

# Intellectual Property of Graduate Students: Guidelines and Best Practices

# School of Graduate Studies

# 1. Purpose

The purpose of this document is to provide direction to the School of Graduate Studies (School) in dealing with intellectual property (IP) issues in the course of facilitating graduate studies at Memorial. This document sets out the assumptions that will guide the School in its treatment of these issues and replaces the <u>School of Graduate Studies Policy on Intellectual Property</u> (2007).

## 2. Scope

While the document will be of most use when dealing with issues that arise in the course of collaborative and contract research, its principles are of general application. These guidelines should be read in conjunction with the University Policy on Intellectual Property (1), and other relevant documents including the University Policy on Conflict of Interest (2), and the collective agreement between the University and Teaching Assistants (3).

## 3. Administration

It is the responsibility of the School of Graduate Studies to implement and administer these guidelines on the authority of its Academic Council.

## 4. Definitions

**4.1 Intellectual Property** may be defined as "any form of knowledge or expression created partly or wholly with one's intellect and which can be legally protected" (4). Copyrights and patents are the two main forms of IP protection that apply to the research pursuits of graduate students. Copyright, conferred upon the act or creation, protects the expression or embodiment of ideas, while patents, conferred upon application, protect inventions.

Intellectual Property includes:

- literary, artistic and scientific works, including computer software,
- performances of performing artists, phonograms, and broadcasts,
- inventions in all fields of human endeavor,
- scientific discoveries,
- industrial designs,
- trademarks, service marks, and commercial names and designations,
- protection against unfair competition,
- and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

**4.2 Data** is defined here as "the factual records (eg. microarray, numerical and textual records, images and sounds, etc.) used as primary sources for research, and that are commonly accepted in

the research community as necessary to validate research findings." (5)

## 5. Principles

- 5.1 Respect for the intellectual work of others is fundamental to graduate education. At Memorial, the guidelines and practices of the School involving IP support the educational process.
- 5.2 Every graduate student has a right to create and use IP in accordance with accepted academic practice and Canadian IP laws. This includes the ability to publish out of research work undertaken as part of a graduate program as well as the ability to submit results promptly in partial fulfillment of the requirements for the graduate degree.
- 5.3 When undertaking collaborative research, participating individuals will not use IP considerations to maximize individual returns at the expense of the project and the project, or other participants, will not attempt to maximize returns to the detriment of the process of graduate education.
- 5.4 It is the responsibility of the PI / supervisor to be familiar with the IP policies and practices of the University and granting agencies, the terms of pertinent agreements and contracts, and the conventions of the discipline which may impact the IP environment of a student's program; to inform students of any restrictions and responsibilities; and to ensure that research is conducted in a manner consistent with such expectations.
- 5.5 It is the responsibility of the student to be aware of IP rights, restrictions and responsibilities in general and in any research project undertaken; to be aware that IP rights are often shared in collaborative research; and that his or her IP rights may be determined by the rights of law, policies of the University and funding agencies, and conventions of the discipline.
- 5.6 It is the responsibility of the School to provide oversight in the form of this document to help guide members of the University community regarding such issues, to act in an advisory capacity for graduate students on IP issues, and to mediate disputes arising from IP Issues.
- 5.7 The development, handling and dissemination of IP vary from discipline to discipline and it is the responsibility of the supervisor to discuss these matters with their graduate students. To assist in this task, in conjunction with the School of Graduate Studies, academic units offering graduate programs must present an educational and information session on IP to graduate students and supervisors as part of their orientation. Academic units are responsible for ensuring copies of this document are provided to all faculty and graduate students.

## 6. Particulars

## 6.1 Ownership of Intellectual Property

Ownership of IP developed by students in the course of their academic program at Memorial is vested as follows:

A) IP developed by students in their course-work, thesis-related research and teaching assistantships remains the property of the students unless, in the course of those projects, the students conceive or develop potentially patentable inventions, discoveries or creations in which

case the students shall share that IP in accordance with the University Policy on Intellectual Property.

B) Ownership of IP developed by students in the course of employment as a graduate assistant who is undertaking research work (research assistantship) remains the property of the employer unless in the course of the employment the students conceive or develop potentially patentable inventions, discoveries or creations in which case the student shall share that IP with the University in accordance with the University Policy on Intellectual Property.

C) Ownership of IP developed while a student is employed on a work term or internship is subject to the terms of contract with the employer.

D) Students who participate in research subject to a contract between the University and an outside third party are subject to the terms and conditions of that contract. Third party contracts may include restrictions pertaining to confidentiality, publication, licensing and ownership of IP.

Notwithstanding restrictions placed on the IP associated with a graduate student's thesis related research due to a third party contract, academic progression will not be delayed. In particular

- 1. there can be no delay for the defence of a student's thesis due to IP considerations; and
- 2. in order to secure IP protection a maximum delay of six months is permitted when submitting papers for publication.

# 6.2 Copyright

- 6.2.1 Copyright gives the creator the right to control certain uses of his/her work in both economic and moral terms in the areas of reproduction and public performance. Economic rights allow creators to draw income from these uses of their works. Copyright also provides the moral right to claim the authorship of a work and to preserve its integrity.
- 6.2.2 Graduate students have ownership of and hold copyright to completed theses, project reports, or any other similar work produced as students. They are entitled to any resulting royalties.

## 6.3 Authorship

- 6.3.1 Neither accepting the addition of an author who has not made a significant intellectual contribution to the piece of work (Honorary author), nor omitting an author who has made a significant intellectual contribution to the work (Ghost author), is ethical.
- 6.3.2 Conventions relating to ordering of authors on publications arising from a graduate student thesis and other collaborative projects vary from discipline to discipline. Each research group must publish its conventions.

#### 6.4 Patents and commercial exploitation

The rights to patent or commercially exploit the results of the research may need to be shared between members of the research group and/or with the University. The regime for such sharing

is outside the scope of this document and is the responsibility of the Genesis Group.

6.5 Right for use in research and teaching

Memorial University and its researchers retain the right to use the knowledge or IP generated for non-commercial purposes in future research and teaching.

6.6 Embargo on thesis disclosure

A request to the Dean for an embargo on the deposition of the thesis in the University library repository and subsequent disclosure may be made by a student. The request for an embargo must be agreed upon by the supervisory committee and Head of the academic unit, and must be submitted to the Dean of the School of Graduate Studies accompanied by a detailed rationale. An embargo may be granted for up to one year in the first instance. In exceptional cases, the Dean may grant an embargo of up to three years.

## 7. Best Practices

- 7.1 Authorship
  - 7.1.1 It is the view of the School of Graduate Studies that where the major intellectual effort behind a co-authored publication is the graduate student, normally the student will be the primary author.
  - 7.1.2 As a graduate student's research may be guided by a team or committee, substantial intellectual contributors to the project are typically given the right of joint authorship of publications that report on the results of the research. A student considering publication of his or her own paper also has the responsibility to consider the IP and co- authorship rights of others who may have been involved in the research. Co-authorship should be recognized only where the primary author has determined that a significant intellectual contribution has been made.
  - 7.1.3 Authors should attempt to publish their work in a timely fashion. The right to coauthorship may be lost if a researcher leaves the project or is delinquent in publication; however, there must be reasonable, documented effort to contact the researcher under such circumstances. Acknowledgement may be deemed appropriate where delinquency exists, and co-authorship rights cannot be assumed.
- 7.2 Data
  - 7.2.1 The recommended best practice determined by the School is to recognize that ownership of original research data is held jointly by all collaborators, and to designate one individual as the custodial agent of the materials for all contributors. Joint ownership would of course include graduate students, and graduate students could be custodial agents. One of two alternatives should be followed when research is conducted by collaborators (including graduate students):
  - 7.2.1.1 If the research is funded by an agency that requires maintenance of original material by

the grant-holder (principal investigator), then that person would become the custodial agent of the data for all collaborators and would provide free access to the materials as needed by the project collaborators in order for them to satisfy their own statutory and collegial responsibilities. Where possible, the custodial agent would provide copies of the data to collaborators on request for their own archival and scholarly purposes.

- 7.2.1.2 If the research is unfunded or there is no funding agency regulation regarding retention of data, the custodial agent for the original data would be the person who, by agreement of all the majority of collaborators, receives primary credit for the particular research or scholarly contribution, and who therefore is primarily responsible for the integrity of the research should there be an allegation of fraud or misconduct.
- 7.2.1.3 The above notwithstanding, in research requiring the approval of the Health Research Ethics Authority, provisions of that agency will apply.
- 7.3 Changes in the IP environment.
  - 7.3.1 It is possible that, in the course of the research, unanticipated opportunities to patent will arise that could delay the completion of the program of the graduate student. In such cases, it is the responsibility of the supervisor to ensure that the student is offered the choice of:
  - 7.3.1.1 Participating in the patent process in accordance with the contribution to the IP in question, or
  - 7.3.1.2 Pursuing research sufficiently tangential to the patent application that the program completion will not be unduly affected.
  - 7.3.2 It is possible that, in the course of the program, a student will be offered an opportunity to undertake contract research. Signing a research contract may nullify the provisions of this document.

#### 8. Dispute Resolution

If a dispute or concern arises with respect to IP and/or co-authorship rights, between a graduate student and other members of a research team, the student and the supervisor are responsible for resolving the matter in the first instance. Failing that, the Dean of the School of Graduate Studies is responsible for resolving the issue in accordance with these guidelines.

#### 9. Appeals

If the resolution proposed by the Dean is not acceptable, it may be appealed to a committee consisting of the Provost and Vice President (Academic), the Vice President (Research), and the Vice President Academic of the Graduate Students' Union. Subsequent appeals are, in order, to the President and the Board of Regents.

#### 10. References

(1) Memorial University Policy on Intellectual Property: <u>http://www.mun.ca/policy/site/policy.php?id=143</u>

(2) Memorial University Policy on Conflict of Interest: <u>http://www.mun.ca/policy/site/policy.php?id=221</u>

(3) Collective Agreement between Memorial University of Newfoundland and Teaching Assistants' Union of Memorial University of Newfoundland: <u>http://www.mun.ca/facultyrelations/TAUMUN\_CA\_FINAL.pdf</u>

(4) Canadian Association for Graduate Studies 2007 *A Guide to Intellectual Property for Graduate Students and Postdoctoral Fellows* 

(<u>http://www.cags.ca/documents/publications/working/Guide\_Intellectual\_Property.pdf</u>; accessed Nov 3 2014)

(5) Canadian Association of Research Libraries (CARL) Data Management Subcommittee 2009 *Research Data: Unseen Opportunities* <u>http://carl-abrc.ca/uploads/pdfs/data\_mgt\_toolkit.pdf;</u> accessed Nov 3 2014)

(6) Natural Sciences and Engineering Research Council of Canada (NSERC) *General Intellectual Property Considerations and Guidelines for Collaboration* (<u>http://www.nserc-crsng.gc.ca/NSERC-</u> <u>CRSNG/Policies-Politiques/ip\_Guidelines-pi\_Directrices\_eng.asp;</u> accessed November 3 2014)

(Endorsed by Academic Council of the School of Graduate Studies, April 18, 2016)