

## **GUIDELINE:** An Inventors Guide to Personal Ownership

#### Domain: IPO May 26th, 2022 Contact: Director, Innovations

The University of Toronto <u>Inventions Policy</u> provides inventors with the option to request personal ownership of unencumbered inventions, or to request the institution accept full ownership and undertake various steps towards commercialization. Inventors, as defined in the policy, can be anyone from the university community including faculty, staff, students, or postdocs. Every inventor has rights to the invention. More information is available on our <u>website</u>.

The option for personal ownership of inventions provides university inventors the opportunity for selfdirected commercialization efforts and creates an additional mechanism to disseminate new knowledge into society and the marketplace with a range of socioeconomic benefits.

The role of the Innovations & Partnerships Office (IPO) for institutionally owned and managed inventions includes helping obtain patent protection, securing funds for proof-of-concept studies, marketing the invention to potential partners, and licensing the intellectual property (IP) to a commercial entity, which may be an established company or a start-up, among others. This guide provides information and key considerations for inventors thinking about personal ownership of IP created at The University of Toronto (UofT) and includes aspects of potential conflicts of interest, ensuring retained rights of the university, ongoing obligations to the university and, in the case of a startup, some tips for navigating the respective roles and interests of founders, inventors and the university.

## The UofT Inventions Policy

The University of Toronto Inventions Policy has three core objectives:

- to encourage creativity and innovation within the university community
- to <u>facilitate the translation of knowledge for the greatest possible public benefit</u>, including by commercialization through development of Inventions into commercial products or processes
- to <u>ensure that revenue generated by these Inventions is distributed in a manner consistent with the</u> <u>first two objectives and the advancement of research at the university</u>

Although commercialization generally means the process of bringing new products or services to the marketplace for financial gain, the policy appreciates that not all inventions have the potential to generate significant revenue. However, when revenue is generated, it is to be shared in a fair and equitable manner between all inventors and the university. To encourage creativity and innovation the policy allocates the university's portion of any revenue to the host department(s), division(s) and possibly the Connaught Fund. These funds support the overall mission of the university including research and educational programs, commercialization and entrepreneurship.

### Is personal ownership always an option?

Sponsored Research Agreements (SRAs) or grants from industry, non-profit or government organizations

may include obligations on the university and the researchers related to the use and ownership research outputs and Intellectual Property (IP). In these instances, the IP may be subject to third-party rights and considered "encumbered" making it unavailable for personal ownership by the inventors. As long as there are no such third-party obligations, the university will seek to transfer the invention to the inventors upon request.

In the performance of a research project, it is important that all members of the research team, including students and postdoctoral fellows, be aware of any sponsor or contractual obligations as it relates to IP rights, confidential information and other key aspects of the agreements. The principal investigator is responsible for advising all members of the research team accordingly. When disclosing an invention to the university, the inventors are required to disclose all sources of funding and sponsorship of the research that led to the invention as this helps IPO identify third-party obligations.

In some cases, IP ownership may be transferred to the inventors with the prior written approval of the sponsor. In these instances, the university will seek permission from the sponsor prior to transferring ownership to the inventors.

### What are the key considerations before requesting personal ownership?

1) Restricted Access to Grant Funding

Personal ownership of inventions may restrict eligibility and access to certain public grants and funding opportunities, which are often necessary to further develop the invention. Most inventions created at a university are at the proof-of-concept or earlier stages of development and access to additional funding is an important consideration. Please consult with a commercialization manager at IPO for further clarity.

#### 2) Conflict of Interest

When the university assigns full ownership of an invention to the inventors the university will retain rights to use the inventions for academic research, teaching and administration. In these instances, commercial pursuits should take place without the use of university resources and facilities unless specific arrangements are made with the division head. The University Policy of Conflict of Interest- Academic Staff, in part, outlines what type of work requires prior university approval. In general, faculty and students may provide services to external organizations, but they should not undertake research activities at the university without an SRA or other arrangement between the university and the third-party (i.e., company). Guidance on activities that can be undertaken for a third-party without using university resources or a university agreement are listed below in reference to consulting contracts.

For research and development work on inventions that are personally owned, there should be a delineation between university activities and personal activities as it relates to the further development of such inventions. In addition, inventors may assign or license rights in their invention to a company and where inventors also retain an active role in the university, they must be careful not to create confusion between the rights of a company and their university obligations. For example, further university inventions which are deemed to be improvements but done with a different group of inventors can create challenges. New inventors may not share the same commercial interests as the original group of inventors. It should be further noted that conflict of interest may arise when one inventor is able to exert undue influence on another inventor due to employment, training, or other circumstances (for example, as between a principal investigator and their students.) This may be the case in determining the optimal commercial pathway or financial consideration where inventions are made by two or more co-inventors. Assigning ownership of the IP to the

university may present a healthy arm's length solution.

For more information on navigating conflict of interest and other standard practices, please review the <u>Policy</u> of <u>Conflict of Interest- Academic Staff</u>, <u>Working Group on Graduate Student Involvement in Research</u> <u>Opportunities with Industry</u>, <u>Intellectual Property Guidelines for Graduate Students & Supervisors</u>, the <u>Inventor's Guide for Technology Transfer</u> and the <u>Start-Up Guidebook</u>.

#### 3) Legal costs

Inventors who undertake personal ownership of IP should consider the legal costs associated with patent filing, patent prosecution and drafting IP licensing/assignment agreements. These costs can be substantial. Inventors should budget \$20-50K for patent costs for each National Phase filing. Costs may be substantially higher if language translations are required or if prosecution is challenging. A breakdown of these costs is provided below.

STEP	Approximate costs including agent and government fees (CDN\$)
US Provisional preparation & filing	\$5-15k depending on complexity
Hundreds to low thousands annually	\$5k assuming provisional was prepared well \$10k if provisional needs updating
National/regional filing based on PCT	Canada - \$2000 US - \$2500 Europe - \$7500 China - \$5000 Others – same basic range
Examination	\$5k - \$20k in initial jurisdictions \$3k – 10k in subsequent jurisdictions (as the prior art would likely be known by that time)
Patent issuance fees	Low thousands
Maintenance fees	Hundreds to low thousands annually

There is typically very little cost associated with protecting copyright such as computer code, however, legal costs for the drafting of licensing and other IP agreements can range widely.

To learn more about filing and maintaining patents, and other forms of intellectual property protection, please take the <u>IP Education Program</u> and visit our <u>website</u>.

#### 4) Access to Additional Expertise

Entrepreneurs can seek commercialization advice, mentorship and entrepreneurship training through various programs offered at <u>UofT</u> or <u>Regional Innovation Centres</u> (e.g. MaRS, VentureLab, Communitech). There are several organizations locally and internationally that provide entrepreneurship support and the university encourages innovators to access these resources. If IP is owned personally, the inventors will not have access to the University legal team or patenting and licensing experts.

Personal ownership of IP is an option, but not necessary if you plan to create a start-up. IPO legal, patent and licensing support can be effectively coupled with entrepreneurship training.

#### 5) Tax Implications

Inventors may license or assign their IP rights in return for monetary compensation or equity. A portion of these financial gains are to be shared with the university as per the policy.

Receiving these revenues will have personal tax implications to the inventors if significant returns are anticipated. It is the responsibility of each inventor to seek their own tax advice as the university does not provide this advice to individuals.

The following two strategies for reducing personal tax liability have been accepted by the university:

- Creating an intellectual property holding company to accept and distribute licensing revenues. As per policy, the university would hold 25% of this holding company or receive 25% of net revenue from the license fees to the holding company. These figures assume the entirety of the company value is from the UofT created IP.
- Having the licensee/assignee pay the UofT directly for any revenues owed to the institution. IPO will provide guidance on this option as revenue-bearing agreements are developed.
- 6) Ongoing reporting

The university has an interest in promoting commercialization successes and reporting to funding organizations. Inventors must provide an annual report updating the university on commercialization activity.

## How is equitable revenue sharing between the inventors and the University achieved?

All co-inventors share ownership of the invention and should agree on the commercialization plan and fair compensation for their respective contributions to the *creation of the invention*. It is important to understand that contributions to the creation of invention are distinct from contributions to the creation and management of a startup company seeking to commercialize the invention. It is recommended that inventors develop written agreements regarding revenue sharing and their respective roles and responsibilities related to the *creation of the invention* in addition to those related to any ongoing commercialization efforts.

An agreement between the inventors should among other things address:

- how to pay for intellectual property protection (e.g., drafting and filing patents)
- how to pay for required legal services (e.g., drafting co-ownership agreements or license agreements)
- how potential licensees are solicited and approved
- how revenues will be collected, shared between inventors, and ultimately distributed
- if some of the co-inventors waive rights and/or revenue sharing, this should be documented

Revenues are aggregate revenues (as defined in the policy), which are received by the inventor from the company (the Licensee/Assignee). Revenues can be any of:

- a portion of the company's revenues (e.g., royalties)
- flat fees
- a portion of sub-licensing fees
- milestone payment
- equity

Expenses related to intellectual property protection can be recovered from the revenues prior to distribution of remaining revenues amongst the inventors and the university.

Only after an agreement between inventors is reached, should the invention be licensed or assigned to either an established commercial partner or a start-up.

## How does IPO support and provide input on license or assignment agreements?

Personally owned inventions, licensing or other agreements are between the inventors and the third party and do not include the university. Inventors should seek their own legal counsel to draft any such agreements. The University (IPO) can review and provide advice to ensure the agreement (and inventors) are compliant with university policy and rights.

Inventors should submit a near final draft agreement to <u>commercialization@utoronto.ca</u> (listing the invention disclosure number for reference) requesting that the agreement be reviewed prior to execution. A response will be provided within 10 business days.

In addition to providing input on the commercial framework, this review, in part, can help mitigate potential conflicts of interest, particularly in instances where faculty and trainees are co-inventors and founders of a start-up.

# What does the University look for when an inventor presents a license or assignment agreement for review?

- 1) Retained rights
  - a. Consistency with the policy and assignment agreement between the university and inventors. The university retains perpetual rights to the invention for research, teaching and administrative purposes. Any agreement for the IP should reference these retained rights to avoid any confusion as the University's rights cannot otherwise be assigned.
  - b. The following language is suggested: "Notwithstanding the rights granted above, it is understood that the University of Toronto retains the perpetual, irrevocable, royalty-free, non-exclusive license to use the Invention for research, educational and administrative purposes."
- 2) License "as is"

- a. The inventors are not authorized to bind the university in the agreement, therefore they cannot bind future works that may be created at the university or by co-inventors or collaborators at other institutions. The university retains perpetual rights to continue to perform research on the invention and *new developments* made at the university are subject to the policy and must be disclosed to the university under standard processes.
- b. The rights to *improvements* are not unusual in the context of licensing but would typically be restricted, for example, by time, scope of claims, and/or by a person's contributions not requiring university resources.
- c. Note that "new developments" and "improvements" are defined differently. A review by IPO is recommended to ensure alignment with conflict of interest and other university policies and practices.
- d. Inventors may grant rights to inventions created during demonstrably private research unrelated to their university functions or during private consulting activities, when such activities do not involve any substantial use of university resources or facilities. Please consult IPO or your division head for clarity when the situation is uncertain.
- 3) No limitation to publication

The University (including faculty, staff and trainees) retain publication rights. An agreement cannot impede these rights as defined by the University's <u>Publication Policy</u>. In no circumstances should publication require prior approval of a third party. Delay of publication in order to patent or remove confidential information are alternatives.

4) Indemnification

Inventors should seek indemnification from the licensee in a commercial transaction and seek independent legal counsel to help draft an appropriate indemnification clause.

5) Obligations to sponsors are met.

If the invention was created at the University and involved a third-party agreement or sponsor funding, the inventors must ensure any subsequent license agreements adheres to the sponsor's terms and conditions.

- 6) Commercially reasonable rate.
  - a. Ensuring that the transfer of rights from inventor/owners to a company is negotiated at a commercially reasonable rate will help ensure all inventors are incentivized to be creative and innovative, consistent with the intention of the policy.
  - b. The financial terms of the license should be commercially reasonable, otherwise the transaction could be deemed prejudicial against the university and the co-inventors. This is especially important if rights are granted to a company in which an inventor has a personal stake. Doing so helps avoid any real, or perceived conflicts of interest.
  - c. Many inventors have limited experience on how to properly structure a commercial deal

(e.g., Have I included the right terms?) and in setting fair market value (Is it competitive?). Information to help determine a commercially reasonable rate is provided in Appendix A. IPO can also provide some limited guidance given their experience in structuring effective agreements and negotiating competitive terms.

d. Exceptions to commercially reasonable financial terms may be made if rights are granted to a not-for-profit organization, for use in developing nations, or for charitable works.

# Who negotiates a consulting contract and other non-University agreements with a Licensee/Assignee?

In addition to an agreement for IP rights, inventors may engage in a consulting or advisory role with a company interested in the technology. Any consulting or advisory arrangements should be entered into personally between yourself as an individual (i.e., independent of the university) and the company. It is your responsibility to review, seek legal counsel if needed, and execute the agreement on your own behalf. The University <u>Policy of Conflict of Interest- Academic Staff</u>, in part, outlines what type of work requires prior university approval. It is important that consulting arrangements do not conflict with their role and obligations to the university.

Some considerations regarding consulting agreements:

The work undertaken within a consulting arrangement should not be undertaken with the use of university resources, laboratory, library or other infrastructure, grants, or trainees unless special arrangements have been made with the division head. While you can agree to consult on research activities of a company, you should not use university resources to actually plan or undertake research for a company.

Acceptable consulting activities may include:

- planning research which does not require the use of university resources
- advising a company on current developments related to the technology
- advising on technical details, patent writing and prosecution
- making scientific presentations to potential investors, business partners or at conferences
- participation on the company's scientific advisory board
- serving as an expert witness

If you have any questions regarding the above, please contact us

Jennifer Fraser Director, Innovations 416.946.5515 commercialization@utoronto.ca

#### Appendix A

To learn more about intellectual property strategy and licensing please consider the follow resources:

- Licensing Executive Society (LES) teaches courses related to licensing. A list of LES courses is on their <u>website</u>. "Foundations of IP Valuation" and "IP Valuation in Early-Stage Technology" are especially useful in the IP valuation context.
- 2) Osage University Partners (OUP) is a Venture Capital (VC) firm that only invests in start-ups based on university intellectual property. Their website has information related to license agreements and how to build an investment ready company. The University of Toronto has a partnership with OUP and using your UofT e-mail you can sign up for access to their great resources.
  - a. <u>https://oup.vc/insights/.</u>
  - b. https://portal.oup.vc/page/OUP\_Info\_for\_researchers
- 3) Carnegie Melon University (CMU) has Spin-off Guidelines for licensing to software start-ups. https://www.cmu.edu/cttec/forms/spin-off-guidelines-cmu.pdf
- 4) There are subscription databases or publications that offer royalty pricing information. Below are a few.
  - a. <u>https://royaltysource.com/</u>
  - b. https://www.royaltystat.com/publications.cfm
- 5) Professional valuation services
- 6) The Innovations & Partnerships Office is staffed with Commercialization Managers and a legal team conversant with the material mentioned above and much more. Consider offering your intellectual property to the University of Toronto to access their valuable expertise, saving yourself time, effort, and money.