Intellectual Property and Graduate Education

The Faculty of Graduate Studies (FGS) recognizes the mission of the university to pursue, preserve, and disseminate knowledge and seeks to conduct research in a fair, open, and morally responsible manner. The university, and by default FGS, encourages creativity that is strengthened through the formative relationships graduate students have with graduate faculty. FGS seeks to foster the development of knowledge and to facilitate its translation and mobilization towards the betterment of society. For the Faculty, the development of knowledge is a process enacted in relationship: led by students and academically supported by graduate faculty and programs. Knowledge development and intellectual property are related, especially for works done by graduate students for their own degree purposes or when in an employment capacity on campus. These regulations therefore relate to all work done by a graduate student.

Central Tenets

With the university's desire to test the boundaries and structures of knowledge and cultivate the critical intellect of graduate students, these regulations seek to provide guidance to graduate students, faculty and programs. They are steadfastly based on two central tenets: (1) in general, intellectual property rights are granted to the creator; and (2) graduate education is contingent upon the intentional contributions of supervisors and supervisory committees towards the student's intellectual development and research/scholarly/creative outputs.

Overview

Intellectual property rights are granted by society to producers of novel or original work through research, scholarly, and/or creative ventures. While varied standards and practices can and do differ across disciplines, graduate students and faculty are responsible for upholding the general principles of intellectual property, in line with the university's commitment to the creation and dissemination of knowledge. The ways in which these principles are enacted, including exceptions, must also ensure the university fulfills its obligations to associated partners and granting agency requirements.

Positive, respectful, professional, and productive working relationships are paramount to the success of graduate students and their advisors/supervisors. Grounded on collaboration and academic guidance/excellence, the sharing of ideas is central to support an environment in which such a professional/academic working relationship between graduate students and their supervisors/supervisory committee can flourish. This collaboration further aligns with the supervisor's principal task of assisting students to develop both their area of scholarship and their own selves as scholars. Indeed, such contributions are an understood component of the relationships upon which graduate students excel and are established so as to help students realize their research, scholarly, and/or creative milestones and potential – in line with the outlined tenets.

In graduate education, intellectual property is a dual responsibility. Graduate students and their supervisor/supervisory committee members are expected to behave in an ethically appropriate manner beyond their immediate graduate student/supervisory relationship, to encompass intellectual property rights and responsibilities, dissemination of research, scholarly, and/or creative works, and in making decisions on authorship and publication/dissemination of joint works. No individual agreement between a faculty member and a graduate student will impose unreasonable or unusual conditions on a student. To that end, parties are encouraged to agree in writing to matters concerning IP at the onset of the relationship through the Intellectual Property Awareness Checklist, and the Research, Scholarly, and/or Creative Works Agreement Template. Parties are also encouraged to consult Article 23 – Patents and Copyright in the <u>York University Faculty Association (YUFA) Collective Agreement</u>.

IP considerations most relevant to graduate education centre on ownership, authorship, copyright, and patents, derived from Canadian law. The way laws addressing these areas operate in a university setting may differ from the way they operate in industry. Industries protect their intellectual property for motives of profit and competitive advantage. These motives are not entirely absent from the academy, but the university's overriding belief is that the public interest is best served by the widest and quickest possible dissemination of useful ideas and knowledge, consistent with the principles and ethics of good and open access scholarship. Intellectual property at York University should be viewed primarily as a means to these ends.

Principles

Ownership

The Canadian Association for Graduate Studies' (CAGS) <u>A Guide to Intellectual Property for Graduate Students and Postdoctoral Scholars</u> defines Intellectual Property (IP) as "any form of knowledge or expression created partly or wholly with one's intellect and which can be legally protected. It is the product of the act of creation, such as an invention, a piece of writing, a painting, a design, a piece of music, etc. An invention is any product of the human intellect that is unique, novel, and unobvious to a person skilled in the field of invention."

Ownership of intellectual property lies with the creator, unless otherwise stipulated through an appropriate agreement under exceptional circumstances. For graduate students conducting research, scholarly, and/or creative activities as part of degree requirements, ownership lies with the creator, i.e., the student. For graduate students conducting research, scholarly, and/or creative activities as part of an employment relationship with the university, ownership of intellectual property lies with the creator, except for works that are standard administrative or professional assigned tasks created in the course of the employment. In such scenarios, ownership lies with the university.

Authorship

Authorship can be credited only to those who make substantial intellectual contributions, in accordance with the particular discipline, to a piece of work. Accepting the addition of an author who has not made a significant intellectual contribution to the piece of work is not ethical for

authors. Authors accept not only credit but also responsibility for their work and, in particular, for ensuring that the work conforms to appropriate standards of academic conduct.

Generally, the order of authors' names in a work should reflect the substance of their relative contributions to the work, with priority going to those who made the greatest or most significant contribution. Supervisors should discuss the issue of authorship, and what factors may determine the final order of authorship, normally before commencing the work. Where the major substance or data of a coauthored work is based on a portion of a graduate student's work, the student will normally be the first author.

Students are the sole authors of a Major Research Paper (MRP), thesis or dissertation conducted under the supervision of a faculty member. While the level of contributions from a faculty member will differ depending on disciplinary practices, such involvement aligns with the supervisor's principal task – in line with the outlined tenets.

Academic publications must give full and proper acknowledgment to the contribution of other students or faculty, or others to their work, notwithstanding that such contribution may not warrant an attribution of authorship. Such contributions should be substantial, in accordance with the particular discipline, and may include items such as original ideas that led directly to the research work, or requested commentary that resulted in significant changes to the research.

Based on these principles, it would normally imply that:

- The supervisor, or joint authors, should be prepared to offer a rationale in cases where the student is not listed as the first author.
- Where the work has been written in an MRP, thesis, dissertation, or research paper before the research is published, the publication will normally cite the MRP, thesis, dissertation, or research paper on which it is based.
- Providing financial support for a student's MRP, thesis, dissertation, or research paper is not, in itself, sufficient to warrant authorship.
- Supplying minor editorial work for a student's MRP, thesis, dissertation, or research paper is not, in itself, sufficient to warrant co-authorship.
- Co-authors or co-owners of the work need to concur in publishing or presenting the work. The inability of the author(s) to contact another co-author prior to publication or presentation should not prevent work from being publicly disseminated, provided they make reasonable efforts to contact all appropriate contributors to obtain prior agreement.

Copyright

Copyright is a legal framework that protects creators of literary and artistic works by establishing economic and moral rights that enable creators to control the publication and reproduction of their works, receive remuneration, and protect the integrity of their works. Copyright law does not protect ideas, facts, news, information, names, or symbols.

Copyright protection exists as soon as a work is created. In Canada, there is no requirement that the work be registered or that the word "copyright" or the symbol © appear on the work.

Specific to YUFA members, applicable entitlements are outlined in the <u>YUFA Collective</u> <u>Agreement</u>.

Patents

Patent law covers inventions in the physical world for industrial application that are new, useful and non-obvious. The inventor has to apply for a patent, preferably before the invention is published in a research paper or is made publicly available in its physical form; otherwise, the public disclosure will bar a patent being granted in most countries.

Please visit <u>Innovation York – Commercialization</u> for more information.

Additionally, specific to YUFA members, applicable entitlements are outlined in the <u>YUFA</u> Collective Agreement.

Research with Indigenous Peoples, Knowledges, and Cultural Expressions

Graduate students interested in working with Indigenous Peoples and communities must be cognizant of several intellectual property considerations.

Graduate students are responsible for ensuring that appropriate agreements with Indigenous Peoples & communities addressing intellectual property have been established prior to the start of any research. Further, it is the responsibility of the graduate student to ensure that Indigenous participants and communities are made aware of their rights to IP. Data related to First Nations, Inuit, or Métis communities whose traditional and ancestral territories are in Canada must be managed in accordance with data management principles developed and approved by those communities, and on the basis of free, prior and informed consent. This includes, but is not limited to, considerations of Indigenous data sovereignty, as well as data collection, ownership, protection, use, and sharing.

The Faculty of Graduate Studies is committed to upholding the <u>United Nations Declaration on the Rights of Indigenous Peoples</u>. Article 31.1 is instructive in that it states:

Indigenous Peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge and traditional cultural expressions. (United Nations (General Assembly), 2007, art. 31.1) ²

For all research involving Indigenous Peoples and communities, all intellectual property, i.e., cultural knowledge, data and information is deemed to be owned collectively by the Indigenous

community, as a group, and should not be otherwise commercialized or reproduced without their consent. With said communal ownership comes corollary rights to:

- Control how information about them is collected, used, disclosed and destroyed;
- Have access to information and data about themselves and their community regardless of where it is held;
- Manage and make decisions regarding who can access their information; and
- The stewardship of data through possession i.e., the mechanism to assert and protect ownership and control, putting data within their jurisdiction and control.

In respect of Indigenous Peoples' sovereign right to self-determination in general, and regarding all research involving/concerning Indigenous Peoples, engagement with Indigenous Peoples for the purposes of graduate education and inquiry shall be: (i) guided by the requests of the given community and (ii) guided by principles such as those found in guidelines relevant to First Nation, Inuit or Métis Peoples. As an overarching guide, the Care Principles for Indigenous Data Governance are instructive.

- For research with First Nations Peoples, the principles found in OCAP® (Ownership, Control, Access and Possession) should guide the approach to IP. In so doing, it ensures that Indigenous Peoples "make decisions regarding what research will be done, for what purpose information or data will be used, where the information will be physically stored and who will have access." ³
- For research with Métis Peoples, principles of <u>Ethical Métis Research</u> should be followed, with a particular emphasis on reciprocity, community involvement and on the requirement to "determine if there are any existing practices or protocols in a given community and should respect community practices and protocols (if they exist). These practices and protocols can be very different from community to community and even from individual to individual along a wide-ranging contemporary to traditional continuum." (Métis Centre at NAHO, pp. 3) ⁴
- For research with Inuit Peoples, the principles found in the National Inuit Strategy on Research are particularly instructive in their direction to ensure Inuit access, ownership, and control over data and information gathered on Inuit population, wildlife and environment. Ensuring ownership of Inuit data by Inuit-appointed entities, utilization of Inuktut in data platforms and information, and striving for Inuit-led data are three key objectives aiming to maximize benefits and minimize harms (ITK, 2018, pp. 34) ⁵

The Indigenous Research Ethics Board at York University shall govern all research done involving Indigenous Peoples and knowledges, cultural heritage and traditional cultural expressions. Graduate students must avail themselves of the procedures governing <u>research with Indigenous Peoples</u>, including working in good relations with Indigenous communities, ensuring and establishing a community engagement plan and securing initial and ongoing consent related to all matters concerning intellectual property, ownership, control, access and possession.

With the increase in conversations regarding open access and data, it is important for graduate students to understand that a greater emphasis on data sharing may create tensions for Indigenous People's right to greater control over the application and use of Indigenous data as it relates to

their knowledge, cultural expressions, and lands. With that, the CARE Principles for Indigenous Data Governance (2018) seek to ensure Indigenous People's rights "to create value from Indigenous data in ways that are grounded in Indigenous worldviews" and that "advance Indigenous innovation and self-determination." (GIDA, 2018) ⁶

Given these principles, it is possible that at the end of a graduate student's project a community may withdraw their consent to use and/or publish their data, potentially impacting the use of such data and/or creative outputs in a student's thesis, dissertation or other works. Initial and ongoing communication and working in good relations with Indigenous communities is therefore a crucial necessity.

Dispute Resolution

Disputes may arise even among individuals of good will, for example, out of conflicting understandings of fact, or interpretations of the law, relevant university regulations or collective agreements, of which may include the YUFA Collective Agreement, or individual agreements. The primary role of the Faculty of Graduate Studies is to provide general directives and principles governing the graduate student/supervisory relationship, to educate and inform parties about their rights and appropriate behaviour, and to assist parties in resolving disputes. Any disputes that may implicate YUFA members will be subject to appropriate procedures outlined in the YUFA Collective Agreement.

The following steps should be taken when a dispute arises that cannot be resolved through informal discussions:

- 1. Parties should initiate a complaint in writing to the Graduate Program Director (GPD) outlining the issue(s). In most cases, the GPD will arrange a meeting with relevant individuals to discuss the substance of the dispute, the possibility of negotiating an agreement at the program level, and to determine the necessity of approaching the Faculty of Graduate Studies for assistance.
- 2. During this process it must be acknowledged that students and faculty generally stand in a relation of unequal power, and thus ensure that any agreement reached is consistent with the general principles of Faculty regulations on intellectual property and graduate education.
- 3. For complex cases, or when discussion at the program level could not resolve the issue(s) amicably, the GPD will contact the Dean, Faculty of Graduate Studies and the appropriate Associate Dean Graduate in the anchor Faculty.
- 4. The Dean, in consultation with the GPD and Associate Dean Graduate, may attempt to find a mutually acceptable solution with the parties. Depending on the nature of the dispute, support from relevant offices at the university may be sought to inform discussions.
- 5. If an impasse continues, the Dean will arrange for adjudication, forming a panel of necessary experts in the subject matter at the university.
- 6. The Dean will render a decision based on the proceedings and assessments of the panel.

Frequently Asked Questions

<u>Frequently Asked Questions</u> (FAQ) have been developed to assist community members navigating individual situations or complexities concerning intellectual property and graduate education.

- ¹ Canadian Association for Graduate Studies. (2005). A Guide to Intellectual Property for Graduate Students and Postdoctoral Scholars. Ottawa, ON.
- ² United Nations (General Assembly). (2007). Declaration on the Rights of Indigenous People.
- ³ First Nations Information Governance Centre. (n.d.). The First Nations Principles of OCAP®. https://fnigc.ca/ocap-training/.
- ⁴ Métis Centre @ NAHO. (2018). Principles of Ethical Métis Research. https://achh.ca/wp-content/uploads/2018/07/Guide Ethics NAHOMetisCentre.pdf.
- ⁵ Inuit Tapiriit Kanatami. (2018). National Inuit Strategy on Research. https://www.itk.ca/wp-content/uploads/2018/04/ITK NISR-Report English low res.pdf.
- ⁶ Global Indigenous Data Alliance. (2018). The Care Principles for Indigenous Data Governance. https://www.gida-global.org/care.

Resources

Intellectual Property Awareness Checklist

Commercialize Intellectual Property – Innovation York

York University Faculty Association (YUFA) Collective Agreement