

## What is “IP”?

Intellectual Property, simply defined, is any form of knowledge or expression created with one's intellect. It includes such things as inventions; data; computer software; trademarks; literary, artistic, musical, or visual works; and even simple knowledge on how to do something. There are various forms of statutory protection for Intellectual Property, but the two that are most likely to be relevant in the University environment are copyright and patents. Know-how and trade secrets are other types of Intellectual Property that are relevant but are not protected by statute.

### Copyrights...

Copyright protects original literary, photographic, musical, dramatic, or artistic works in a variety of forms, including written materials and computer software. It is important to understand that copyright does not protect ideas, but rather the expression of such ideas. Under copyright law the creator, or a subsequent copyright holder, has the exclusive right to copy a creative work or allow someone else to do so. This includes the sole right to publish, produce or reproduce, to perform in public, to communicate a work to the public by telecommunication, to translate a work, and in some cases, to rent the work.

Generally the author of a work is the first owner of copyright, however, where a work is created by an employee in the course of his or her employment the employer is the first owner of the copyright in the absence of an agreement to the contrary. Copyright works can have multiple authors/owners. Joint Authors are those who collaborated on a work in which the contributions of the various authors are not distinct from one another. If each person's contribution to the work is distinct (e.g., contributors of entries to an encyclopedia), the work is deemed a "collective work" and each author has copyright in his or her individual contribution.

Copyright comes into existence automatically when the work is created and lasts for the author's lifetime plus an additional 50 years. Under international treaties Canada has agreed to recognize the validity of other country's copyrights in exchange for their recognition and protection of Canadian copyrights.

### Patents...

Patents protect inventions, which are defined as “any new and useful art, process, machine, manufacture, or composition of matter, or any new and useful improvement in any art, process, machine, manufacture, or composition of matter” and include related computer software, know-how, and new life forms.

Through a patent, the government gives an inventor the right to exclude others from making, using or selling an invention for 20 years. In exchange, an inventor is expected to provide a full description of the invention so that society can benefit from the advance in technology and knowledge. Once the patent expires, anyone is able to use the invention without a requirement to obtain the patent owner's permission.

Products, processes, machines, manufactures or composition of matter, or any new and useful improvement of any of these, such as new uses of known compounds, are patentable subject matter. Scientific theorems or principles, as well as anything that is illegal or illicit, are not patentable. Novel, genetically engineered life-forms and new microbial life-forms can be patented in some countries but not in others. Likewise methods of medical treatment and software are patentable in some countries but not in others, including Canada. In order to be patentable, an invention must be novel (i.e. be first in the world) and it must have utility (i.e. be functional and operative). Finally, to be patentable, your invention must be a development or an improvement that would not have been obvious beforehand to workers of average skill in the area of technology involved. An invention must elicit a “why-didn't-I-think-of-that” reaction from other researchers working in the field.

To be granted a patent you must be the original inventor (or the assignee of the inventor), and it must be the first in the world. You cannot obtain a patent if your invention was made public before you

filed the patent application. Generally, if the subject matter of the patent has been disclosed in an article, a seminar or even in a conversation not covered by a confidentiality agreement or in confidential circumstances before the patent was filed it will not qualify for a patent. Although, in Canada, patent filers have a 12-month "grace" period between the time an invention is publicly disclosed and the time a patent application must be filed.

It is important to understand that different criteria are used in determining inventorship than are used for authorship of scientific papers. An inventor is a person who has had an original idea or has contributed intellectual input to one of the main claims of the patent. They are the individuals who were responsible for the creative breakthroughs that led to the invention. A person who works under the direction of another and does not contribute any original thought to the claimed invention (for example, "works as a technician" to confirm an invention) is not an inventor. To be considered an inventor, you must be able to point to a specific idea of yours without which the invention could not exist. A patent application may be filed naming one or more inventors.

### **Know-How...**

Know-How is defined as special knowledge of how to do something; skill in a particular field. Usually know-how is neither an invention (i.e., patentable) in and of itself, nor an expression of an idea (i.e., a copyright work). A researcher's know-how can often have considerable value. While it is mandatory in filing a patent application to disclose sufficient information to enable others to reduce the invention to practice, a researcher will often also possess valuable know-how and experience that is not contained in the patent that permits commercial optimization of a process or product. While know-how is not protectable under statute, as its creator, you have an intellectual property interest in it.

### **Trade Secrets...**

Unlike other forms of intellectual property such as patents, copyrights or trademarks, trade secrecy is basically a do-it-yourself form of protection. The owner or creator of a trade secret does not register with the government to secure it; he or she simply keeps the information confidential (i.e. the recipe for Coca-Cola). The commercial value in trade secrets comes from the fact that it is not well known; protection essentially ends when the secret is generally available to the public. The basis of a trade secret may be something that is patentable or may simply be know-how or data. Trade secrets can be commercialized through licensing as with other forms of Intellectual Property. Trade secrets are not compatible with an academic environment where the right to publish is essential.

### **Intellectual Property at the University...**

The University has a number of policies regarding intellectual property that clarify the University's interests in intellectual property in relation to individual creators or inventors. These policies apply to faculty, students and staff and include the *Inventions Policy*, the *Copyright Policy*, the *Ethics Policy*, and the *Publication Policy*. These policies operate in conjunction with Intellectual Property laws and apply unless there is a signed agreement to the contrary.

More information about Intellectual Property can be found online on the Canadian Government's Intellectual Property Office website @ <http://www.cipo.gc.ca>. University policies regarding Intellectual Property can be found @ <http://www.governingcouncil.utoronto.ca/policies/invent.htm>. Alternatively, you can contact IPO if you have any questions regarding University-created Intellectual Property.

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