

Intellectual Property Guidelines at Queen's University

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Intellectual Property Guidelines at Queen's University

Dear Graduate Students,

These guidelines are intended to support your study and research at Queen's and to provide you with a general overview of what intellectual property is, what you should know and how to find out more.

In this document, prepared by the School of Graduate Studies in partnership with the Office of Research Services and PARTEQ Innovations, you will find practical guidance about issues associated with intellectual property (IP). I hope that these guidelines will be of use to the broader Queen's community on matters that arise as part of graduate research involving graduate students and graduate faculty. It is important that you discuss IP with your faculty supervisor to ensure that you understand what, if any, specific considerations might be required. An awareness of IP issues and a plan for protecting IP (e.g. patents, commercialization) is best addressed early in the research process to avoid problems that otherwise could arise.

Note that what follows are *guidelines*, and do not supersede Senate Policies or provisions in Collective Agreements between the Queen's University and Employee groups.

I wish you success with your creative and intellectual academic pursuits!

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Vice-Provost and Dean, School of Graduate Studies

The School of Graduate Studies at Queen's thanks the University of Toronto for permission to use the basic structure and elements of content from their publication 'Intellectual Property Guidelines for Graduate Students and Supervisors at the University of Toronto'

INTRODUCTION

Universities as institutions of advanced education and research are key sources of knowledge creation promoting innovation, creativity and intellectual capital. A prime commitment of the University is to foster intellectual inquiry, which is enhanced through the existence of policies that deal with issues of ownership and the transfer of results of such inquiry to society. The products of such inquiry are known collectively as intellectual property. Whenever intellectual property is created, questions of ownership may arise in several contexts such as patent application, publication of findings, authorship of creative works, and commercialization. Recognizing that there are diverse circumstances across academic and research units, there is no single set of rules that can be applied to all situations. However, conflict may be avoided if there is appropriate recognition of the contribution of each individual and clear expectations concerning ownership of intellectual property at the outset. Discussion about intellectual property and dissemination should occur early in the research process and it should be open and free from intimidation, harassment and discrimination and ever mindful of situations in which there is a differential power status.

The questions and answers that follow provide information relevant to members of the research community as they pursue creative and scholarly activities.

1. WHAT IS INTELLECTUAL PROPERTY?

Intellectual property is any form of knowledge or expression created with one's intellect. Specifically, this includes inventions, publications, computer software, works of art, industrial and artistic designs, as well as other creations that can be protected under copyright, patent, or trademark laws. The two main types of intellectual property protection in the University environment are copyright and patents.

Copyright protects original artistic, literary, musical, or dramatic works and written materials and software by preventing anyone from copying, publishing or broadcasting a work without the copyright owner's permission. Copyright exists as soon as the work is created and is often signaled by marking the work © (author's name, year). Note that copyright does not protect ideas, but rather the expression of ideas.

1a. Who owns the copyright to my thesis? Can it be published in part or whole by a journal or publishing house?

In the case of a graduate student's thesis, the student owns copyright to all original work. Third party copyrighted material that is included in a thesis must meet the requirements of the Copyright Act. Students must ensure that they appropriately attribute all third party copyrighted material included in their thesis (e.g. figures and tables) and acquire permission from the publisher. For more information related to copyright and thesis creation, see Copyright and your Thesis (http://library.queensu.ca/copyright/thesis).

If the thesis includes individual chapters or sections that have been published or submitted for publication with co-authors (e.g. manuscript style thesis), a *Permission of Co-Authors Form* that lists all co-authors with their signatures must be completed in order to include the work in the thesis (http://www.queensu.ca/sgs/forstudents/completion/finalsubmission.html). Chapters or

sections that may have already been published prior to final thesis submission are normally allowed to be included in manuscript style theses without obtaining permission. For more information related to copyright and thesis creation, see the getting permission section of the Copyright and your Thesis (http://library.queensu.ca/copyright/thesis#gettingpermission) guide.

In many cases portions of the thesis or the thesis in its entirety may be published after the degree requirements have been met and copyright for the publication is generally transferred to the journal or publishing house at that time.

1b. I have been asked to sign a Library and Archives Canada non-exclusive license agreement. What does this mean?

The license gives the Library and Archives Canada your permission to make your thesis available to interested parties upon request (royalty free, not for profit). You retain copyright ownership of your thesis. Should you assign or license your copyright to someone else, you must inform them of the non-exclusive license agreement with the Library and Archives Canada.

Patents protect new inventions, and are granted, upon application, by the national government in exchange for a complete disclosure of an invention. Patentable subject matter includes devices, processes, new uses of previously known things, and compositions of matter, including chemical compounds and new life forms (e.g. transgenic animals). In most countries, an invention is considered new if it has not been disclosed in an article, presentation, seminar, blog or any other public forum <u>prior to filing</u> a patent application. However, in Canada and the United States there is a one year grace period for filing a patent application if such public disclosure originated with the inventor. A patent prevents anyone from using the invention without the patent owner's permission.

1c. My work is covered by a patent application. Can I still publish it?

Seeking patent protection for your intellectual property need not prevent you from publishing your research results, providing that there are no existing agreements to restrict dissemination for a period of time. However, publicly disclosing or sharing your findings without initiating patent protection can prevent you from filing for and acquiring a patent later on. If you are planning to present your research findings (including in a seminar, class presentation or thesis defense), and/or submit an abstract, poster or paper, you should seek advice from your supervisor and those knowledgeable about patents and IP (e.g. PARTEQ) beforehand. Once a patent application has been filed, your work described in the application may be presented without loss of rights.

1d. My thesis involves a new invention but the patent application has not yet been submitted or approved. How can I complete the thesis examination and submission without compromising the patent application?

Ideally, patent protection should be initiated before the thesis examination. If this is not possible, there are several things that should be done to ensure confidentiality and non-disclosure of proprietary information. The thesis examination process itself is considered confidential when the student requests a 'closed' examination (i.e. only the examination committee and the student are present). If a confidentiality agreement is signed by all present prior to the start of the examination, this is sufficient proof for a patent Examiner that the invention was not publically disclosed. In some instances, a third party (e.g. industrial partner) may request signing of a

confidentiality agreement prior to the examination. If the student desires that his/her thesis be kept confidential for some period of time, then upon submission of the final approved thesis in completion of degree requirements, the student must request that the thesis be restricted. This prevents access to the thesis for a five (5) year period, but such embargo may be lifted by the student at any time during the five years (e.g., after the patent application has been filed) upon written request. Note that this restriction does NOT embargo the "metadata" – that is, the thesis title and the abstract. Even if the thesis is restricted, the title and abstract are ordinarily still published on line. In some cases, it may also be necessary or desirable to restrict the metadata. In such cases, a written request including the reason(s) for restricting the metadata must be made to the School of Graduate Studies PRIOR to uploading the completed thesis to QSpace. After a period of five (5) years (or earlier upon written request), the thesis is automatically released and is available electronically.

2. WHAT ARE QUEEN'S UNIVERSITY'S POLICIES REGARDING OWNERSHIP OF INTELLECTUAL PROPERTY?

The University's policy on intellectual property states that the ownership of all types of intellectual property and for all members of the University should rest with the creators, unless other arrangements have been agreed to in advance for certain categories of employment, for certain types of funding, or by individual contract. Two possible exceptions to this principle of "creator ownership" should be recognized: (1) work for hire and (2) work under a contract between the University and an outside sponsor. In the first instance, intellectual property should be owned by the University if it is created by a faculty member, staff member or student under a contract of employment or service that assigns responsibility specifically for the creation of such intellectual property. In the second instance, intellectual property that is created under a contract between the University and an outside sponsor should be owned by the University. The sponsor may claim ownership only if the sponsor insists on such an arrangement as a condition for funding, and this is acceptable under prevailing University guidelines for contract research. In order to assess your intellectual property rights it is important to understand the nature of your responsibilities and any particular provisions regarding intellectual property rights, publication or confidential information at the outset.

The policy on intellectual property should be viewed in the context of Collective Agreements between Queen's University and employee groups. To access Collective Agreements between Queen's University and particular employee groups, please click on the following link: http://www.queensu.ca/humanresources/employees/unions.html

The Senate report on Intellectual Property can be found at: http://www.queensu.ca/secretariat/policies/senateandtrustees/intellectualproperty.html

Students should be aware that the university retains a royalty-free irrevocable right to use for educational and research purposes any intellectual property created by a student in relation to his/her research activities.

2a. Who can I talk to at Queen's about protecting my intellectual property?

If you are a student or staff member you should speak with your supervisor first. All members of the Queen's community (faculty, staff, and students) can consult with the staff of PARTEQ Innovations, a not-for-profit office dedicated to protecting and commercializing research discoveries (www.parteqinnovations.com). For questions about copyright, publishing agreements, Open Access and matters to consider if approached by a publishing company interested in your thesis, the Copyright Advisory Office can offer assistance and provide expertise (http://library.queensu.ca/copyright).

3. I AM EMPLOYED AS A RESEARCH ASSISTANT. WHO OWNS THE INTELLECTUAL PROPERTY THAT I CREATE?

The recommendation of the Senate Ad Hoc Committee on Intellectual Property that ownership of all types of intellectual property should rest with the creators unless other arrangements have been agreed upon in advance applies to all members of the University. Other arrangements may be appropriate for certain categories of employment, certain types of funding, or by individual contract. For example, if the intellectual property is created by a faculty member, staff member or student under a contract of employment or service that assigns responsibility specifically for the creation of such intellectual property then ownership lies with the University. If intellectual property is created under contract between the University and an outside sponsor, the University may require ownership of any intellectual property created in the course of the contract work, in order to fulfill the terms of the contract. In exceptional cases, the sponsor may insist on ownership as a condition of funding.

In the case of many research assistantships held by graduate students or research associate position held by staff, the source of payment is a research grant held by the principal investigator who is usually the employee's supervisor. As such, the funding is tied to a specific project and its deliverables and the activities of the research assistant are linked to the research objectives as described in the grant. In some cases the contributions of the research assistant may be considered "work for hire" (see section 2). However, in most cases the research assistantship provides support for graduate students as they work on their thesis research (a <u>Graduate research Assistant Fellowship</u>) and therefore the student makes creative and intellectual contributions that must be recognized and duly acknowledged unless other agreements are in existence (see section 4). Normally acknowledgement is in the form of co-authorship (see sections 5 and 8) or co-applicant on the filing of a patent application. To avoid misunderstandings and potential conflict, the supervisor and research assistant should discuss intellectual property rights at the outset.

4. MY RESEARCH IS SUPPORTED BY EXTERNAL FUNDS. DOES THIS HAVE AN IMPACT ON THE OWNERSHIP OF INTELLECTUAL PROPERTY?

The relationship between funding and ownership of intellectual property is dependent upon who the funding body is, and the terms and conditions of the funding. The federal granting agencies (Social Sciences and Humanities Research Council, Canadian Institutes of Health Research, and Natural Sciences and Engineering Research Council) do not attach intellectual property claims to the research they fund, but require that institutional policies governing intellectual property and

its disposition be adhered to in addition to those of other sponsors (e.g. industrial partners, organizations).

Other organizations, notably private companies, do attach intellectual property claims to their support of University research. Some charitable associations or foundations or provincial Centres of Excellence may claim licensing rights or a share of royalties. It is important to be aware of the funding organization's intellectual property policies with respect to ownership, confidential information and publication as it applies to the research work that you do. In the case of contracts and grants from the private sector, agreements may have a number of provisions with respect to intellectual property, sometimes including a grant of rights in resulting intellectual property. In such instances, project participants will normally be asked to sign an agreement in which they indicate that they have been made aware of the funding terms and agree to abide by them. Faculty involved should consider whether the project is suited for thesis work and if so, the supervisor should disclose all restrictions and conditions at the outset of the graduate work.

4a. I am funded by a scholarship or fellowship from an external agency. What effect does this have on the intellectual property I create?

Scholarships and fellowships are generally adjudicated on the basis of academic merit and research potential and are awarded to the student even though the institution may be required to set up an account to disburse the funds. Since the monies are not to support a research project *per sé*, but rather to support the student as s/he pursues graduate training, there are no claims on intellectual property. In these situations the student is likely considered as a creator of any intellectual property that results. However, depending on the specific conditions under which the research was undertaken, the student may not necessarily be the sole creator/owner. For example, if others contributed to the concept of the research (*e.g.* the principal investigator), the analysis and interpretation of the findings, the writing of reports/manuscripts and the like, then they may have a claim on creation/ownership and have intellectual property rights. Consult with your supervisor.

If a fellowship or scholarship is provided by a company, then it is possible that the company may claim rights to resulting intellectual property. The terms and conditions should be clearly laid out and the signature of the award recipient required, indicating acceptance of the award and all its terms and conditions.

5. WHAT RIGHT DOES MY SUPERVISOR HAVE TO ANY INTELLECTUAL PROPERTY I CREATE?

There is no single answer to this as it depends on the individual circumstances, the type of intellectual property, the usual practice within the discipline and whether the research sponsor has rights to own or to license the results of the research (see section 4). In particular, some agreements that require "improvements" to prior or background intellectual property to be assigned or licensed. If the intellectual property is an invention, then patent law determines who is the inventor or co-inventor and, absent other agreements, University policies determine ownership. Students or staff working on a supervisor's project that could lead to creations or inventions that would be accorded intellectual property rights would have no claim unless they are a co-author or co-inventor. Similarly, a supervisor would have no claim if s/he were not a co-author or co-inventor. It should be recognized though, that if the work done was part of an

ongoing research project or program, the results can be used with appropriate attribution in furthering the supervisor's research and the research of others working in the same laboratory or group (e.g. in publications, presentations, reports and grant applications).

The rights to intellectual property should be clarified before the submission of papers for publication or disclosure of research findings in any manner which places a creation or invention in the public domain. This is critically important in instances where an application for patent is forthcoming.

With respect to a publication, individuals named as authors must have made a significant intellectual contribution to the work. Individuals hired to perform specific tasks typically do not share authorship, although they may receive acknowledgement for their contribution to the work. The decision about authorship and the order of authors may be based on what is considered the usual practice in a particular field, by the relative contribution made by each co-author, by seniority or by some other method that acknowledges contribution. Increasingly, journals are providing directives with respect to authorship and these must be adhered to.

6. I AM WORKING WITH A PROFESSOR AND OTHER STUDENTS ON A DISCOVERY. HOW DO I KNOW IF I AM AN INVENTOR?

Inventorship is determined by patent law. Generally, an inventor is a person who has contributed an original idea or otherwise made a material contribution to one of the claims granted in a patent. More than one person may be named as an inventor. Inventorship generally gives you rights to a share of the proceeds of your invention should it be commercialized and gives you the right to be informed of the progress of the invention as it makes its way through the patent protection process. However, a person who works under the direction of another and does not contribute any original thought to the claimed invention (for example, working as a technician to confirm an invention) would not be named as an inventor.

6a. What if I am co-author on a paper related to the patent?

Co-authorship is not the same as inventorship. You may be recognized as a co-author in a publication that relates to an invention even though you are not deemed an inventor. However, your contribution to an invention may, in some cases, still be recognized through some sharing of the net proceeds from the invention. Questions about inventorship should be discussed with your supervisor and/or PARTEQ.

7. WHO OWNS THE DATA PRODUCED IN MY RESEARCH PROJECT?

Raw data are not generally considered patentable nor are they creations that can be protected by copyright. Research records and data are to be managed and used in a manner consistent with the highest standards of ethical and scientific practice. According to the Senate Policy on Integrity in Research original data are normally stored in the laboratory or department of the principal investigator. In the case of collaborative research all those directly involved in the conduct of the research (including supervisors and students) will have access to the data. In the case of research involving human subjects, storage of the data and access to it must be in accordance with the procedures outlined by the principal investigator and approved by the University's Research Ethics Board. Access may be restricted only when a request to do so is made in writing to and

approved by the Vice-Principal (Research). The granting agency or research sponsor may have rights to the data as part of the terms of the agreement.

Research records must normally be retained on site for a minimum of 5 years from the date of publication or other form of presentation or communication. The period may be longer if mandated by a legal requirement or an applicable funding or oversight agency. An exception to this would be when, for anonymity purposes, destruction of data has been approved by a Research Ethics Board at Queen's University.

8. WHEN IS SOMEONE A JOINT INVENTOR? A JOINT AUTHOR?

The fact that a person is not named on the grant or contract under which the research work was performed does not prevent that individual from being named as a co-inventor and/or co-author if their contribution warrants such recognition. A member of the University community who makes an original and substantive contribution to a claimed invention should be named as joint inventor in any patent application. An exception may be if your contribution was limited to the work you were employed to complete and involved standard methodologies/protocols.

The criteria used to determine co-authorship vary across disciplines. It is not uncommon in the humanities and some social sciences that papers are sole authored. Indeed co-authorship is usually limited to cases in which the contributions of the co-authors are indistinguishable. In the physical, applied, natural and life sciences, teamwork and advisory committees are common and members contribute original ideas that help shape the particular project and results. These contributions may be recognized by co-authorship if significant (see also section 5). It is usually the case that co-authors will have made substantial contributions in two or more of the following: concept and design of the experiment; execution of the experiment; analysis and interpretation of the data; and/or the writing of the manuscript. It is normally the supervisor/principal investigator who determines when there is sufficient material to submit a manuscript for publication and may consult with those directly involved in the project to identify target journals.

9. IS IT NECESSARY TO COMMUNICATE INTELLECTUAL PROPERTY?

The University has an obligation to ensure that information and intellectual property is communicated in a timely manner such that it is accessible for scrutiny, wider utilization and societal benefit. It is recognized that knowledge and intellectual property resulting from research and scholarly activities may be disseminated and transferred from the University in many different ways including publications (including published patent applications and patents), presentations, exhibitions, consultation, licensing and commercialization and the movement of personnel to industry, government and other institutions.

Ownership of intellectual property must not be used to suppress the dissemination of or distort results of research or creative work produced by members of the University. In some cases the publication of findings may be deferred for legitimate reasons such as to allow time to apply for patent protection or to comply with the terms of sponsored research. These are exceptions that the University regulates to assure that considerations of intellectual property do not lead to

restrictions that are inconsistent with the University's expectation of making findings/creations accessible to the scholarly community and general public.

10. If a dispute arises with respect to intellectual property where do I go for help?

Disputes about an individual's contribution to the research or scholarly activity can arise whenever people work together. An attempt should be made to resolve the matter by reasonable discussion among those involved that is informed by the relevant University policies and practices (see Integrity in Research, Academic Integrity and the School of Graduate Studies Academic Integrity Policy. If you have questions or concerns you should consult with your department or faculty office, as well as PARTEQ for legal definitions of inventorship, invention, etc..

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