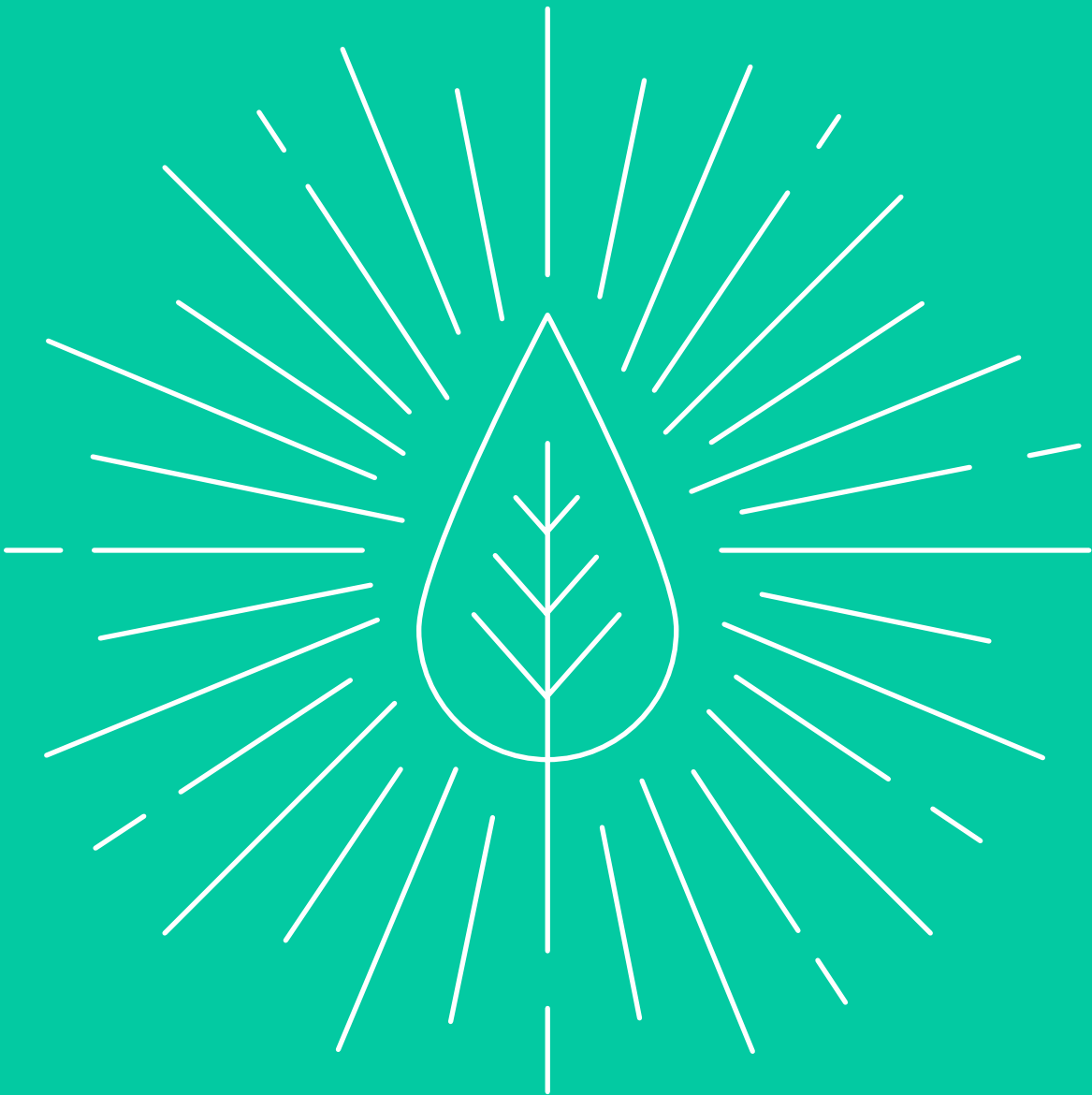


Start-Up Guidebook



The University of Toronto (U of T) is where research excellence comes together with a collaborative, entrepreneurial spirit. U of T entrepreneurs tackle global challenges and solve real-world problems.

Innovation comes in many forms, follows many pathways, and emerges from many disciplines. Our entrepreneurs have a common passion for ideas and a willingness to take risks. They might fail, but they might succeed in ways they could not have imagined. It is the possibilities that excite us all.

For more information, contact:

University of Toronto
Innovations and Partnerships Office
Banting Institute, 108 College St, Suite 517
Toronto, Ontario M5G 0C6

Phone: 416-946-7342
E-mail: Innovations@utoronto.ca
Web: <http://www.research.utoronto.ca/industry-and-partners/commercialization-at-u-of-t/>

Certain sections contain information derived with permission from the *Stanford University Office of Technology Licensing Start-up Guide*. U of T is thankful for their support.

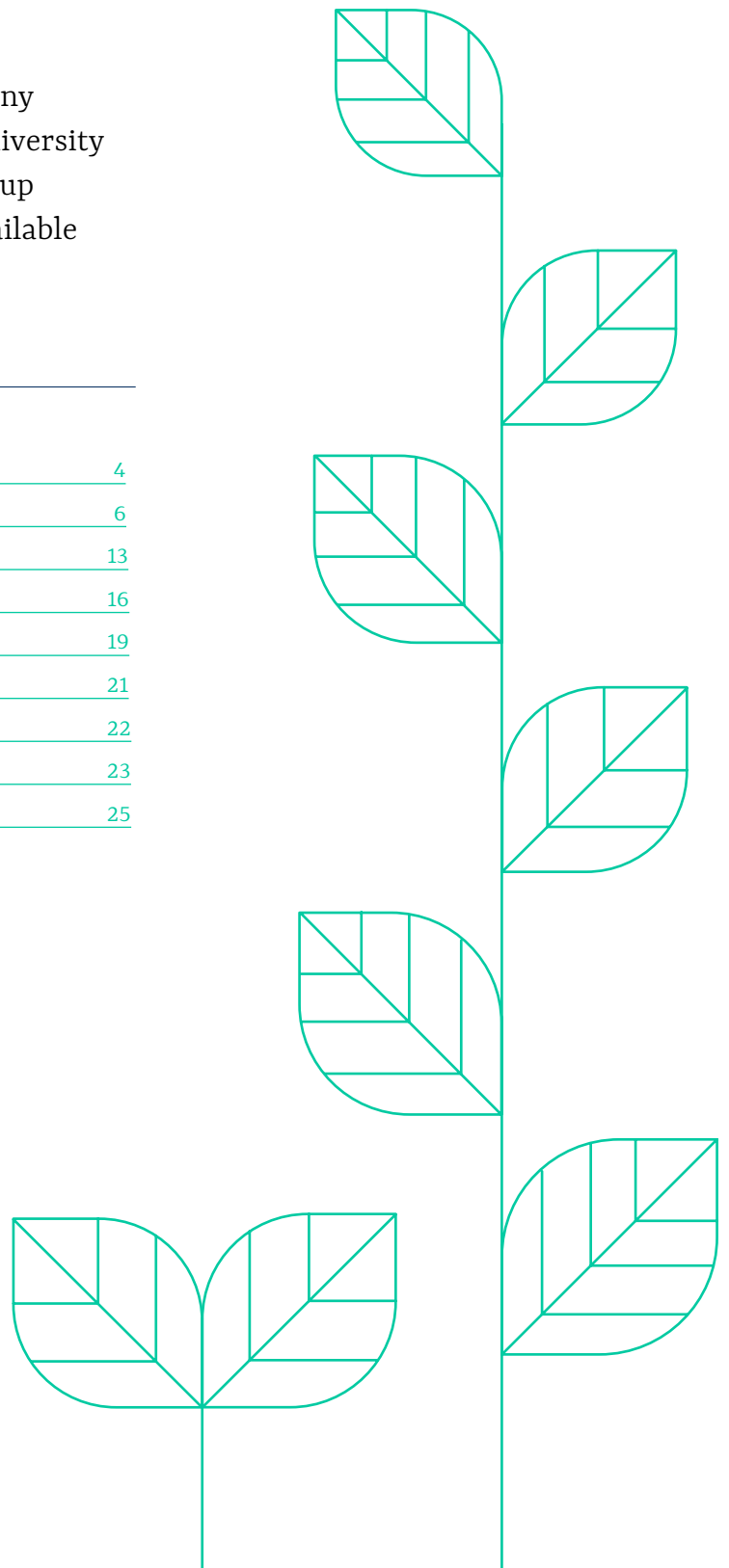
U of T's policies and practices may be revised from time to time. Inventors should refer to U of T's current policies—for example, [Inventions Policy](#) and [Policy on Conflict of Interest – Academic Staff](#)—as well as to any [other university policies or guidelines](#) that may be relevant to their situation. Additional information may be found on the [Innovations and Partnerships Office \(IPO\) website](#).

The University of Toronto Start-Up Guidebook

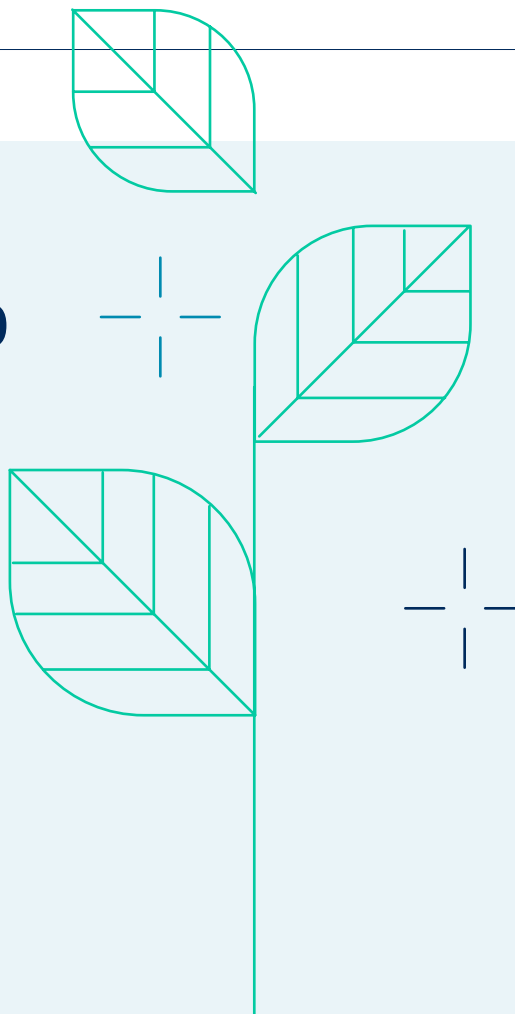
This guide is intended for U of T faculty, staff, and students interested in launching a start-up company based on intellectual property developed at the University of Toronto. It is also a broad overview of the start-up process and provides background on resources available for all U of T entrepreneurs.

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Innovation & Entrepreneurship at U of T



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U of T ignites innovation. U of T alumni have been starting companies and growing them into global businesses for decades. Companies such as Globalive, Kobo, Apotex and WIND Mobile are household names. These companies were all started by U of T alumni, but they did not use intellectual property developed under university policies. This guidebook is about—and intended for—the many other start-ups that have been created by U of T faculty and students to commercialize discoveries made at U of T.

Over 5,000 faculty members, 18,000 graduate students and 2,600 postdoctoral fellows are conducting research and creating new technologies, inventions, companies and jobs.

No. 1 in Canada

and the only Canadian University among Times Higher Education's Top 25 Universities working with the most innovative firms.

1 patent every 3 days

Average of patents filed by U of T Partner Hospitals

No. 5 in the World

for university business incubators according to UBI Global's World Benchmark Study. We're a North American leader in the number of new start-ups, new inventions, licenses and options.

\$3 billion

raised by U of T start-ups in the last decade.

The [Innovations & Partnerships Office \(IPO\)](#) is an important part of a dynamic innovation and entrepreneurial ecosystem at U of T. IPO assists the U of T community by supporting invention disclosure and the commercialization processes for intellectual property developed at U of T. IPO also manages U of T’s intellectual property portfolio and has an ever-changing and expanding number of innovations and technologies available for licensing.

There are lots of ways to create a start-up at U of T. This guide focuses on starting a company to commercialize technology stemming from U of T’s research programs, but it is full of useful information for every entrepreneur.

A technology or innovation is considered U of T intellectual property if it was created using U of T facilities or funds (either direct or administered by U of T).

Some examples of start-ups based on intellectual property developed at U of T are listed below. In some cases, inventors took personal ownership of the intellectual property, in other cases, the inventions were licensed through the Innovations and Partnerships Office (IPO).























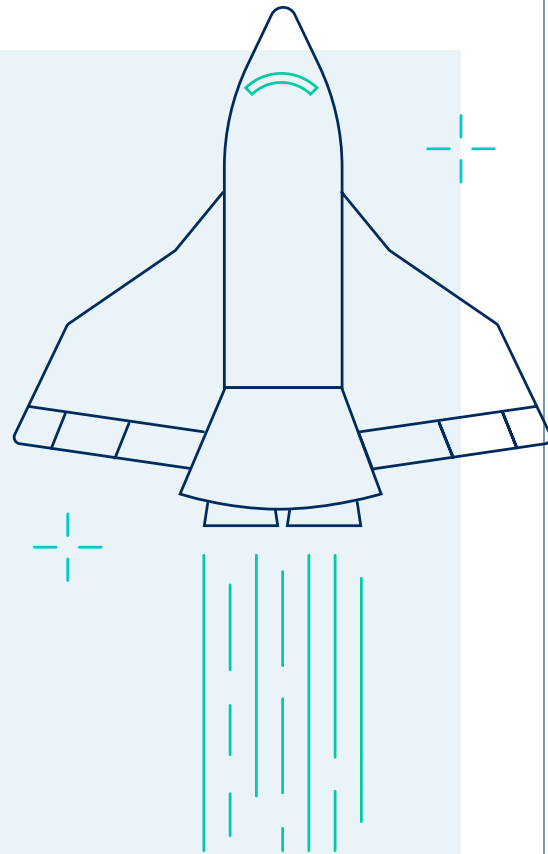




Whether U of T is licensing the technology or innovation to a start-up company or an existing company, the goal is to maximize the chances of successfully advancing products to market while supporting the University’s mission of research and education. This obligation is the shared responsibility of U of T and the start-up entrepreneurs, especially if they maintain connections to the university (as faculty, staff or students) during the creation of the start-up or after it is launched. This guide summarizes some of these responsibilities and best practices, but individuals are expected to know and follow U of T’s policies and those of the research sponsors. These policies and procedures can be found on the website of the University of Toronto’s [Office of the Governing Council](#). IPO is here to help, advise, and support.

Many technologies created at a university are early stage and require a significant investment to bring them to the marketplace. Entrepreneurs must have passion and persistence! They need faith in their technology along with an eagerness to commit time and resources to develop their inventions. IPO will work with new companies to craft agreements that help them succeed.

Getting the Business to Take Off



Launching a successful start-up company requires commitment, dedication, and perseverance. Many companies fail even if the core technology is innovative and promising; however, when the right technology is implemented at the right time, it has the potential to benefit society significantly. Components of a successful start-up include a compelling concept, a strong market opportunity, a competitive advantage, a sound business and financial plan, and an experienced management team. Luck and timing are also important.

Entrepreneurs spearheading a new company formation will be the key champions for the technology and the start-up. In addition to navigating the typical technology transfer process, they are responsible for a variety of tasks such as identifying the market opportunity, developing a business plan, and pursuing financing. Every start-up follows a unique path, but there are many common steps to get the business off the ground as outlined in this section. Additional resources are available through [U of T Entrepreneurship](#).

Often an important immediate question for inventors is whether they want to be involved in these tasks directly as part of the company team or to continue in their U of T roles as faculty, research staff or students. Your division head or department chair can offer guidance about these decisions and information about options (e.g., taking a leave of absence), including putting you in touch with faculty mentors who may be willing to share their own experiences with other inventors.

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Steps to Start-up Launch

1 Talk to IPO
 We encourage you to contact the Innovations & Partnerships Office early in the process to discuss your invention, how to protect the IP, and your thoughts about a start-up company.

2 Protect Intellectual Property
 A major source of value—and a major tool for attracting investment—is IP. Engage with IPO to get a patent application filed for your invention before you make any public disclosure of it.

3 Seek Input and Network
 U of T provides a wealth of resources and numerous support programs. IPO can guide U of T inventors to these programs, investors, mentors, and other resources.

4 Plan the Business
 A formal business plan may or may not be part of this phase, but you'll need to understand your invention's market potential, competition, funding needs, and how you plan to develop the product and attain the revenues sufficient to sustain and grow the company.

5 Secure a License or Option Agreement
 IPO will work with representatives of the company to grant a license to the start-up. In some cases, a short-term option agreement may precede a license so your company can demonstrate to potential funders that it has secured the rights to negotiate for a license to the technology.

6 Pursue Funding
 Commercializing technology is typically a capital-intensive process. You'll need to present your opportunity to people with the funds to help you make it happen: venture capitalists, angel investors and perhaps in the initial stages, friends and family. You can start the personal introduction process that can help you get the attention of angel and captial investors by working with IPO.

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Seek Input and Network

Throughout the start-up process, advice and mentorship are invaluable in building the foundation for a successful business. U of T cultivates a strong entrepreneurial spirit and has many resources to help with networking and guiding a path to commercialization.

[U of T Entrepreneurship](#) enables student and faculty innovators to access U of T's ecosystem of accelerators, incubators, programs, courses, and partners. It helps faculty and student entrepreneurs turn ideas into viable ventures. The U of T Entrepreneurship community provides mentorship, expertise, space, and networks for all stages of the innovation pipeline and provides the skills and resources entrepreneurs need to effectively pitch ideas, find collaborators, and build and scale their businesses.

Develop a Business Case

Entrepreneurs should develop a strong business case to understand the market potential, competition, and funding needs. A business plan should include strategies for developing the technology and attaining sufficient revenue to sustain and grow the company. This plan will be useful when meeting with investors and pursuing funding.

Several key factors should be considered when deciding to form a start-up company:

- **Technology innovation and patent/IP position:** Is broad patent coverage possible? Are there background patents owned by others? Will the company have freedom-to-operate to develop the product?
- **Development risk:** How far along is the technology? How much time and money is required to bring a product to market?
- **Development costs versus investment return:** Can investors obtain their required rates of return (e.g., venture capital looks for 10X initial investment in 5 years)?
- **Product strategy:** Does the technology lend itself to opportunities for multiple products/platforms?

- **Market size, dynamics and potential:** Is the market big enough? Is it controlled by a few players? Is there a healthy growth trend?
- **Financial potential:** What market share can be obtained? Is it worth the effort?

IPO can help answer all of these questions.

A business plan should be clear and concise. It will be easier to “sell” the vision to investors and attract management talent with a business plan. Investors are interested in investing in start-ups with high growth potential. The business plan should address what investors want to know: the compelling concept, competitive advantage (including patent/IP position), market and financial potential, and proven management team.

Pursue Investors/Funding

Except with certain software companies, commercializing technology is typically a capital-intensive process. Entrepreneurs need to present their opportunity to individuals or organizations with funds to help launch the company. Typically, these are venture capitalists, angel investors and—perhaps in the initial stages—friends and family, all of which may likely be further supported via public programs. Accessing U of T's network is one way to start the networking process that can help get the attention of angel and venture capital investors.

First, decide what type of funding is required for your venture. Technology commercialization often requires multiple rounds of funding from multiple sources. Angels and venture capitalists (VCs) are private investors who take on high-risk ventures with goals of high returns. Return requirements vary based on industry and stage of funding, but many investors seek 10X their initial investment over five years. Not all start-ups are well-suited for angel or VC financing. Other options exist.

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Types of Early-Stage Investment

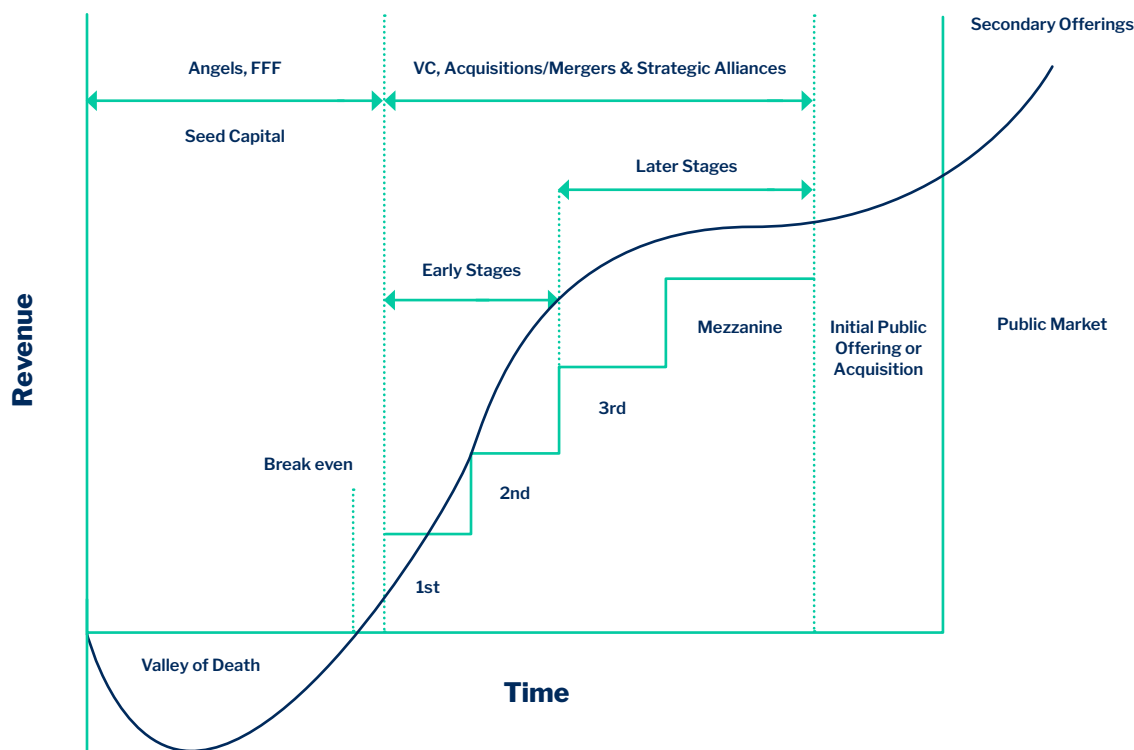
Angel Investing

Angel investors are typically high-net-worth individuals who have a personal interest in funding new companies. They are often willing to invest in earlier stages and with smaller amounts of money than VCs in exchange for equity. They can take passive or active roles in the start-up and typically have a longer investment horizon than VCs. According to the National Angel Capital Organization’s (NACO) 2016 Report on Angel Investing Activity in Canada, 35 Angel groups across Canada, representing 3,300 active Angels, made 418 investments amounting to \$157.2 million.

Venture Capital (VC)

Compared to angels, venture capitalists can invest larger amounts of money (usually millions of dollars) in a company. In exchange they tend to receive more equity. VCs also exercise control and often bring experienced management talent to help guide and grow the company. Sometimes they invest in several rounds of funding and are part of a larger consortium of investors in the company. According to PwC Canada, total investment in venture capital-backed Canadian companies was U.S. \$1.7 billion across 266 companies.

Startup Financing Cycle



This graphic is an example of a start-up financing cycle using traditional funding sources, through an initial public offering. There could be more or fewer rounds of funding. The 1st, 2nd, and 3rd rounds can be equivalent to Series A, B, and C. (Source: “Startup Company” Wikipedia, The Free Encyclopedia. Wikimedia Foundation, Inc. 11 March 2009. Web. August 2017 under GNU Free Documentation License, Version 1.2).

Other Sources of Capital

Start-ups may also investigate and pursue funding from non-traditional sources.

Some examples include:

- **Government grants:** Certain research grants are available through a vast array of programs. Additionally, the Government of Canada has implemented [Concierge](#), a service operated by the National Research Council Industrial Research Assistance Program (IRAP) that provides a single access point where small and medium-sized enterprises can find high-quality, timely advice to help them innovate and accelerate their growth. [SRED credits](#) (Scientific Research and Experimental Development Tax Incentive Program provided by Canada Revenue Agency) are also a great source of funds from government.
- **Banks:** Banks do not usually participate in equity investments in new companies, but they are a source of loans, particularly for capital purchases when there is some collateral (such as large equipment)
- **Crowdfunding:** Various crowdfunding companies enable entrepreneurial fundraising by pooling small investments from a network of individuals. A variety of crowdfunding platforms exist. Find the one that best suits your needs. For example, certain crowdfunding platforms focus on funding social innovation. Platforms include GoFundMe, Kickstarter, Indiegogo, Chuffed, Ideapros, etc.
- **Other funding sources** as found at [U of T Entrepreneurship](#).

How Investors Evaluate a Company

Investors receive numerous requests or “pitches” for funding, but only a small portion of start-ups get funding. Investors will determine if the start-up meets their strategic and financial goals and if the company fits into their current portfolio of investments. VC funds target an annual return on the fund which is significantly higher than other investment vehicles such as stocks and bonds.

Investors typically perform due diligence before funding new opportunities, and they often view the fact that a new company is working with U of T positively in this analysis. For example, IPO’s involvement may provide an extra measure of reassurance to investors that IP rights are being properly secured by the company.

Funders and Founders has an infographic that explains “[How Startup Valuation Works – A Way to Measuring a Company’s Potential.](#)”

Exit Strategy

Investors plan to recoup their investments via exit strategies. Typically, a VC hopes to sell its equity in a portfolio company within 3-7 years, ideally through an initial public offering. Another exit strategy could be through mergers and acquisitions (M&A).

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U of T companies that have gone public:



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U of T companies that have been acquired:

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Acquired by Google



Acquired by Google



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Acquired by Cederlane



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Acquired by Fluidigm



Acquired by Marketwire



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Acquired by Twitter



Acquired by Silanna Semiconductor



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Risks

New company formation is a high-risk proposition. While many U of T start-ups are successful, others are not. Some common challenges for academic start-ups:

- **Inexperienced management:** A strong, experienced, cohesive team is required for a successful start-up company. Problems can arise if founders or other members of the team do not have enough start-up and business experience or if founders, new management, and investors do not have the same strategic vision.
- **Lack of funding:** A start-up needs sufficient capital to overcome technical challenges, reach critical business milestones, and progress to the next phase of development. The company must have a solid business plan and a strong management team to attract investors.
- **Technology does not meet commercial need:** Sometimes the science is innovative and exciting, but does not meet a commercial need or perhaps current solutions are still better than the new technology.
- **Timing:** Even when a commercial need exists, the company may miss the market opportunity. Sometimes the market is not ready for the product (e.g., too early, too expensive, unrecognized need). Sometimes the product is too late to the market and the need has been filled by a different technology or competitor.
- **Marginal niche:** If the target market is smaller than expected, the company might not meet its financial growth targets.
- **Bad luck:** Sometimes events outside of the entrepreneur's control can negatively impact a company. Remember that resilience is often seen as an entrepreneur's greatest strength.

The business website Inc.com offers some additional information about [why start-ups fail](#).

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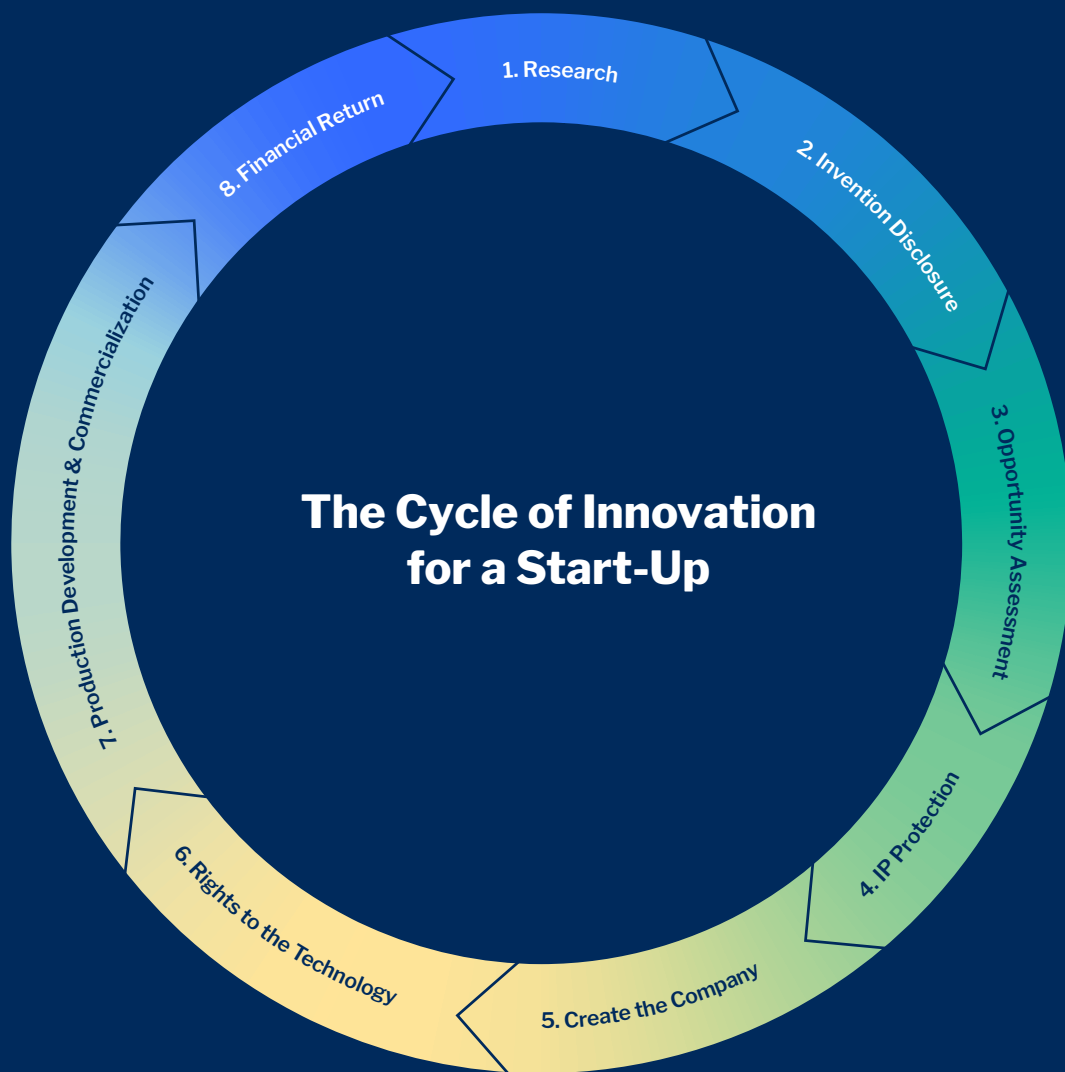
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Technology Transfer at a Glance for Start-Ups



The technology transfer process at U of T can be conceptualized as a continuous cycle—one where discoveries in the laboratory are developed into licensed products in the marketplace that then help fund the next generation of research and innovation. For the most part, the steps of the cycle are similar whether the company commercializing the technology is a new venture or an established one.

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Key steps for entrepreneurs starting a new venture based on U of T intellectual property. U of T's *Inventor's Guide*, explains some of these stages in further detail.

1. Research

Observations and experiments during research activities often lead to discoveries and inventions or the development of software and other copyrighted works. An invention is any useful process, machine, composition of matter (e.g., a chemical or biological compound), or any new or useful improvement of the same. Often, multiple researchers—including students, post-docs and research staff—contribute to an invention and may be inventors.

2. Invention Disclosure

This written notice of an invention to IPO begins the formal technology transfer process. The [Invention Disclosure](#) is a confidential document and should fully describe the new aspects of the invention, including the critical solution it provides and its advantages and benefits over current technologies. Invention disclosures can be submitted to ip.officer@utoronto.ca.

If you believe that what you have developed does not fall under the U of T [Inventions Policy](#) (i.e., it was invented without significant use of U of T resources) and wish to confirm, please fill out the [Declaration of Invention with No Significant Use Form](#).

3. Opportunity Assessment

If the inventors choose to take personal ownership of the invention, the University will assign the invention to the inventors. Before doing so, IPO will ensure sponsors don't already have rights to the invention. If the inventors choose personal ownership, IPO will not assess the commercial potential of the invention.

If the invention is offered to U of T, IPO will review the invention disclosure and evaluate the commercial

potential based on patentability (if applicable), market analysis, existing competitive technologies, and other factors. At the conclusion of the assessment phase, IPO and the inventors will decide if the best path to market for the technology is to create a start-up company.

The assessment of commercial opportunities takes into account many factors that can be summarized in six major areas:

- What is the core technology disclosed? What is unique about it? To what extent does the technology work?
- What products or services does the technology enable? How can these products be designed and built? By whom and where?
- What are the potential markets for the products? Are these markets worthwhile? To whom?
- What financial resources are needed to commercialize the technology? Which type of financing will be required?
- Will the company have the freedom to operate? Is IP infringement easily detectable? Is the patentable content strong?
- What team is required to commercialize this technology? Who is missing at this stage? How will the company recruit the required expertise?

4. Intellectual Property Protection

(If appropriate, necessary, or warranted)

Patent protection, a common legal protection method, begins with the filing of a patent application. Once a patent application has been filed, it requires several years and tens of thousands of dollars to obtain an issued patent. Other common forms of IP protection include copyright and trademark. Unique biological materials and software can often be successfully licensed without formal IP protection.

5. Create the Company

Once the decision has been made that the best vehicle for commercialization is a start-up, the company should be formally incorporated. Typically, U of T companies choose to incorporate [federally](#) in Canada for wider rights and so that they do not have to incorporate separately in each province. It is required at the time of incorporation that the company have at least one company director and established company bylaws. IPO uses external legal counsel to provide support during the company creation process.

The company founders will create a capitalization table to understand the equity distribution amongst the founders. In most cases the company will set aside equity to allocate to new employees as the company grows, this is referred to as the employee stock option pool or ESOP. Next is the execution of a shareholder agreement. This agreement ensures each shareholder has rights and protocols to make decisions and provides protection if company founders leave or new shareholders become part of the company.

Eventually, a Board of Directors (BoD) should be established to provide strategic company direction and bring credibility to the company. At the onset, a BoD can have as little as three members, with the majority external to the company. It is also a good idea to have a Board of Advisors (BoA). The BoA provides access to expertise that would not otherwise be available to a start-up. A good BoA can also bring external viewpoints and a larger network of contacts.

6. Rights to the Technology

For inventions that are managed by U of T, IPO will negotiate and execute an option, license or assignment agreement. This agreement is a contract between the University and the company in which certain rights to a technology are granted to the company. Most start-ups request an exclusive arrangement because they believe it is required to raise funding for the company. Terms may include equity, royalties, and milestone fees.

When U of T inventors are involved in a start-up company, offering rights to that company can raise concerns about conflicts of interest. The final rights

agreement must fall within the normal range of terms and conditions of similar licenses to non-inventor-associated companies (taking into consideration the unique circumstances of each technology and transaction).

7. Product Development and Commercialization

Most university inventions are early-stage and require further research and development. The company typically makes significant investments of time and funding to commercialize the product or service. These steps may entail regulatory approvals, sales and marketing, support, training, and other activities. The company will be expected to meet commercialization milestones described in the agreement of rights.

It is common for the company, particularly early-stage ventures, to evolve their strategy and development plans as the company grows, faces technical challenges, and recognizes new market opportunities. IPO can work with the company to amend and renegotiate rights agreements in response to these changes if the request and reasons to renegotiate are reasonable.

8. Financial Return

Revenues, including both cash and equity received by U of T from companies in consideration for granting a license, are distributed annually to inventors, departments, and schools according to U of T's [Inventions Policy](#). The inventors who have not waived royalty rights due to conflict of interest considerations will receive their share under the policy.

Royalties and the proceeds from equity are shared within the University to collectively foster the creation of the next generation of research and innovation.

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Frequently Asked Questions



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How are inventors involved in the licensing process?

IPO encourages inventors to recommend potential licensees, provide input for assessing technical and market feasibility, and offer suggestions on licensing strategies to commercialize the technology. IPO will always consider inventors' feedback and strive to keep inventors informed.

When an inventor is also a founder, the best practice is for IPO to negotiate the agreement with a founder who is *not* also a U of T inventor.

When can the start-up management negotiate a license?

IPO can begin negotiations with any representative of the company. It is best, however, if the company has a business and financing plan. If possible, U of T faculty members should not represent the company in negotiations.

Which comes first, the license agreement or company funding agreements?

This is a chicken and egg scenario. Investors usually want to be sure the entrepreneur has an option or license to the technology before investing in the company, but the entrepreneur often does not know what kind of license (field of use, financials, etc.) the investor requires. One solution is for an entrepreneur

to take an option to a license, with the terms of the license outlined in a term sheet. The final negotiations for an option/license and investment funding agreement will often occur in parallel.

What is an option agreement and how is it different from full license?

An option agreement is often used to reserve rights in an invention while a company evaluates the technology, explores funding opportunities and raises the capital needed to fully license the rights in question. Option agreements may include financial consideration to U of T to reserve those rights. Start-up companies sometimes prefer this route and IPO may grant options for up to one year.

How long does it take to license a technology from U of T?

The time it takes to license an invention varies. After the technology is disclosed to IPO, it could take several weeks to a few months to review the invention and then apply for a patent application (if a patent application is appropriate). During this time, the entrepreneur(s) could begin to develop the new venture to better position the start-up as a potential licensee (e.g., develop a business plan, research entrepreneur resources, and begin seeking investors). If the start-up company is the best possible licensee, negotiations with IPO for a license could take several weeks to months. Some negotiations may only take a few days if both parties agree to terms easily. IPO has developed a start-up licensing model to simplify software licensing for U of T start-ups.

What are typical licensing terms for U of T's agreements with start-up companies?

License agreements have both financial and non-financial terms. These vary based on the technology, the stage of development, the field of use, and the commercialization risks. Typical terms consist of:

- Financial terms for patented intellectual property may include annual fees, payments when milestones are achieved, and royalties on product sales.
- Financial terms may also include a small, minority share of equity in the company (see below).
- Exclusive licensees are generally expected to pay patent expenses.
- Diligence terms to ensure reasonable progress in growing the company and commercializing the invention.

Many entrepreneurs are concerned about the financial terms. IPO has completed hundreds of agreements with start-ups. IPO's goal is to negotiate an agreement that is fair and reasonable based on experience, on the industry and on how the technology fits into the ultimate product.

The goal is to ensure startups get a comparable deal within a given field. To that end, in addition to our own experience, IPO consults data sources from outside the university such as Osage University Partners (OUP). OUP only invests in university technology. Their database has become the gold standard for comparable startup license terms.

Does the university take equity in start-ups?

U of T often accepts equity as part of the financial terms of the license. Because most start-up companies have limited cash, equity is often substituted for some of the cash consideration. Equity is a way for the university to share some of the risks and rewards associated with start-ups. Equity is typically negotiated as a minority shareholding on a case-by-case basis at the time of licensing. The amount ranges from single digit to low double digits. Please consult with a commercialization manager for additional context.

Will U of T take a seat on the company board?

No, nor does U of T take an active role in managing the company. IPO representatives may sit as an observer on the board or act as an informal advisor to the company.

Will U of T assign the patent to a start-up (or existing company)?

Yes, U of T does assign or transfer IP rights when appropriate.

What happens if there are follow-on patents to the original patent?

It depends on who owns the follow-on patents. Typically, U of T will have filed the initial patent application that is exclusively licensed; the exclusive licensee provides input for the prosecution of this original patent. Follow-on inventions conceived by the licensee without U of T involvement usually belong to the licensee. Follow-on inventions based on work at U of T will be owned under U of T policies. In other words, the existing licensee will not be automatically granted a license to the follow-on invention.

Can a start-up get an option or license without being incorporated?

The company must be incorporated to enter into a license or an option agreement. Prior to incorporation the entrepreneurs can enter into a memorandum of understanding (MOU) with the University. An MOU outlines the startup's plan and how the University can facilitate.

If the start-up is based on an invention jointly owned by U of T and another institution, what happens to the invention?

Typically, U of T enters into an Inter-Institutional Agreement (IIA) whereby one of the institutions will take the lead in negotiating. This way a company can negotiate a single agreement with an exclusive license to both parties' IP rights.

If a start-up needs technology from another institution besides U of T, but the technology is not jointly-owned with U of T, will the company need a separate license?

Under most circumstances, the company will need to negotiate separately with the other institution for a license. For complicated technologies, the company will need to conduct a freedom to operate (FTO) analysis and confirm that the company has a path to acquire all the necessary IP components the start-up will need to make its proposed products.

If the invention is unpatented software, will the start-up still need a license?

Yes, a license is required if the software falls under U of T's [Inventions Policy](#).

Can I continue to do research at U of T on the technology that is the basis of a start-up?

U of T always reserves the right to protect its own inventions for research purposes. However, to develop technology at U of T for the benefit of a start-up, the researchers must follow U of T's [Policy on Conflict of Interest – Academic Staff](#). Guidance can be sought from IPO.

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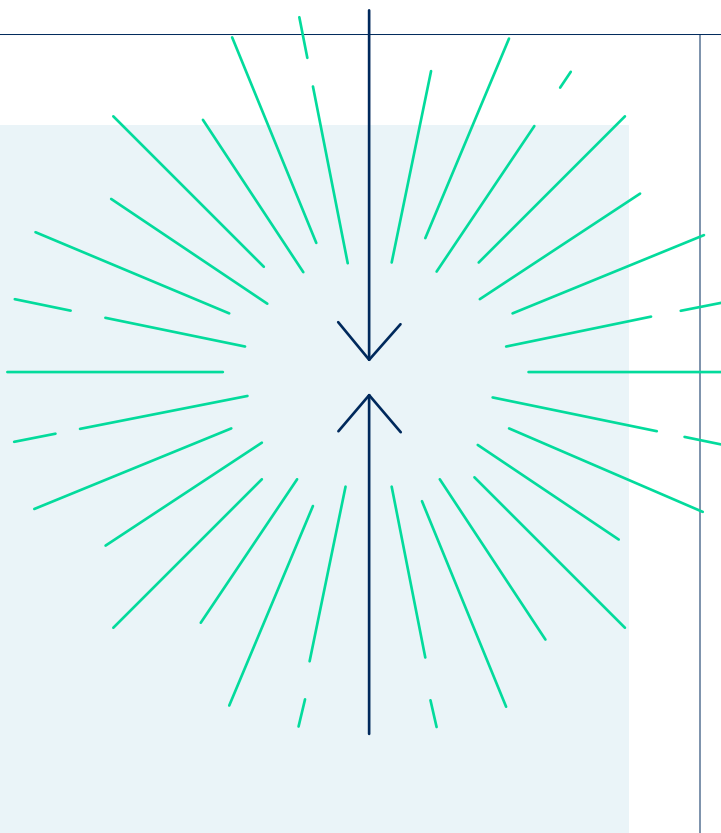
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Intellectual Property Policy and Ownership

Unless U of T resources are used in the creation of the invention, there is no obligation to U of T under the *Inventions Policy*.

Intellectual Property (IP) created by U of T faculty, staff, or students using U of T resources is governed by U of T's [Inventions Policy](#).

In short, if University funds or facilities are used:

- Inventions must be disclosed to U of T.
- Inventors may choose to take personal ownership of the invention or offer full ownership to U of T.
- In all cases:
 - IP access agreements must include commercially reasonable terms
 - Revenue from the agreement is shared between the inventors and U of T
 - U of T retains the right to use the invention for research and teaching

One exception to joint ownership is if the rights to an invention were granted to a third party under a separate prior agreement, such as a sponsored research agreement or a material transfer agreement. Please contact IPO for more information.

Managing Conflict of Interest at U of T

U of T and inventors must be sensitive to conflict of interest (COI) and public perception. A start-up or a faculty-associated company should not utilize university resources to support company activity. If university resources are required (e.g., space or equipment), IPO can advise.

In general, faculty members should not:

- Use students at U of T for research and development projects for their company
- Restrict or delay access to information from U of T research
- Employ current U of T students at the company

Conflicts of interest can also involve issues of time allocation. Faculty should discuss the situation with their division head or department chair. In general, faculty are allowed 20 days per academic year to work on projects outside their University obligations.

See Best Practices for faculty and student start-ups below and U of T's [Policy on Conflict of Interest – Academic Staff](#) for more information.

Consulting and Ownership of Intellectual Property

When a faculty member is consulting for a start-up company with which he or she has another financial relationship, it is particularly important to make certain that the separation between consulting activities and the faculty member's academic program, including research and teaching activities, is clear to all parties.

Companies may use U of T faculty members as consultants. U of T does not ordinarily review consulting arrangements, but faculty members should be clear about the delineation between university work and private consulting. U of T faculty members cannot enter into any agreement that creates obligations that conflict with U of T's [Policy on Conflict of Interest – Academic Staff](#). Faculty members must separate and distinguish ongoing university research from work being conducted at the company.

U of T will ordinarily presume that intellectual property developed while a faculty member is consulting at the company or is involved in an on-going company program (e.g., drug development, medical device, chip development, software issue, or any other specific company research or design activity), **belongs to the company as long as there has not been more than incidental use of U of T resources**. U of T resources are considered to include facilities, equipment, and the time and expertise of students and post-doctoral fellows and research staff. However, U of T resources do not include the use of personal computers, telephones, or libraries.

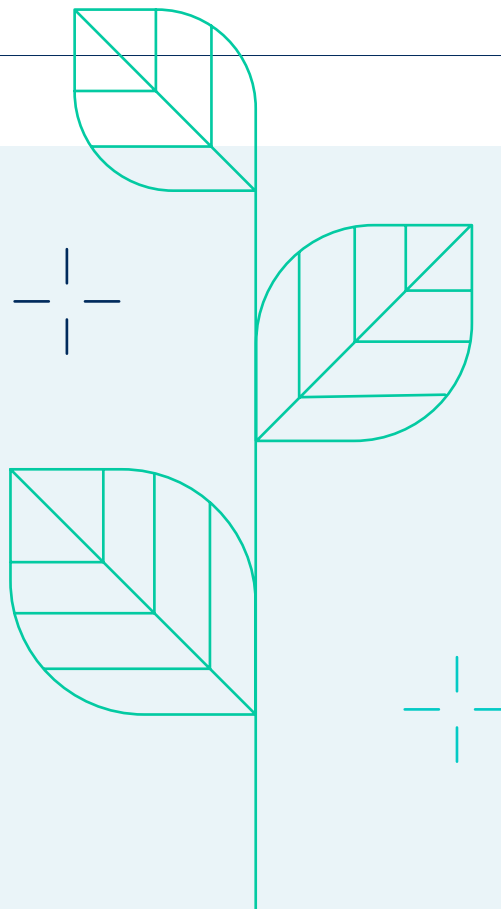
When a question arises as to the appropriate delineation between a researcher's U of T responsibilities and a researcher's consulting obligation, the researcher should discuss the situation with his or her division head or department chair.

If there is ever a question of IP ownership, the IP should be disclosed to U of T.

Obligation to Sponsors

Inventors should take particular care in disclosing all sponsors, including companies whose funding or materials led to the invention. Sponsored research agreements specify what rights a sponsor has in any IP developed as a result of the sponsored research. Under most circumstances, federal funding of research leading to an invention will not impose significant impediments on commercializing the invention via a start-up. Funding or materials provided by other entities (such as companies) may result in license rights to those entities, limiting the license rights available for a start-up. Corporate sponsors are typically granted rights to negotiate a license for any IP arising from sponsored research, but sponsorship agreements vary widely. IPO reviews the research agreements listed on the invention disclosure to identify any licensing restrictions on the invention.

For Faculty: Best Practices For Start-Ups



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U of T encourages entrepreneurial activity by faculty, staff, students and alumni and is supportive of its entrepreneurs.

U of T’s main mission, however, is education and research. There is a requirement to maintain openness in research. Therefore, entrepreneurial activity must be balanced by careful review of the proposed relationships. These relationships may require active management to assure openness in research, academic freedom for trainees, and clear understanding of how conflicts of interest are to be managed. Faculty should also familiarize themselves with the University’s [Graduate Supervision Guidelines](#) to help them strike the right balance between their education and research missions and their entrepreneurial activities.

U of T is committed to avoiding either perceived or actual conflict of interest issues concerning faculty start-ups. Both U of T and its faculty members have responsibilities to optimize technology transfer and mitigate COI when licensing U of T IP to a start-up.

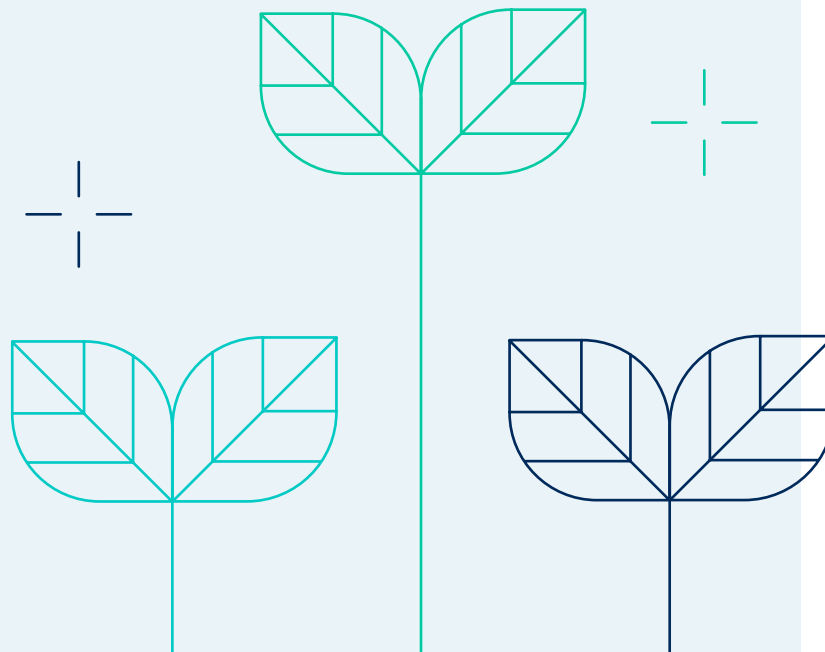
University/IPO Responsibilities

IPO makes licensing decisions based on its professional judgment about technology transfer to achieve the best possible benefit to the public.

Faculty Responsibilities

Faculty members are responsible for separating university duties for research and education from personal financial interests in the company.

For Students: Best Practices For Start-Ups



Innovation and the translation of inventions into products that serve the public are deeply ingrained in U of T's culture, and we have benefited greatly from it. U of T is supportive of students becoming inventors and starting companies—whether or not these companies are based on technology that is bound by U of T's [Inventions Policy](#).

Student inventors must:

- Describe how they will separate and distinguish their on-going activities as students (e.g., thesis research) from work being conducted at the company.
- Implement measures that will allow them to avoid the use of U of T facilities and personnel for company purposes (e.g., availability of off-campus resources and support personnel).
- Consult with the advisors overseeing their academic progress.

Some university facilities can be used by any U of T affiliated companies without ceding intellectual property rights. For example, access to office space for U of T entrepreneurs is available through [ONRamp](#). Students also have access to U of T Entrepreneurship programs, some of which provide R&D space. For more information, [please contact IPO](#).

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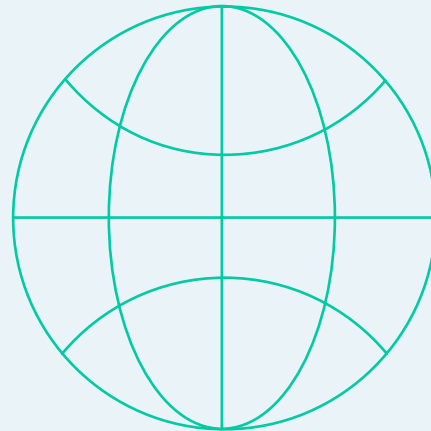
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U of T has a wealth of entrepreneurial history and knowledge. Some entrepreneurs are already aware of the various organizations, classes and websites that are available to them. Below is a list of resources, both on- and off-campus, that can educate and guide U of T entrepreneurs through the start-up process or help them network and gain feedback for their new company. IPO is well connected with these organizations. [Come to IPO for guidance.](#)

Organizations and Programs at U of T

[U of T Entrepreneurship](#) is the hub of the entrepreneurial ecosystem at U of T.

Find out about:

- Workspace and networking opportunities through [ONRamp](#)
- Entrepreneurial [courses and programs](#)
- [Accelerators and incubators](#)
- [Funding opportunities](#)

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Outside Resources

Centres of Excellence in the Commercialization of Research (CECR's) help bridge the gap between innovation and commercialization. The centres adopt different models to best serve the commercialization needs of their sector; acting as investors, incubators or service providers.

U of T is a member of the three CECR's listed below but has access to many others.

- [Toronto Innovation Acceleration Partners \(TIAP\)](#): specializes in extreme early-stage seed investing for companies and technology emerging from its member institutions, of which U of T is one
- [CCRM](#): aims to harness the power of stem cells and biomaterials to treat disease

Regional Innovation Centres (RICs) provide specialized assistance in 18 regions across the province to accelerate start-up and growth of entrepreneurial talent and globally competitive, innovative companies with value-added advice, access to capital, market intelligence, mentoring, and peer-networking programs. U of T entrepreneurs often access the resources of our local RICs.

- [MaRS](#): In addition to their Start, Growth and Scale Programs, MaRS has a variety of online courses and resources that are accessible to all; please visit the [MaRS Library](#)
 - [Communitech](#): is an innovation hub located in Waterloo Region that provides support and collaboration to +1400 technology entrepreneurs.
 - [Altitude Accelerator](#): is Mississauga, Brampton and Caledon's innovation hub, providing free support services to entrepreneurs focused on IT, Clean Tech, and Advanced Material manufacturing sectors.
 - [VentureLAB](#): operates out of York Region to help technology entrepreneurs build scalable, high-growth tech businesses.
- [Osage University Partners](#) provides capital and support to startups that are commercializing the most exciting and groundbreaking scientific innovations emerging from the world's greatest research institutions. The University of Toronto (U of T) is a partner. U of T researchers can access their [resources](#).

[Oneeleven](#) is North America's largest scale-up innovation hub focused on helping the most promising, high-growth start-ups build their businesses and scale their operations.

[Next36](#) is a program that accelerates the growth of Canada's top entrepreneurs by providing mentorship, capital, and founder development.

[Entrepreneurship.org](#) was formed as a free, online international resource designed to help build entrepreneurial economies. This site features a vast array of content and resources to assist entrepreneurs, business mentors, policymakers, academics and investors through each phase of the entrepreneurial process.

[How to Build a Startup](#) is a course designed to introduce the basics of building a successful start-up. The core idea of the course involves learning how to rapidly develop and test ideas by gathering massive amounts of customer and marketplace feedback. Many start-ups fail by not validating their ideas early on with real-life customers. Students will learn how to get out of the building and search for the real pain points and unmet needs of customers. Only with these can the entrepreneur find a proper solution and establish a suitable business model.

There are many VCs and Angel Investor Networks who have worked with U of T start-up companies. To find the right fit, ask IPO.

Appendix 2: IPO Innovation Team Contacts



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A [full contact](#) list can be found at the [Research and Innovation website](#).

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**UTEST - Incubator for
high tech startups**

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General

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