INTELLECTUAL PROPERTY
and the
GRADUATE STUDENT
at
YORK UNIVERSITY

Excerpt from the Faculty of Graduate Studies
Task Force on Intellectual Property Report
February 1995

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Introduction

York University, like any university, is committed to the creation and dissemination of knowledge. Questions may arise about who receives credit for the knowledge created and disseminated. In the pursuit of their studies, graduate students have opportunities to create intellectual property. For example, a student may produce a thesis or dissertation, or a publication in a learned journal. In the former example it is standard practice for the thesis or dissertation to be copyrighted and owned by the creator; in the latter case the journal usually acquires the copyright of the article. There are, however, no formal guidelines or policies within the university that govern the disposition of intellectual property which has been developed and produced by graduate students singly or jointly with other students and/or faculty members, in the normal course of their studies. Nor are there formal policies governing the disposition of intellectual property where students are employees of the university or are employed by faculty members, who in turn are employees of the university. It is, therefore, in the best interest of graduate students and faculty members to understand the legal and ethical aspects surrounding intellectual property.

A Task Force on Intellectual Property was created by the Faculty of Graduate Studies in response to nationwide concerns about the intellectual property of graduate students in the student-supervisor relationship, and some reported difficulties of graduate students at York. The terms of reference for the Task Force were consideration of 1) the ownership by graduate students of created research and research materials, 2) the rights of students in respect to joint authorship in publications, and 3) agreements between supervisors and graduate students concerning intellectual property rights. The Task Force reported in February 1995, and the report was subsequently approved by the Faculty of Graduate Studies Council. Given the terms of reference for the Task Force, the report focussed on matters relating only to the student-supervisor relationship; it did not enter any discussion of the development or application of overriding university policy around intellectual property rights because that would be beyond the jurisdiction of the Faculty of Graduate Studies. Such questions as the extent of public ownership, or of university ownership, of intellectual property created at, by or through the university, or with public funding, need be addressed elsewhere than by the Faculty of Graduate Studies. The attached portion of the Task Force Report, entitled *Intellectual Property and the Graduate Student at York* should be viewed in this light.

Because of the foregoing, the reader should understand that this document emphasizes the legal dimensions of the issue; this is because the questions posed in the document are the major areas of concern to both graduate students and professors involved in the graduate student-supervisor relationship. No doubt university-wide applicable policies will evolve, detailing the rights and obligations of all members of the York University community regarding intellectual property. Graduate students and faculty members can expect to be governed by these policies as they are implemented.

INTELLECTUAL PROPERTY AND THE GRADUATE STUDENT AT YORK

This document is intended for the guidance of students and professors. It is not legal advice. Intellectual property questions can become very complicated. For help with a particular problem, you may need advice from a lawyer.

1. What is intellectual property? Intellectual property rights are granted by society to producers of novel or original work in the arts or sciences. There are various laws making up intellectual property: laws relating to copyrights, patents, industrial designs, semiconductor chips, plant varieties, trademarks, trade secrets and confidential information. Those most relevant to graduate students in the university are probably the laws of **copyright**, **patents** and **confidential information**, although others will be referred to where relevant.

The way these laws 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 as well, 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, consistently with the principles and ethics of good scholarship. Intellectual property at York University should be viewed primarily as a means to these ends.

Copyright law covers much creative work in the arts and sciences: original literary, scientific, dramatic, musical and artistic work in written or some recorded form (e.g., tape or diskette). This includes books, articles, letters, poems, essays, theses, translations, lectures, computer programs, maps, charts, plans, art (paintings, drawings, sketches, architecture, sculpture, photographs, logos), plays, choreography, films, slides, sound recordings, and songs, including all preparatory work, models and notes. Purely oral expression does not qualify for copyright.

Copyright arises automatically once the work is created; registration or marking the work with a copyright claim ("© [author's name][year of publication]") is an optional but wise precaution. It draws attention to the copyright claim and stops copiers from later saying they did not know they might be infringing the owner's rights.

People sometimes may speak as if they own ideas ("that's my idea, not yours"), but this is inaccurate. Ideas are not usually capable of being owned by anyone; they are free for all to use. The expression of ideas, if recorded, may have a copyright; ideas for a new invention may be patented; ideas, if communicated for a restricted purpose, cannot be used outside that purpose. The claim of "that's my idea" is usually less a claim for legal ownership than a demand that the speaker be recognized as the first to have brought the idea to people's attention.

Authors are usually the first copyright owners; but if they create work as part of their duty as an employee, the employer first owns the copyright. (On who qualifies as an employee, see #4, below.) Copyright prevents someone copying, publishing, translating or broadcasting a work without the copyright owner's consent. It lasts for the author's life plus 50 years (except for photographs, sound recordings and films of live events, where a straight 50 year term from when the negative or original tape was made applies).

Authors also have **"moral rights"** to have their work properly attributed, and not to have it distorted or modified so as to prejudice their honour or reputation.

Patent law covers inventions in the physical world: new and useful arts, processes, machines, manufactures, or compositions of matter, or any new and useful improvement to them. This includes new gadgets, medicines, chemical compounds, methods of making things, if they have a practical application. Scientific theories are not patentable, unless they have an intended practical application.

The inventor has to apply for a patent, preferably before the invention is published in a paper or is made publicly available in its physical form; otherwise the public disclosure will bar a patent being granted in most countries. An employee inventor has to assign the benefit of the application or patent to her/his employer. A patent is only good for the country where it is granted. In Canada, a patent lasts for 20 years from the date of filing and stops anybody from making and selling the invention, even if they come up with the idea independently.

Patenting is generally an expensive exercise that needs professional advice from a patent agent or specialized patent lawyer.

The law of confidential information provides that written or oral information given or disclosed for one purpose cannot be used or disclosed for another purpose without permission. For example, information given during a lecture is for the education of the students present; while they may take notes, they cannot publish the information without the lecturer's consent because this is outside the purpose for which the information was given.

These rights do not deal with the ownership of the physical material in which an idea is expressed: the physical paper, tape or diskette. I may buy a book and so become its owner, but I do not become its copyright owner.

2. As a graduate student, can I acquire intellectual property rights? Yes, you can.

When you submit work for academic credit or a degree, the copyright in it will automatically belong to you. If you have invented something patentable, you may apply for a patent.

You need do nothing to get copyright in your work: copyright arises automatically in any work you create. It costs nothing. Patents are different: nobody has any rights in an invention unless s/he applies for and obtains a patent from the Patent Office in Ottawa. Patenting can be expensive and requires help from a patent agent or specialized patent lawyer.

3. Does the university have any rights in my work?

The university owns the physical material you submit to it for academic credit or a degree, e.g., thesis, dissertation, major research paper, report, **any** diskette containing such material, or examination paper. The university is, of course, entitled to review and evaluate the material in accordance with its rules.

For material other than an examination paper, by submitting it to the university, you allow the university to

- circulate the work as part of the university library collection, and
- reproduce, perform and otherwise use the work for academic purposes within the university.

For a thesis or dissertation, by submitting it to the university, you allow the university the same rights, and also the right to

- reproduce the work deposited in the university library to fulfil requests from other universities and institutions,
- microfilm the work and send the microfilm to the National Library of Canada, and
- publish an abstract or digest.

Somewhat different rules may apply to artistic and other material (see Box).

In a faculty like Fine Arts, students may submit sound or video recordings, films, sculptures, paintings or other artwork for credit or a degree. The student usually will continue to own both the physical artwork and its copyright (unless s/he produced them as part of her/his duties an employee, in which case the employer may own the work). The university may require slides or other records of the work to be provided; it will then own these records and have the same rights as for other physical material submitted for credit or a degree.

Special types of work may be submitted for credit or a degree elsewhere in the university. If you are unsure of what rights you and the university have over such work, you should seek advice from your supervisor or department head.

4. What about work I do as an employee or research assistant? If you are an employee or research assistant hired to do research or other work for the university or a professor, your employer owns the copyright or rights to patent any work you produce in that capacity unless you reach a different agreement with the employer. You have rights to have your work properly attributed and not to have it distorted or modified so as to prejudice your honour or reputation, but you may be asked to relinquish these rights.

It is usual for the employer — the university, a faculty, department, or individual professor — to have employees sign a document setting out their rights and duties. The employee should be given an opportunity to consider and discuss the document with the employer; at that time any changes or clarifications should be made and initialled.

It is the responsibility of both employee and employer to ensure such a document comes into existence, to inform themselves of its contents, and to act by it.

Note that in some faculties a Research Assistant is not allocated any research duties and is in the same position as a Graduate Assistant. See #6, below, *What if I am a Graduate Assistant?*

5. What if I am a graduate Teaching Assistant? Teaching Assistants are employed to teach or do work related to teaching. The copyright in any teaching or lecture notes you produce of your own accord belongs to you.

If, however, you are asked to produce course materials in any form as part of your TA duties, the university will own the copyright, unless you reach a different agreement with it. You are entitled to have your authorship of the materials properly attributed. To use the material outside the university may require the employer's prior consent. **It is best to agree these matters with your employer and have her/him sign a letter recording the agreement.**

6. What if I am a Graduate Assistant? A Graduate Assistant (called a "Research Assistant" in some departments) may receive payments in effect as a scholarship: the purpose is to support the student's academic studies, without the student's having any corresponding duties to perform for the professor or granting agency. If you are such a Graduate or Research Assistant, rights in any work done *voluntarily* for the professor or agency during such an arrangement belong to you, unless the terms of your appointment stipulate otherwise or the professor reaches a different agreement with you.

It is important for you and your supervisor to be clear on whether the assistantship carries any duties and, if so, what they are. The same procedure and obligations as set out in #4 above should be observed by you both.

7. Am I an employee just because I am on a scholarship or grant? No. You should, however, check if the scholarship or grant has any conditions that affect your intellectual property rights. If there are no conditions, you may safely assume your rights are unaffected. If you are unclear about any conditions, you should contact the granting authority to clarify the position.

8. What if I am paid from my professor's research funds? It all depends; you may or may not be an employee.

For example, payments from some research funds may — like a Graduate Assistantship — be effectively a scholarship: their purpose is to support the student's academic studies without requiring the student to do any return work for the professor or granting agency. Rights in any work done *voluntarily* for the professor or agency during such an arrangement belong to the student, unless the terms of the grant stipulate otherwise or the professor reaches a different agreement with you.

Other times, the payments will be salary for work you do as an employee. A student/supervisor and employee/employer relationship may commonly co-exist, so that work is done both for academic credit and for the employer. Here again, it is important for the parties to sign a document setting out their rights and duties. The professor should make sure the student is aware of any restrictions relating to ownership, publication and use of any work (including data or results), and how far the work may be used for academic credit or a degree.

> **It is the responsibility of both professor and student to ensure a document setting out these matters comes into existence, to inform themselves of its contents, and to act by it.**

9. Does my thesis supervisor or course instructor have any rights arising from my thesis or course work? Yes, if you are an employee or if you have jointly authored or invented something with her/him. Your supervisor then has rights as an employer, joint author or joint inventor in those parts of the work. S/he will have no rights over parts you produced on your own and outside any employee relationship. (For more on joint authorship or inventorship, see #*14,* below: *When is someone a joint inventor or joint author?*)

Similarly, you have no rights in your supervisor's or instructor's work, unless you are a joint author or joint inventor of it.

10. Can I tape my course instructor's lectures? Not without her/his prior permission. The taping then is for your own private research or study, and cannot be transcribed for publication. Similarly, you may not publish the notes you make of your instructor's lectures.

11. Who owns my thesis or dissertation? You as author own the overall copyright in your thesis or dissertation. This means you have — subject to the next paragraph — the sole right to decide whether and where to publish it, in whole or in parts; nobody else is entitled to publish, copy or translate the whole or any substantial part of it, without your prior consent.

Your rights are cut down if you produced parts of the thesis or dissertation as an employee, joint author or joint inventor. These parts should be clearly indicated in your thesis and appropriate credit to your co-author or co-inventor should be given. For those parts produced in your capacity as an employee, your employer owns the copyright; s/he alone can decide whether and where to publish that work separately, translate it, etc., although your authorship must be appropriately credited. For jointly authored or invented work, all co-authors or co-inventors usually need to concur in publishing or presenting the work. (More on this under #15 below.)

Your rights as a copyright owner do not mean you can object if someone:

- takes ideas from the thesis: copyright protects only the *expression* of ideas, not the ideas themselves. The taker must, however, observe standards of academic honesty: not properly crediting the source of one's ideas or representing the ideas of others as one's own can be plagiarism.

- deals fairly with the work — e.g., copies or translates substantial parts — for purposes of private study, research, criticism, review or newspaper summary, again appropriately crediting the source;

- copies material in which you do not own copyright — photographs you have found, newspaper clippings, data or results generated by someone else (you will yourself need to get copyright clearance for these if you publish the work).

It is wise to include on the work a notice in the form "© [your name] [year of publication]". A copyright may also be registered in the Copyright Registry in Ottawa any time. Even without these precautions, the thesis will be fully protected in Canada and many other countries.

You may, if you want, acknowledge the assistance of your supervisor or others in the work. However, since by submitting your thesis or dissertation, you represent that it is overall your own original work, nobody is entitled to claim co-authorship (except, as noted above, where a part may have been co-authored). This applies equally if the work is published. If your supervisor or someone else helps revise the work for publication, they may also be entitled to credit as a joint author; this should be agreed beforehand.

Of course, people or institutions to whom you give physical copies of the thesis or dissertation will own those physical copies, but they will have no greater rights to copy the work without your permission than any other user has.

12. Who owns any papers or other work I submit for credit? The position is the same as for a thesis or dissertation: you as author own the copyright in any papers or other work (e.g., tapes, films, slides) submitted for credit. The professor may retain a copy of the paper or other work (or a record of it) for her/his records.

The professor has the same rights in relation to your paper or other work as you have to her/his work. You may copy for your private study or research portions of faculty papers that are published or come legitimately into your hands; you may use references in them to generate your own ideas, and include extracts from the papers in your own work, provided you appropriately acknowledge your sources. In the same way, the faculty may use student work for the purposes of their own private study, research, criticism or review, with appropriate acknowledgment of sources.

A professor should not, however, take substantial material from a student paper — e.g., a bibliography taking hours to assemble — and simply include it in a paper that s/he is presenting at a conference or publishing, without first obtaining the student's consent. If the student consents, s/he is then entitled to have the work appropriately acknowledged in the professor's paper.

The student cannot, however, object if the professor compiles a similar bibliography from the same common sources to which the student had access.

13. Who owns the data and results in my thesis and course papers? You own the copyright, if you generated and compiled them yourself. If, however, you generated and compiled them as an employee, your employer will own the copyright; if you worked closely with someone else in generating them, the data or results may be jointly authored and so jointly owned. Even where someone else owns or jointly owns data or results, you may incorporate them in your thesis with their permission and you will own copyright in your thesis as a whole.

If you are an employee, the original physical material on which the data and results are recorded — notebooks, tapes, etc. — belongs to your employer. For work produced outside an employment relationship, practices differ within the university. In the sciences, for example, the original physical material may belong to your supervisor; you should retain a copy for yourself. (Where you are paying for the material, you may want to see beforehand whether the university can reimburse you.) In other disciplines such as history, the material may belong to the student. **It is the responsibility of both student and professor to clarify beforehand, preferably in writing, who is to be the owner of the original physical material recording data and results.**

In **all** cases, however, both you and your supervisor are entitled to access to the material, whoever owns it, for purposes of verification or clarification. The data and results may be used by your supervisor for private study or further research. S/he must appropriately acknowledge your work if it is used in her/his publications.

Where a student has provided technical or other assistance short of authorship to a project, it is customary for that assistance to be appropriately acknowledged in the final report on the work. The borderline between assisting a project and co-authoring it can be unclear. (More on this in #14, below.) If in doubt on your status, you should seek to have it clarified in writing as soon as possible with your supervisor or employer.

If you are an author or co-author, you are still entitled to have your authorship attributed when you generate or compile data or results, even if someone else owns or jointly owns the copyright. You may also object to your data or results being distorted or modified in a way that prejudices your honour or reputation (this presupposes your data and results were fairly generated and compiled in the first place). You cannot object to your data, results or interpretation being corrected if errors have been made, or to their otherwise being put in proper form. You and your supervisor should first try to resolve any differences amicably; if agreement cannot be reached, the head of department should be consulted.

14. When is someone a joint inventor or joint author? You can be a joint inventor by collaborating on a project and making some original contribution to the inventive thought going into it and to the final result. You should be named joint inventor in any patent application, but if you were employed to do the work, you will need to sign over your rights in the application to your employer.

"Joint authorship" is a more thorny concept because conventions about what counts as authorship vary among disciplines.

A joint invention is the product of collaboration of the inventive endeavors of two or more persons working toward the same end and producing an invention by their aggregate efforts. To constitute a joint invention, it is necessary that each of the inventors work on the same subject matter and make some contribution to the inventive thought and to the final result. Each needs to perform but a part of the task if an invention emerges from all of the steps taken together. It is not necessary that the entire inventive concept should occur to each of the joint inventors, or that the two should physically work on the project together. One may take a step at one time, the other an approach at different times. One may do more of the experimental work while the other makes suggestions from time to time. The fact that each of the inventors plays a different role and that the contribution of one may not be as great as that of another, does not detract from the fact that the invention is joint, if each makes some original contribution, though partial, to the final solution of the problem.

A discussion of joint invention under US patent law. Source: *Monsanto Co v. Kamp*, 269 Federal Supplement 818, at 824 (District Court, 1967).

The narrowest definition comes from copyright law and applies to collaborations in literary and artistic work in some of the humanities. There, a "joint author" is technically someone who has collaborated on a work in which the contributions of the various authors are not distinct from one another. Only contributors to the form or expression of the work qualify; those supplying ideas do not. If everybody's contribution *is* distinct (e.g., contributors of entries to an encyclopedia), the work is a "collective work"; each author has a copyright in her/his individual contribution.

In the sciences, however, contributors of original ideas to a project are typically considered joint authors even if they do not contribute to the writing. There has been considerable controversy about who is entitled to be credited as co-author and in what order the credit should appear. "Honorary" or non-contributing credits are no longer acceptable, but otherwise opinions differ. Some may claim that the principles applying to co-inventorship should apply, *mutatis mutandis*, to co-authorship in the sciences. Others claim equal co-authorship should be recognized only where at least two of the following criteria are fulfilled:

- conception of idea and design of experiment,
- actual execution of experiment or hands-on lab work,
- analysis and interpretation of data, and
- actual writing of the manuscript.[1]

Since collaboration and teamwork are common within all parts of the university, **it is imperative** that those working together on a project agree from the beginning what work will attract an authorship credit and in what order the authors will appear on any publication.

The fact that a co-worker is not named as an investigator in a grant should not debar her/him from credit; but, in any case, only work that involves an original contribution, as understood by that discipline, should count. Unless otherwise agreed, each co-author will own the copyright and moral rights jointly and equally.

A co-worker may forfeit her/his right to co-authorship if s/he leaves the project before substantially completing her/his assigned work. The employment document could have, as an agreed term, that a meeting of co-authors may decide whether forfeiture is warranted after hearing from the departing worker.

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[1] Arnold Relman, as quoted in Marcel C. LaFollette, *Stealing into Print: Fraud, Plagiarism, and Misconduct in Scientific Publishing* (1992, Uni. Cal. Press), p. 94.

The university will treat the appearance of a person's name as author on a work, whether published or unpublished, as a representation by that person and all co-authors that s/he made an original contribution to the work and that s/he accepts not only the privileges but the responsibilities of its authorship.

15. Can I present or publish jointly authored work without the consent of the other authors? No. All joint authors usually have to agree to the publication or presentation of the jointly authored paper.

Since, however, a major role of the university is to disseminate knowledge as widely and quickly as possible, an author should not attempt to block publication or presentation of the work in any reputable forum, except for very good cause. For example, a genuine disagreement on the interpretation of data should not bar publication or presentation, but can be dealt with through a suitable rider indicating the nature of the disagreement.

It is wise for the document under which the student is working to include an agreed binding method of resolving disputes among co-authors.
