _____ 19

U of T prepares all its students for a rapidly changing world and is set apart by its excellence, diversity and accessibility.

Outstanding Alumni _____ 21

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

Alumni Impact _____ 25

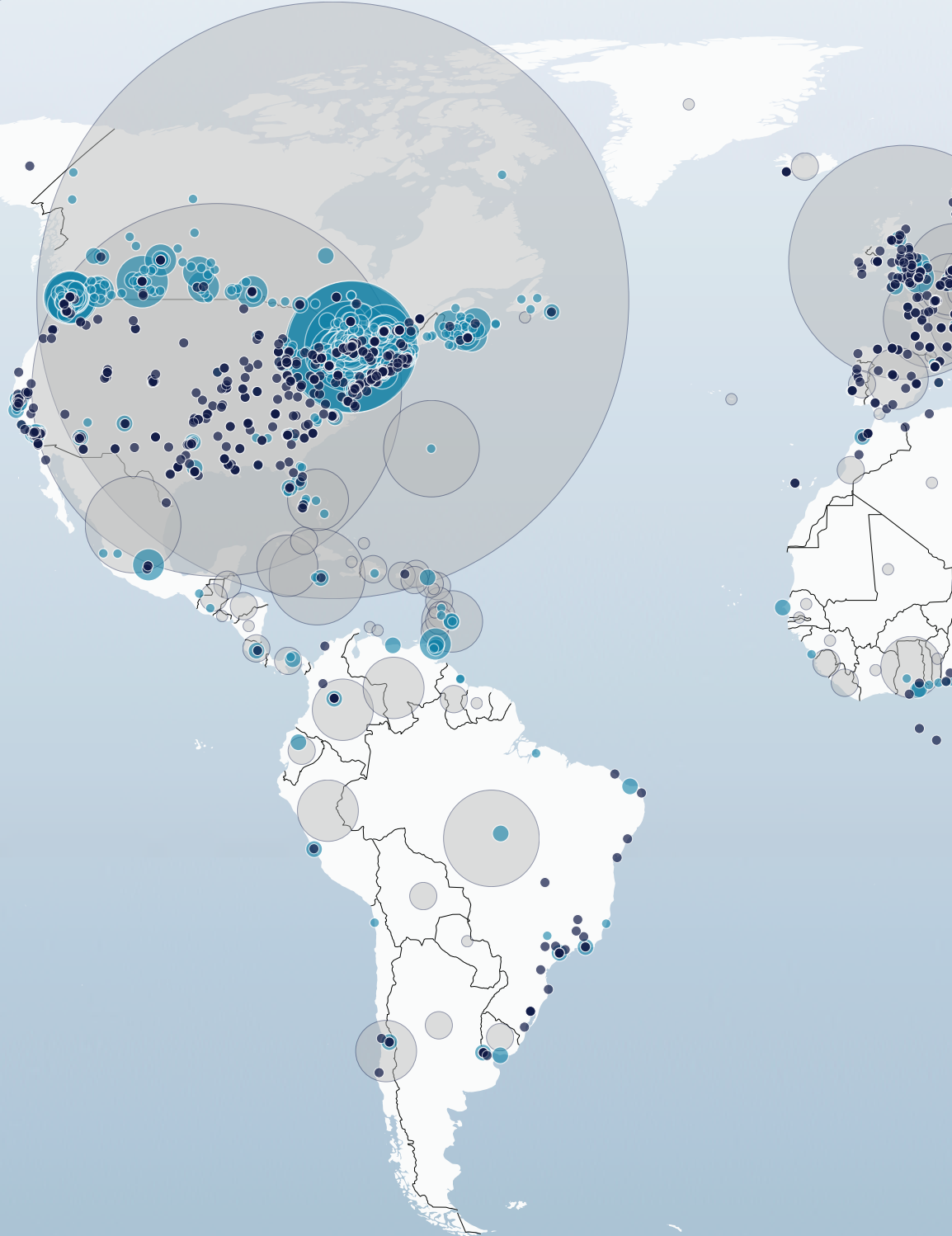
U of T's extensive alumni network is a significant driver of economic growth and societal well-being.

Looking to the Future _____ 27

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



Over 630,000 alumni in 190+ countries and territories.

STUDENTS

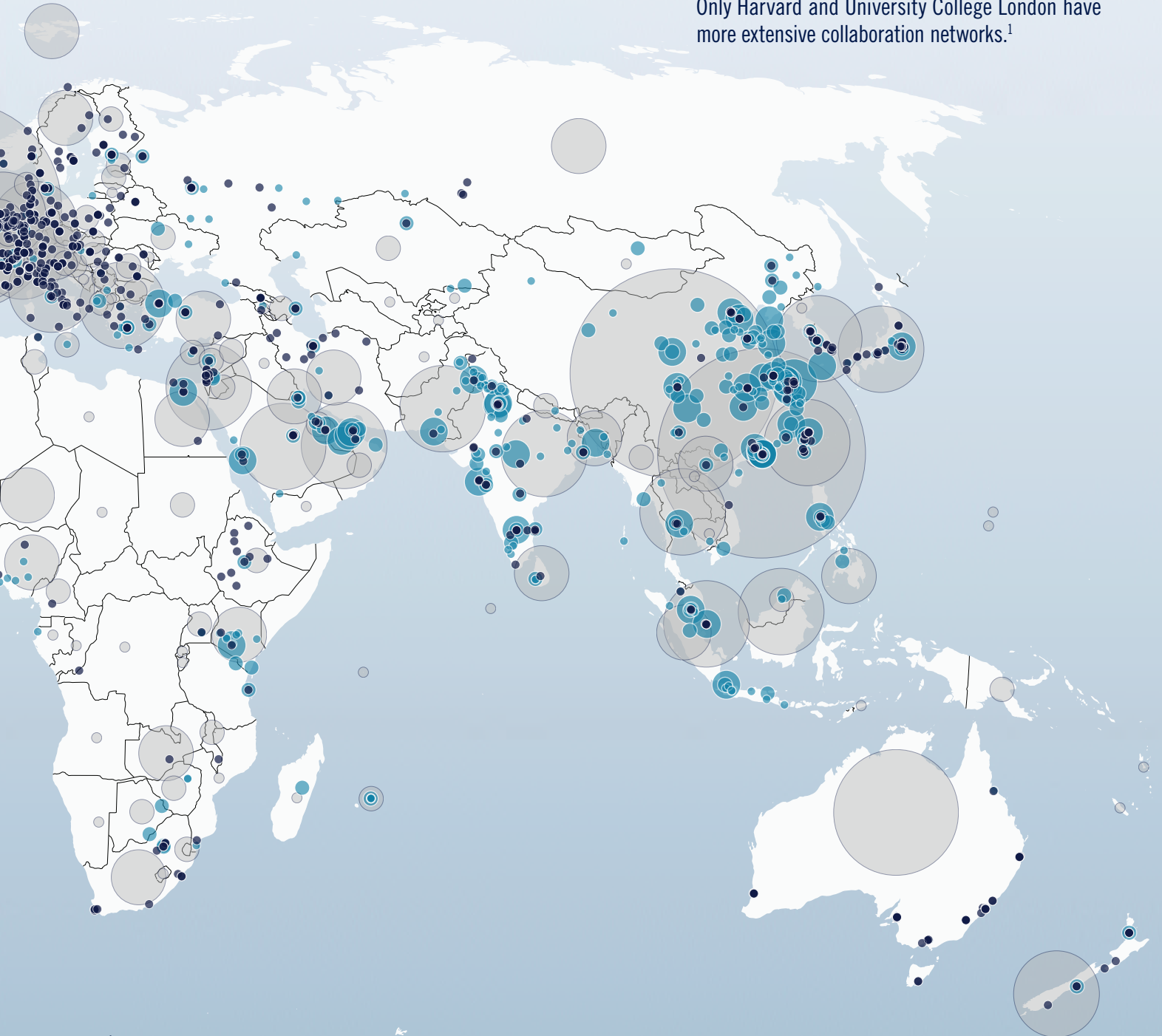


More than 14,000 first-year students from more than 1,000 municipalities throughout the world.

RESEARCH COLLABORATIONS



More than 1,740 research collaborations that resulted in 25 or more publications over a three-year period. Only Harvard and University College London have more extensive collaboration networks.¹



¹ ONLY COLLABORATIONS THAT OCCURRED BETWEEN 2016 AND 2018 THAT RESULTED IN 25 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 liveability and ease of doing business, it has become one of the world's leading tech centres. 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 liveable cities ¹



One of the world's leading tech centres ²

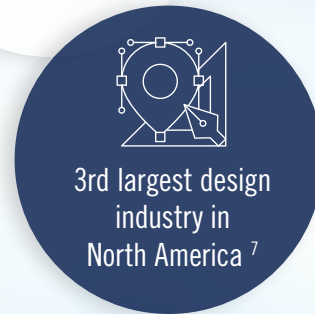


Considered the world's most diverse city ³



Top 3 in leading global cities along with London and Singapore ⁴

¹ THE ECONOMIST INTELLIGENCE UNIT GLOBAL LIVEABILITY INDEX, 2018; ² CBRE INC. 2020; ³ BBC RADIO, 2016 & CITY OF TORONTO DATA; ⁴ PWC CITIES OF OPPORTUNITY 7 REPORT, 2016



⁵ UNESCO CREATIVE CITIES NETWORK; ⁶ THE ECONOMIST INTELLIGENCE UNIT, 2015; ⁷ CITY OF TORONTO DATA; ⁸ 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.

Top 3

in the world for
the performance of
scientific papers¹

1	Harvard
2	Stanford
3	University of Toronto
4	Johns Hopkins
5	University of London

Ranked in the
Top 25
globally in
31 subjects.²

in the company of Berkeley, Harvard,
Cambridge and Oxford

U OF T'S POSITION IN WORLD UNIVERSITY RANKINGS

	2020-21	2019-20	2018-19	2017-18	2016-17
National Taiwan University Ranking	3	4	4	4	4
US News Best Global Universities	17	18	20	20	21
Times Higher Education World University Rankings	18	18	21	22	22
Academic Ranking of World Universities	23	24	23	23	27
QS World University Rankings	25	29	28	31	32

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.

Consistently top

5

in the world for
research impact³

	CITATIONS	PUBLICATIONS
1	Harvard	Harvard
2	Stanford	University of Toronto
3	University of Toronto	Université Paris Saclay
4	Oxford	Shanghai Jiao Tong
5	Johns Hopkins	University College London

\$1.4B

in annual research
funding – U of T and
partner hospitals

315

Canada Research
Chairs

8

Nobel Laureates
associated with U of T

¹ NATIONAL TAIWAN UNIVERSITY RANKING, 2020; ² QS WORLD UNIVERSITY RANKING BY SUBJECT, 2020; ³ INCITES™, CLARIVATE ANALYTICS (2014-2018), INCLUDING WEB OF SCIENCE CONTENT INDEXED THROUGH 2019-11-29

A LEADING ENGINE FOR INNOVATION AND ENTREPRENEURSHIP

U of T ranks number one in the world for industry, innovation and infrastructure.⁴ We're a global leader in transforming innovative ideas into products, services, companies and jobs.



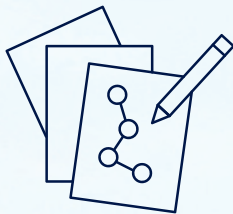
U of T Entrepreneurship ranks among the top university-managed business incubators in the world⁵



More than 1,000 patent applications filed since 2010



U of T's entrepreneurs have secured more than \$1.5 billion in investment and created more than 500 startup companies over the past decade



Entrepreneurial hubs across 3 campuses assist more than 300 student-led startup teams each year

A leader among North American universities for research-based startups, inventions and licenses and options⁶



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

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

3.7M
jobs created by
alumni globally

8th
in global employability
of our graduates in the
company of Harvard, MIT
and Cambridge⁷

⁴ TIMES HIGHER EDUCATION IMPACT RANKINGS, 2020; ⁵ UBI GLOBAL WORLD BENCHMARK STUDY 2019/20;

⁶ AUTM SURVEY DATA FY 2015 TO FY 2017; ⁷ TIMES HIGHER EDUCATION GLOBAL EMPLOYABILITY RANKING, 2020

A LIFE-SAVING DISCOVERY IS BORN

One of the most significant advances in medicine took place at the University of Toronto in 1921. Insulin was discovered by research team Frederick Banting, Charles Best, John J.R. Macleod and James B. Collip, in what is perhaps the best-known partnership in U of T history.

On this illustrious foundation, U of T and our hospital and industry partners built a culture of discovery, innovation and collaboration that has revolutionized health care in Canada and globally.

While a cure for diabetes is yet to come, the Nobel-prize winning discovery of insulin continues to save the lives of millions of people worldwide. Its ongoing impact is allowing generations throughout the 20th century and beyond to live up to their full potential.

2021 marks the 100th anniversary of insulin's revolutionary discovery that sparked a culture of ingenuity and collaboration that continues to change the world.

Where will the next 100 years take us?





9

INCREDIBLE BREAKTHROUGHS

University of Toronto researchers have made an astounding number of revolutionary 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.



Catalogue of Variable Stars in Globular Clusters, 1939

Renowned astronomer Helen Sawyer Hogg published an extensive catalogue of variable stars in globular clusters, which has been widely cited in astronomical literature, enabling researchers to get a clear understanding of this vital work.



Insulin, 1921

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

World's First Electronic Pacemaker, 1950

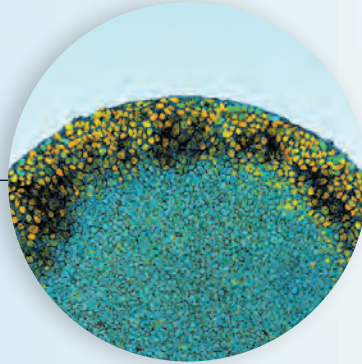
W.G. Bigelow invented the revolutionary pacemaker, and also demonstrated that lowering the body's core temperature and oxygen requirements made open-heart surgery possible.





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.



The Toronto Method, 1952

Biochemist Leone Farrell developed the Toronto Method, an innovative technique to radically increase quantities of the polio vaccine, involving bottles that gently rocked on a custom-designed machine.

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.

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.



Anatomy of Criticism, 1957

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



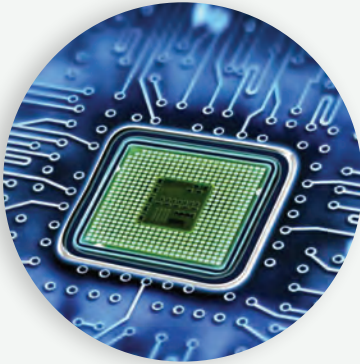
Understanding Media, 1964

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



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.



Deep Learning, 2006

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



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.

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.

AT THE FOREFRONT OF COMBATting COVID-19

As the world grapples with COVID-19, U of T's research, discovery and innovation continues to create meaningful and life-changing impact, joining countless other institutions globally to stop the spread of a dangerous disease. Since March 2020, we have mobilized our knowledge, expertise and resources to fight the pandemic and lay the foundation for recovery, working closely with our government, industry and hospital partners.

9th-largest source of scientific literature on COVID-19¹

According to a paper in the journal *Scientometrics*, in the first six months of the 2020, U of T and its partner hospitals comprised the world's ninth-largest source of scientific literature on COVID-19, reaffirming our remarkable leadership role in illuminating this very challenging phenomenon.

Researchers pivoting towards a great challenge

U of T's CL3 lab tested an antimicrobial coating's efficacy and discovered that it deactivated over 99% of SARS-CoV-2 within minutes. The CL3 lab also validated that a common technique used to pasteurize breast milk inactivates the virus, making it safe for parents who use human breast milk banks to feed their infants.

Community responding quickly and creatively

U of T experts from a wide range of disciplines are developing new diagnostics and treatments, modelling the virus's spread and providing life-saving care on the front lines. Our volunteer networks are supporting health-care workers, from grocery shopping to providing daycare. Researchers quickly jumped into action digitally fabricating PPE, ventilators and other critical supplies.



¹ SCIENTOMETRICS, 2020



Experts serving as trusted advisors

At all levels of government, U of T experts in public health and public policy are serving as trusted advisors as members of the federal government's COVID-19 Immunity Task Force, its Therapeutics Task Force, and the Ontario government's COVID-19 Science Advisory Table, among others. Experts are also keeping the public informed with a daily presence in national and international media.

Faculty exploring pandemic-related issues

U of T researchers are tackling a wide range of issues, including how the pandemic has changed the way we work; what the mental-health outcomes in healthcare workers are; how it impacts homelessness in Canada; how the virus promotes stigma and misinformation and how to fight these challenges; and what the course of COVID-19 is in older adults so we can better identify the most vulnerable.

Charting a post-pandemic recovery path

U of T is also contributing to post-pandemic recovery efforts that ensure individuals, communities and businesses are not left behind. In August 2020, the Dalla Lana School of Public Health launched the Institute for Pandemics, the world's first academic centre dedicated exclusively to preventing, preparing for, fighting and recovering from pandemic diseases.



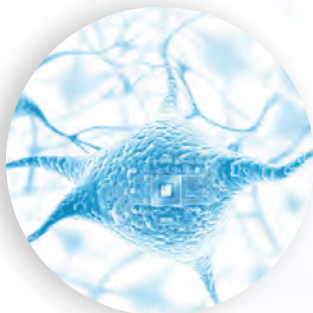
The speed and scale with which our entire community pivoted towards this great challenge has honestly been inspiring to behold.

— Professor Scott Gray-Owen, Temerty Faculty of Medicine



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 & Precision Medicine

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



Legal Studies

Law at U of T is ranked 14th in the world,¹ 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.

¹ TIMES HIGHER EDUCATION WORLD UNIVERSITY RANKINGS BY SUBJECT, 2021



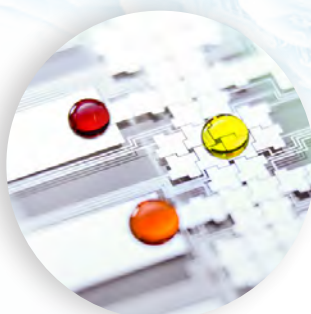
Children's Health & Development

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.



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.



Humanities

Our English language and literature is ranked 10th in the world, while we rank 11th in the world for philosophy.²

² QS WORLD UNIVERSITY RANKINGS BY SUBJECT, 2020

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 COMPREHENSIVE GLOBAL EDUCATION

U of T's global outlook, cosmopolitan location and international community provides 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
93%

of U of T accomplished
scholars teach
undergraduates

At least
46%

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

69%

of first-year students
identify as a visible
minority

A photograph of two male students in a laboratory. The student on the left is a man of South Asian descent with dark hair and a beard, wearing a white and blue vertically striped button-down shirt. He is looking towards the camera with a slight smile. The student on the right is a man of European descent with light brown hair, wearing a light blue and white vertically striped button-down shirt. He is looking down at a piece of equipment. They are surrounded by various scientific instruments, including a large white photonic device in the foreground, a computer monitor displaying data, and shelves with books and other lab equipment in the background.

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

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.



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



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



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



Dr. Eileen de Villa (MHSc 1994, MD 1998), City of Toronto's Medical Officer of Health



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



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



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



Richie Mehta (BA 2001 UTM), Filmmaker



Measha Brueggergosman (MUSP 1999), Soprano



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



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



Mark Rowswell “Daşhan” (BA 1988), Entertainer



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



Margaret Norrie McCain (BSW 1955, Hon LLD 1996), Social Advocate & 27th Lieutenant Governor of New Brunswick



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



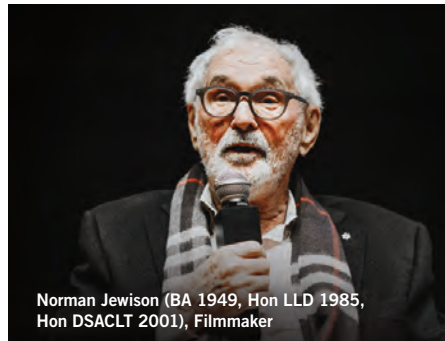
Suneet Singh Tuli (BSc 1990),
Founder, President & CEO, DataWind Ltd.



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 DSACLT 2001), Filmmaker



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



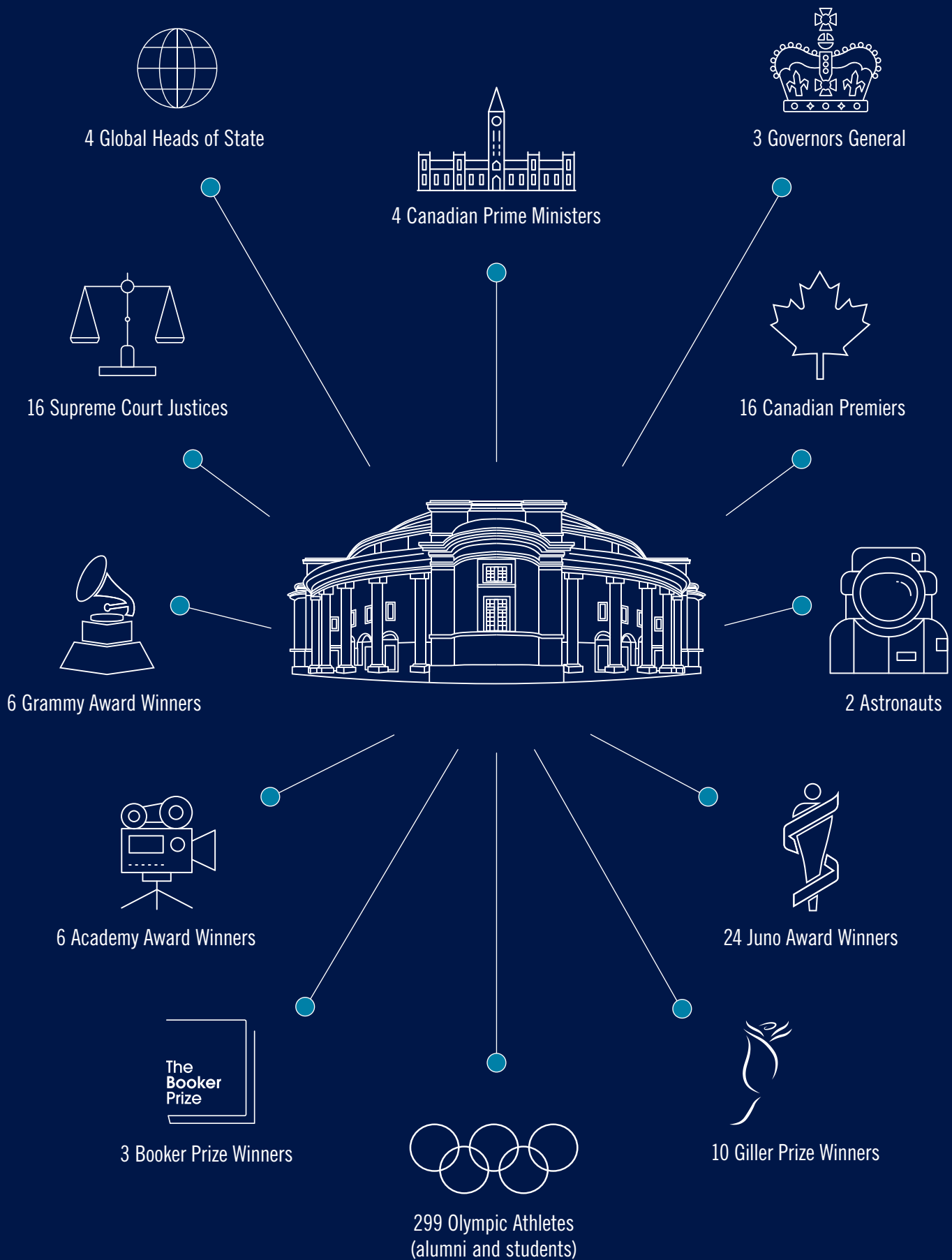
Lorne Michaels (BA 1966, Hon LLD 2002),
Creator, *Saturday Night Live*



Michael Ondaatje (BA 1965), Author



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

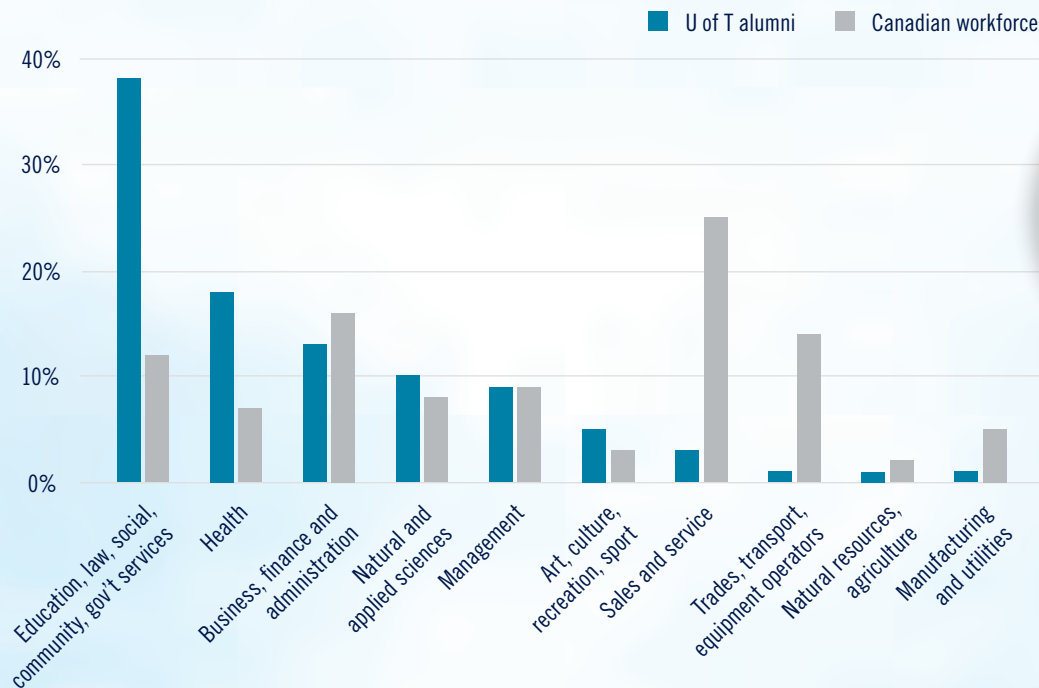


ALUMNI IMPACT

A distinguished network of more than half a million University of Toronto graduates are 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

EMPLOYMENT, ENTREPRENEURSHIP & INVESTMENT

U of T alumni participate in the knowledge-intensive economy; start growing, profitable companies; invest in innovative startups; and participate 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

LEADERSHIP

U of T alumni hold leadership roles across a vast range of organizations and industries and are primarily employed in management and professional jobs.

63.2%

of alumni hold professional roles compared to 18.1% of the Canadian workforce

10%

of alumni are employed in senior positions such as presidents, CEOs and elected officials, compared to 1.2% in the Canadian workforce

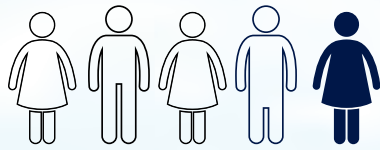
50%

of alumni in senior manager roles lead companies of more than 500 employees

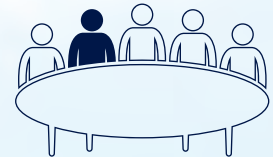
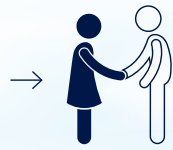


BOARD SERVICE, VOLUNTEERISM & MENTORSHIP

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.



1 in 5 alumni
sit on boards



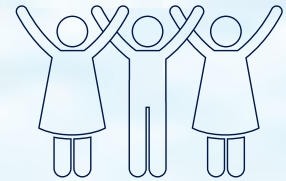
Alumni serve on
172,000 boards

1.16 million total years
of non-profit board service



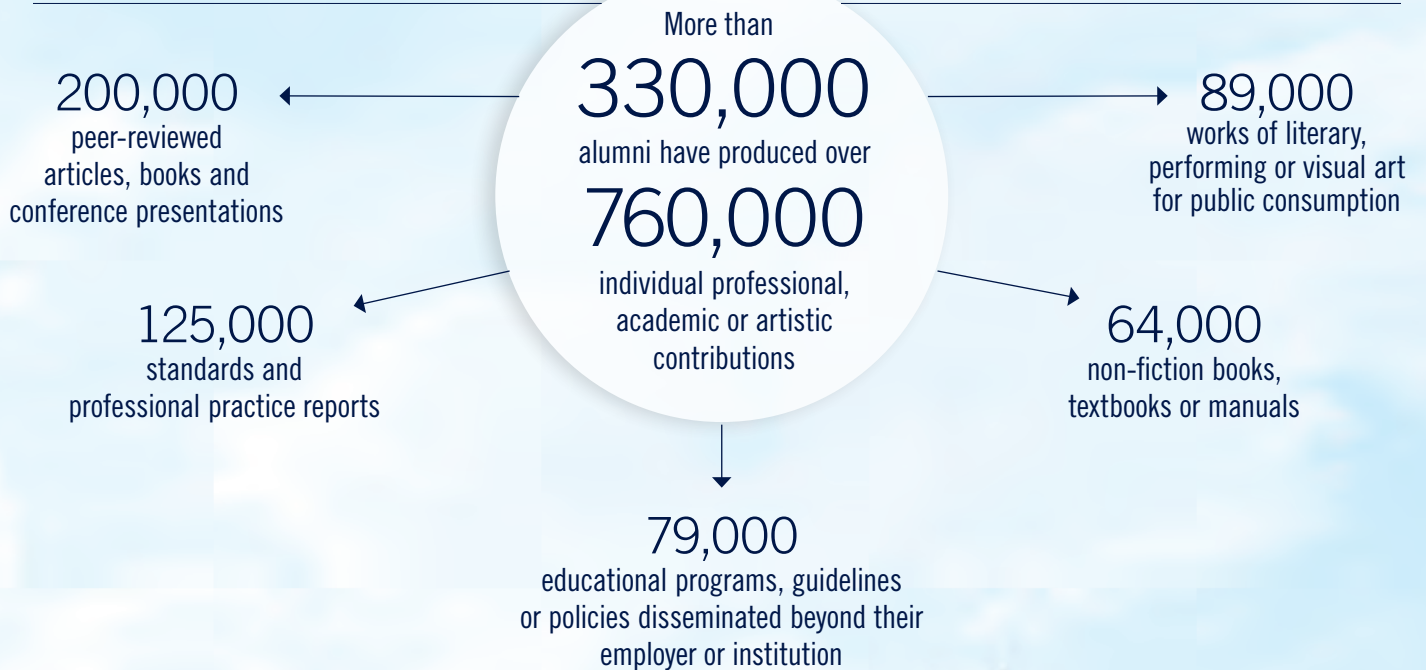
2.8 million hours of volunteer
service per month

330,000 alumni have
served as mentors



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.