

THE UNIVERSITY OF TORONTO COMMERCIALIZATION FRAMEWORK

April 2022

A Commitment to the Management and Protection of Intellectual Property

<u>The University of Toronto</u> (U of T) is where research and innovation excellence come together through a collaborative and entrepreneurial spirit. Innovation comes in many forms, follows many pathways, and emerges from many disciplines as U of T innovators tackle global challenges and solve real-world problems.

Our community of innovators and entrepreneurs share a passion for creating new knowledge along with a willingness to take risk to bring their ideas to Ontarians and the global community. To equip and enable the research, innovation and entrepreneurial community at the university the <u>Institutional Strategic Research Plan</u> identifies five strategic objectives that are informed by key societal challenges and a commitment to inclusive excellence. These objectives support research and innovation programs across the university that mobilize knowledge and strengthen Canada's position in the global knowledge economy:

- 1. Demonstrate National and Global Leadership in Research and Innovation
- 2. Foster Collaborations, Partnerships, and Engagement
- 3. Advance Equity, Diversity, and Inclusion Across Research and Innovation
- 4. Support Integration of Research and Innovation in Student Curricular and Co-Curricular Experience
- 5. Strengthen the Institutional Supports that Foster Research and Innovation Excellence

The university is deeply committed to its public role as a leader in the discovery, preservation and sharing of knowledge. Commercialization and patent protection can be critically important to the process of turning ideas and innovations into new products and services, and are often valued by commercialization partners, entrepreneurs, and investors seeking to bring new innovations to the market. The university seeks to ensure all scholars are enabled to effectively identify intellectual property opportunities emerging from their research and provides institutional governance and support to effectively manage and protect IP when warranted.

The success of a university's technology transfer efforts and related startup companies are critically dependent on private sector receptor capacity for early-stage innovations, access to risk capital, and domestic and international market opportunities. However, Canada and Ontario lag behind peer international jurisdictions in terms of private sector expenditures on R&D, lower levels of patenting, and reduced availability of risk capital. To help address these challenges, the university has fostered the development of a vibrant innovation community that provides mentorship, expertise, and networks for all stages of the innovation pipeline and provides the skills and resources entrepreneurs need to build and scale their businesses or to apply their experiences to business in the local economy.

The University of Toronto's global reputation as a top research university attracts industry partners from Ontario, Canada and around the world. Over the last decade, U of T has worked with over 600 different industry partners. University scholars actively seek partners that can help advance university IP and to also co-develop new ideas and innovations that can be moved into domestic and global markets. These partnerships often include students and trainees, providing experiential learning and future employment opportunities.

Defined Roles and Responsibilities in Support of Commercialization

Commercialization and technology transfer are activities that turn early-stage knowledge and ideas into marketable products or services that create social and economic benefits. To support these activities, the Innovations & Partnerships Office (IPO) manages U of T's portfolio of intellectual property and helps build successful relationships between industry, government, non-profit, NGOs and the U of T research community. Through the Innovations & Partnerships Office, the university actively provides support to the innovation community, including <u>Protecting Intellectual Property</u>, and the overall <u>Commercialization Process</u>. Professional services available to the UofT community include:

- Advice on U of T's Inventions Policy
- Receipt and evaluation of Confidential Invention Disclosures for technologies created at U of T
- IP protection
- Negotiating research and license agreements
- Legal resources
- Industry and partnership development
- Technology marketing
- Company creation and related professional services
- Networking support to secure partners, funding and commercialization

In addition to technology transfer services, the University of Toronto contains a vibrant entrepreneurship community consisting of <u>10+ accelerators</u> operating across three campuses. These entrepreneurial initiatives accelerate ideas, people, social impact and new companies, while striving to create an inclusive environment that supports diverse and talented innovators across all disciplines. This entrepreneurship ecosystem with the support of <u>University of Toronto Entrepreneurship</u> provides mentorship, experiential learning opportunities, expertise, resources, and strategic connections to give students, alumni and faculty entrepreneurs the tools they need to effectively start, build and scale their businesses.

A Commitment to Increase IP Capacity, Education and Awareness

Intellectual Property (IP) is a critical element of the global innovation economy. It generates value and wealth for individuals, companies and countries. Successfully protecting and leveraging IP is increasingly important for many entrepreneurs and their startups.

U of T has created an accessible, free <u>IP Education Program</u> designed to equip students, faculty and staff with a broad foundation in intellectual property and its various forms. This IP Education Program consists of two levels, *Level 1: IP Foundations* and *Level 2: IP Strategy and Application* and U of T students can receive recognition on their Co-Curricular Record upon completion. The university has made these materials freely available to educational institutions across the province, and beyond, to help equip the next generation of innovators in Ontario.

To further equip and assist U of T inventors, The Innovations & Partnerships Office created the <u>Inventor's Guide to Technology Transfer at The University of Toronto</u> which contains information on disclosing and protecting an invention, licensing considerations, helpful FAQs from the research community, and information on the professional services available to all U of T inventors.

Given the growing interest in entrepreneurship, a <u>Startup Guidebook</u> is available for U of T faculty, staff, and students interested in launching a startup company based on intellectual property developed at the University of Toronto. This handbook provides a broad overview of the start-up process from creating an incorporated business to seeking potential investors along with information and resources available to all U of T entrepreneurs.

The university annually tracks and publicly reports on a variety of innovation and entrepreneurship metrics in the <u>Annual Report</u> of the Division of the Vice-President Research and Innovation, U of T's <u>Performance Indicators</u>, and to the annual licensing survey of the <u>Association of University Technology Managers</u>.

A Strong Policy, Governance and Institutional Support Framework

U of T has a modern, flexible ownership <u>Inventions Policy</u> allowing U of T inventors to assume full responsibility for patenting and commercialization, or offer the invention to U of T and access direct support and assistance from the university. U of T actively promotes the innovation and IP services offered to our innovation community, including support throughout the process for the mandatory <u>Disclosure of Inventions</u>.

Through The Governing Council of The University of Toronto, formal policies are adopted and become binding across the institution. Originally adopted in 2008 and revised in 2013, the <u>Inventions Policy</u> at U of T outlines three key objectives:

- 1. To encourage creativity and innovation within the University community
- 2. To facilitate the translation of knowledge for the greatest possible public benefit, including by commercialization through development of inventions into commercial products or processes

 To ensure that revenue generated by these inventions is distributed in a manner consistent with the first two objectives and the advancement of research at the University

The Policy includes a definition of inventions which fall within U of T governance, a requirement for the mandatory disclosure of inventions by all U of T faculty, staff, trainees and students, and ownership and revenue sharing obligations.

U of T promotes IP opportunities to potential domestic and international partners through our <u>Technology Explorer</u>, a searchable database of market-ready innovations and companies and the <u>DeepTechDownload</u> which features investment opportunities and the latest news on research-based companies from U of T.

Since 2010 the university has supported the <u>Connaught Innovation Awards</u> with funding from the <u>Connaught Fund</u> to accelerate the development of promising technologies and to promote commercialization and knowledge mobilization. This program encourages applications from diverse sectors and backgrounds providing critical proof-of-concept funding to help accelerate ideas into impact.

The university also created the <u>Toronto Early Stage Technology (UTEST</u>) program to leverage our IP portfolio towards creating new companies based in Ontario. UTEST provides support to emerging entrepreneurs through a range of services including intensive entrepreneurial education, advisory support, opportunities to raise capital, and dedicated incubation space. The program operates in partnership with <u>Toronto</u> <u>Innovation Acceleration Partners (TIAP)</u>, also receives financial support from the <u>Connaught Fund</u>, and provides companies with investment capital, mentoring, business strategy and incubation space.

In addition to UTEST, companies based on institutional IP can access any of the <u>10+</u> <u>accelerators</u> that operate across U of T's three campuses and the 15,000 square feet of dedicated incubator space at <u>ONRamp</u>. ONRamp is an engaged and inclusive community providing entrepreneurs with access to facilities, events, and the business community in downtown Toronto.

Building and Supporting an Innovation Ecosystem

U of T has taken a leading role in building and fostering Canada's largest innovation ecosystem. The university has been a key partner of the <u>MaRS Discovery District</u>, bringing together the innovation community to grow the economy and offering a range of high-value services that help high-growth companies succeed.

The university and the affiliated <u>Toronto Academic Health Science Network</u> of hospitals form one of the largest biomedical research clusters in North America and are the founding partners of the <u>Toronto Innovation Acceleration Partners (TIAP</u>) which specializes in venture building of early-stage health science technologies. The university has also sought to support the creation of organizations with deep

commercialization expertise in areas of global research strength within the province. The university remains the institutional host of the <u>Centre for the Commercialization of</u> <u>Regenerative Medicine</u> which provides specialized expertise and investments to startup companies in cell- and gene-therapies, access to GMP cell manufacturing, regulatory support and a global industry and partner network.

In another area of global strength, the university is a key partner of the <u>Vector Institute</u> for Artificial Intelligence which is driving research excellence and leadership to foster economic growth and improve the lives of Canadians. The university was also instrumental in supporting Johnson & Johnson's innovation investment in Canada, <u>JLabs@Toronto</u>. This 40,000 square foot facility supports up to 50 life sciences technology companies at any given time and provides access to mentorship, investor networks, wet-lab facilities and specialized equipment and instrumentation.

An Innovation Powerhouse

Research that feeds innovation, entrepreneurship, and commercialization is thriving at U of T. In all sectors and across our three campuses, our faculty, postdoctoral fellows, students and alumni are turning ideas into products, services, jobs, and companies that are contributing to the Ontario economy and improving lives around the world.

This Framework is focused on the commercialization of research knowledge created at an academic institution, but it is important to recognize that commercialization is one of many approaches to knowledge mobilization and impact. Numerous research outputs across disciplines spanning the life sciences, social sciences, humanities, physical sciences, education, arts and culture and beyond may not be suited, nor intended, for commercialization but inform new policies and practices, improve sustainability, elevate our quality of life, and enrich society in countless ways. U of T is known for its vibrant culture of innovation, research partnerships, and a multitude of collaborations with public- and private-sector organizations. International rankings place the institution among the top universities in the world and as a North American leader in the number of new intellectual property (IP)-based startups, invention disclosures, and licenses.

The university is also embarking on the creation the country's largest university-based innovation node. Through a \$100-million investment and the largest gift ever to the Canadian innovation sector, the university is constructing the <u>Schwartz Reisman</u> <u>Innovation Complex</u>, a 750,000-square-foot facility that will anchor U of T's unique cluster of world-leading artificial intelligence scientists and biomedical experts, our world-class entrepreneurship network, and the country's largest concentration of student- and faculty-led startups.