

University of
Lethbridge



Intellectual Property Guidelines for
Graduate Students and Supervisors

Preface

The intent of this document is to provide a framework to graduate students and their supervisors on addressing the varied issues associated with intellectual property (IP) that arise in the graduate education context at the University of Lethbridge. Appended to this document are two additional reference tools; the first is the Intellectual Property Awareness Form and the second is the Graduate Research Confidentiality Agreement. Both are intended to aid and facilitate IP-related discussion in the context of graduate studies at the University of Lethbridge. A primary goal of graduate education is the creation of new knowledge. When that occurs, questions can arise regarding its ownership and use. Experience has shown that early discussion of matters relating to intellectual property can help graduate students and supervisors establish comfortable collaborations and minimize conflict.

These guidelines provide some fundamental definitions, identify current field-of-study customs and conventions, and provide links to sources of further, more detailed, information. The guidelines are not intended to replace independent legal advice, nor are they intended to restrict the openness that normally characterizes intellectual scholarship within the University. It is hoped that these guidelines provide both graduate students and supervisors with helpful information and suggestions for approaches to a topic that can seem daunting, by virtue of its complexity. By incorporating this information into our graduate programs, we hope to promote collegiality within our academic community and help to prepare our graduates for the societal roles they aspire to undertake.

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Introduction

This guidance document is intended to introduce graduate students and their supervisors (both thesis supervisors and graduate coordinators, as defined by the [GSA Collective Agreement](#), for any graduate research assistantship) to intellectual property issues that may arise within the context of graduate education at the University of Lethbridge.

Every effort is made to provide graduate students with the appropriate learning environment and skills required for them to succeed as an independent scholar. For most graduate students, the relationship with their supervisor is a productive collaborative one. It is not uncommon, however, for questions to arise about the rights or obligations that graduate students have with the University, their supervisor and other colleagues, or about intellectual property (IP) when research is supported by an external funding agency. At the outset, it is important to understand that considerable variation in practice exists among graduate programs within the University. For example, in many humanities and social science departments, graduate students may pursue their thesis work largely independently. In contrast, in many physical and life science departments, graduate students often work as part of a research team in a laboratory, which also includes post-doctoral fellows, research assistants and associates, and/or research technicians. A further complexity is that graduate students may by some definitions be considered employees of the University, which may include the work or research undertaken in that capacity.

This document is intended to be used as a general guideline for navigating issues of intellectual property in these types of situations. Graduate students at the University of Lethbridge should familiarize themselves at the start of their research program and during their graduate education with these general guidelines. All graduate students and supervisors are also encouraged to complete the Intellectual Property Awareness form at the start of the student's program.

1. What is Intellectual Property?

Intellectual Property (“IP”) is any form of knowledge, expression, or scientific or artistic endeavor created with one’s intellect (such as inventions; artistic, literary, dramatic and musical works; industrial designs, and computer software) that can be protected under law.

There are various form of legal protection for IP; the two main types of statutory protection that are most relevant to the University setting are patents and copyright.

Patents protect inventions. Inventions are developments and discoveries that have utility and are novel. Therefore, patents can only be obtained for inventions that are both useful and new.

In order for an invention to be considered “new” it cannot have been disclosed or displayed publicly prior to the filing of a patent application. This may include presenting the invention or subject matter of the invention at a conference, publishing an article in a journal, or even discussing the concept with individuals not covered by a Confidentiality Agreement. If any of these disclosures are made prior to the filing of a patent application, then the invention may not qualify for patent protection.

A patent grants to the patent owner the exclusive right to make, use or sell the invention for a limited period of time. In Canada, patent protection is in effect for a maximum of 20 years from the date the patent is granted. After 20 years the patent expires and anyone is able to use the invention without the patent owner's permission.

Some examples of patentable inventions created within the University setting include new chemical compounds, new devices, innovative medical products, and disease resistant agricultural products.

Copyright protects the expression of ideas, rather than the ideas themselves. Copyright covers original creations such as manuscripts, theses, conference papers, presentations, books, computer programs, films, musical compositions, paintings, and photographs.

Copyright law is intended to ensure that copyright holders have control over the use of their works. For those who intend to use the work, the law specifies the conditions and terms under which the work may be legally copied, in whole or in part, or used for instruction, research, translation, broadcast, performance, adaptation or display.

Unlike patent rights, which only arise after a patent application is granted by the Canadian Intellectual Property Office (CIPO), copyright arises automatically when the work is created. For example, upon completion of the student's thesis, the thesis is considered to be copyright protected and the student becomes the copyright holder. The thesis is copyright protected even if the copyright symbol © does not appear on the thesis, and even if the student does not register with the CIPO.

In Canada, the standard term of copyright protection is for the life of the author plus 50 years after his/her death.

According to Copyright law in Canada, the author/creator of a work is the first owner of the copyright. This is, however, not always the case. For instance, unless there is an express agreement to the contrary, works created in the course of employment belong to and are owned by the employer. Copyright can also be held jointly if there are two or more authors/creators. As well, there can be two or more copyrights held over different parts of the same collective work. For instance, a song may have a copyright holder over the lyrics of that song and a separate copyright holder over the musical composition of the song; neither has a legal ownership interest in the others' creation.

Moral rights attach to any copyrighted work. Moral rights exist separate and apart from copyright ownership, and remain with the author/creator even if the copyright itself has been transferred or sold to someone else. "Moral rights" serve to ensure that no one, including the person who owns the copyright, distorts or modifies the work in a way that is prejudicial to the reputation of the author/creator. Moral rights cannot be sold or transferred, but they can be waived.

Data, on its own, is not IP; it is neither a patentable invention nor an original work capable of copyright protection.

For more information on patents and copyright, and other forms of legal protection for IP, visit the CIPO website at <http://strategis.ic.gc.ca/cipo>.

2. How are Intellectual Property rights determined?

The starting premise is that all IP created by a student is owned by that student. In a university setting, examples of IP that may be created by a graduate student include:

- ideas submitted in course work and lecture materials
- handouts
- printed works, such as books and articles
- artistic works, such as paintings, sculptures and musical compositions
- computer programs
- recorded works, such as videos and audio recordings
- the student's thesis

From there, it is important to be familiar with the more common situations where IP may be impacted. These include where the student is also an employee of the University, the work created is supported by external funding, and where the work is created with the supervisor or as part of a research group (either collaboratively or jointly). Rights and ownership of IP created by a graduate student may also be impacted by the customs and conventions of the supervisor's field of study or of the particular discipline. For instance, the field of study often determines how a student will interact with her/his supervisor and, in turn, the student's role in the creation of IP. In the humanities, social sciences, and fine arts it is often the case that students will receive guidance from their supervisor but generate their own ideas and perform their own research. By contrast, in the physical and life sciences students often join an existing research group and collaborate with their supervisor and others in generating ideas and performing research. These differing student roles lead to different results in the ownership of, and right to, the resulting IP.

These situations are discussed in more detail below. However, to ensure clarity and mutual understanding, graduate students should discuss the potential outcomes of the research (including IP ownership and rights resulting from that research) with their supervisor in advance.

Determining IP when a student is also an employee

In addition to the duties related to a graduate student's program of study, graduate students may also be employed by the University of Lethbridge. At law, the general principle is that IP created in the course of employment is owned by the employer, not the employee. As such, establishing whether the student is also an employee, and the role that employment may have in the creation of IP, is key in determining ownership. It is also important to differentiate work being completed by the student in her/his course of study from work being created in her/his role as an employee.

For example, if the student is employed by the University as a Graduate Assistant (Teaching) and in that role the student creates a presentation consisting of PowerPoint slides, then it is likely that the University (as the employer) will be the owner of that IP. If that same PowerPoint presentation was created by the student as a part of her/his Masters' program, then the IP likely belongs to the student.

Also, while the law provides the general principle of ownership for employment-created IP, this can be modified by University policy or overridden by an agreement that provides otherwise.

Determining IP when a student's research is supported by external funding

Graduate students may be awarded external funding support (often in the form of an internship, scholarship or fellowship), or otherwise be involved in research that is support by external funding. Such funded research, regardless of the form it comes in, may carry stipulations or conditions that impact IP. It is these stipulations and conditions that generally guide the determination of IP rights and ownership in funded research.

For instance, the federal granting councils - Natural Sciences and Engineering Research Council of Canada (NSERC), Canadian Institutes of Health Research (CIHR), or Social Sciences and Humanities Research Council of Canada (SSHRC) do not attach any IP claims to the research they fund. Other funders, such as the MITACS Accelerate Program and industry sponsors / private corporations, may impose contractual limitations on IP (such as ownership rights, licensing rights or a share of the royalties) and often seek to impose restrictions on publications of the research results. Not-for-profit organizations may not seek to attach ownership claims to IP created, but may seek rights to licensing and/or royalties.

It is the student's responsibility to ensure she/he is aware of all IP-related conditions and stipulations of any funded research. At the outset, students are encouraged to determine which, if any, conditions or stipulations apply to the research and to discuss with their supervisor any claims the funder has to IP, particularly in the case of multiple funders.

Determining IP when work is created with the supervisor or as part of a research group

The determination of rights when the student creates IP with her/his supervisor has many components. It may be governed by IP law, applicable University policy, custom of the particular discipline, funding stipulations and conditions, and/or written agreements between the student and the supervisor.

In the case of inventions, the determination of who is an 'inventor' is governed by the *Patent Act* and depends on whether the contribution is substantive. While not exhaustive, the following factors may be considered in identifying whether the contribution is substantive:

- whether the student merely took direction from the supervisor (which does not constitute substantial contribution);
- whether the student provided innovation and intellectual input (which may constitute substantial contribution);
- whether the student provided the concept and design, conducted the experiments her/himself, and analyzed and interpreted the data (which may, when combined, constitute substantial contribution).

In the case of original creations, the determination of who is an 'author' is governed by the *Copyright Act* and custom of that discipline. If the research is funded, then the stipulations and conditions of the funding agreement will most likely determine IP rights and ownership.

In all cases, the final determination will be fact specific and may be further impacted by University policy and any written agreements between the student and the supervisor.

Apart from the determination of ownership is the awareness of use. If the work was done by the student as part of an ongoing research project, it should be expected that the results can be used (with appropriate acknowledgment) by those involved in the project for advancing research activities, such as in publications, presentations, and grant applications. It should also be expected that the student can also use the IP, particularly within the student's own thesis.

Ordinarily, a student will have no claim to the supervisor's work unless the student is a 'joint author' or 'joint inventor'.

Determining 'Joint Authorship' or 'Joint Inventorship'

Joint authorship is defined in the *Copyright Act* and arises when an original creation is "produced by the collaboration of two or more authors in which the contribution of one author is not distinct from the contribution of the other author or authors". Ordinarily, only contributions to the *expression of ideas* qualify; contributions to *ideas* themselves do not qualify for joint authorship. However, the custom in the particular discipline may impact this. For instance, in the physical and life sciences, a student's contribution to the original ideas in a project may be afforded joint authorship in publications that report on the results of the research, provided that the student's contribution is substantive.

If each author's contribution is distinct from one another, then the creation is a 'collective work'. Each author in a collective work retains copyright over her/his distinct contribution. An encyclopedia is an example of a collective work; each contributor has copyright over his/her individual work, but no one contributor has copyright over the entire encyclopedia.

Under the *Patent Act*, an inventor is someone who makes an original and substantive contribution to an invention. Where two or more people make an original and substantive contribution to an invention, they are **joint inventors**. The determination of whether a student has made an original and substantive contribution to an invention is, in all cases, fact-specific. When a patent application is made in respect of an invention, all joint inventors must be named.

3. What steps should be taken if a dispute or concern arises?

If a dispute or concern arises with respect to IP rights, it is important for the student and supervisor to attempt to amicably resolve any differences themselves. The underlying causes of disputes can be complex, but resolution can usually be obtained through discussion and clarification of concerns. If differences persist, the student can consult with the Associate Dean of the student's Faculty/Program of Study. The Associate Dean of that Faculty/Program may also consult with the Office of the Dean of the School of Graduate Studies and the Office of the Vice-President, Research.

Appendices

1. Intellectual Property Awareness Form – School of Graduate Studies
2. Confidentiality and Non-Disclosure Agreement for University of Lethbridge Graduate Students

References & Acknowledgements

1. *Patent Act* of Canada
2. *Copyright Act* of Canada
3. University of Toronto graduate student guidelines
4. University of Manitoba graduate student guidelines
5. University of Alberta graduate student guidelines
6. Canadian Association for Graduate Studies guidelines
7. http://www.wipo.int/edocs/pubdocs/en/intproperty/450/wipo_pub_450.pdf
8. http://www.nserc-crsng.gc.ca/Professors-Professeurs/FinancialAdminGuide-GuideAdminFinancier/Responsibilities-Responsabilites_eng.asp#intellectual_property

This is not a legal document. It is in no way intended to replace consultation with the University's School of Graduate Studies or Office of Research and Innovation Services. These guidelines do not replace the need for or provide any independent legal advice on the issues covered in these guidelines. Its purpose is to guide the discussion between students and faculty and identify potential issues that may arise in the creation of intellectual property in the University setting.