

Business Special Surveys and Technology Statistics Division

**Survey of Intellectual Property
Commercialization in the
Higher Education Sector, 2008**

Respondent Handbook

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Statistics Statistique
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Canada

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Electronic questionnaire

A form-fillable PDF questionnaire will be available shortly after the mail-out of the paper questionnaire. To receive a copy, please e-mail your request to **Education.oid@statcan.ca**.

Instructions for hospitals

Hospitals will receive a one page screening questionnaire in addition to the main (11 page) questionnaire. Hospitals are asked to complete the screening questionnaire first to determine whether they are also being asked to complete the 11 page questionnaire.

If the hospital meets the screening criteria, please proceed to Section 1 - General information – of the questionnaire. Section 1 concerns intellectual property (IP) policies at the hospital. This will be applicable to your hospital even if IP is commercialized through an affiliated university.

If researchers report IP to your hospital, complete Section 2 as well.

If IP is managed (e.g., patented, licensed, commercialized) by your hospital, complete Sections 3 to 5 as applicable.

If IP developed at your hospital is commercialized by a different institution (e.g., a university technology transfer office), indicate this in the “Comments” section (Question 6.2) and complete only the questions in Sections 3 to 6 that relate to activities at your institution.

Instructions for liberal arts universities and divinity colleges

This survey applies to all members of the Association of Universities and Colleges of Canada (AUCC), including liberal arts universities and divinity colleges. Even if the institution has no invention disclosures or patents, information is still required on other types of intellectual property, such as “educational materials” and “other materials” (e.g., literary works) and on other issues, such as faculty consulting.

You are therefore asked to complete all relevant questions on the questionnaire. The relevant questions are most likely 1.1, 1.2, 1.3a, 1.4, 1.5, 2.1, 3.1 and 3.2.

General instructions

Complete all sections of the questionnaire that are relevant to your institution.

If you don't have all the information requested, please complete as much as you can. **If exact numbers are not readily available, please provide estimates with a note indicating this.** Since we plan to ask many of these questions in future surveys, it may be helpful for your institution to set up an information system now to track the information requested for future surveys.

Please do not leave any question blank. **If the value is known to be zero, enter the digit "0"**. If the information is not available, **write "not available"** in place of the answer. In cases where the question is not applicable, **please enter "n/a"**.

Report all dollar amounts in thousands of Canadian dollars.

If using the paper questionnaire, please type or legibly write your answers to the survey in ink.

Please keep a copy of the completed questionnaire for your own future reference and in case we require further details.

Survey contact: Please include your e-mail address so that we can automatically send you the aggregated results of this survey when available.

Section 1. General Information

1.1 Please provide information for fiscal or business year ending in 2008. If the information provided on this form does not refer to 2008, please note the year to which the data do refer.

1.2 a. *Intellectual property management* includes intellectual property identification (reporting, patent disclosures), protection (patenting, registration of industrial designs, etc.), promotion (market studies, business plans, prototypes, etc.) or commercialization (licensing, research contracts, consulting, and spin-off investment).

b. **Please provide the name of all affiliated institutions included in your figures**, and whether those institutions are engaged in intellectual property management activities or not. Affiliated institutions may include universities and research hospitals.

c. Some institutions that create intellectual property may not have the facilities to manage it. For instance, their intellectual property may be managed through another institution.

1.3 a. "**Intellectual property management**" is to be interpreted in the broadest sense. It refers to the activities of an institution's University-Industry Liaison Office, Office of Research, Technology Transfer Office, Software Licensing Office, etc.

b. Please estimate the components of operational expenditures. The components should add to the "total operational expenditures for intellectual property management." If information on the components is not available, provide an estimate of total operational expenditures.

Expenditures should be estimated to correspond to the portion of the office dedicated to intellectual property management as opposed to the research contracts or other functions.

For "**employees engaged in intellectual property management**", include both professional and administrative support staff (the portion of their time dedicated to IP management only). Include persons involved in the negotiation of material transfer and confidentiality agreements but not clinical trial agreements.

c. This question requests information on the sources of funds that were used for intellectual property management in the reference year.

d. For this question, include both professional and administrative support staff.

f. A *start-up* is a company established to license the institution's technology.

1.4b Intellectual property includes:

Inventions: Any patentable product, process, machine, manufacture or composition of matter, or any new and useful improvement of any of these, such as new uses of known compounds (Canadian University Intellectual Property Group, 1998). Some inventions are patentable in some jurisdictions but not in others; these include novel genetically-engineered life forms, new microbial life forms, methods of medical treatment and computer software.

In the event of multiple possibilities (for example, computer software that is patented and copyrighted), count the item only once and preferably in the category most appropriate for Canadian intellectual property legislation.

Computer software or databases: As noted above, computer software can be patented but normally it is protected by copyright. Databases may also be copyrighted.

Educational materials: This category includes special materials that may be copyrighted but are not necessarily in the form of printed books. This could include broadcast lessons, Internet pages, booklets, posters or computer files, among others.

Other materials protected by copyright: This category includes any copyrightable works other than computer software and databases and special educational materials as noted above. For example, it includes literary, artistic, dramatic or musical works, books and papers.

Industrial designs: These are original shapes, patterns or ornamentations applied to a manufactured article. Industrial designs are protected by registration with the Canadian Intellectual Property Office.

Trade-marks and official marks: These are words, symbols, designs, or combinations thereof used to distinguish your wares or services from someone else's. Trade-marks and official marks are registered with the Canadian Intellectual Property Office.

New plant varieties: Certain plant varieties that are new, different, uniform and stable may be protected by registration with the Canadian Intellectual Property Office.

Other intellectual property includes:

Integrated circuit topographies: This is a three-dimensional configuration of the electronic circuits used in microchips and semiconductor chips. Integrated circuit topographies can be protected by registration with the Canadian Intellectual Property Office.

Know-how is practical knowledge, technique or expertise. For example, certain information is codified in the patent application but a researcher's know-how may be valuable for commercial optimization of the product. Know-how can be licensed independently of the terms of a related patent.

If your institution deals with a type of intellectual property not listed, please indicate it under "Other".

The owner of intellectual property refers to the initial owner of an invention, or the holder of the copyright or the registration of other intellectual property.

1.5 “**Faculty consulting activities**” refers to paid or unpaid professional activities that are beyond normal academic and collegial duties, for the benefit of clients outside the institution. Unpaid consulting could include advising a non-governmental organization.

1.6 **Research contracts** are arrangements under which the institution, or an individual within the institution, agrees to undertake a research project on a specified problem, using the institution's facilities and/or personnel, for a sponsor that provides funds to meet all or part of the costs of the project.

A **Canadian business** is any business that is incorporated in a Canadian jurisdiction. A **foreign business** is any business that is not incorporated in a Canadian jurisdiction. **Foreign** includes the United States. A **multinational** would be classified as a Canadian business if it has an operation incorporated in a Canadian jurisdiction.

In the case of multiple sponsors, if possible, create a group under "other" that specifies the category of sponsors (e.g., "federal and provincial government"). The sums of the number and value of contracts should correspond to the totals.”

Canadian and foreign “organizations”: include research contracts with not for profit organizations and associations.

“Other” research contracts: include those with other universities and hospitals, institutes, foundations and individuals.

Section 2. Identifying Intellectual Property

2.1 The types of intellectual property are defined under Section 1.4. If, to the best of your knowledge, these forms of intellectual property have never been created at this institution, answer "n/a".

Section 3. Protecting Intellectual Property

3.1 The mechanisms for *protecting* intellectual property do not exactly parallel the *forms* of intellectual property. One invention, for example, may result in several patents, copyrights, trade-marks and confidentiality agreements. The mechanisms for protection are:

Filing of patent applications: A patentable invention (see description under Section 1.4 above) to be protected, requires a patent application with the government of the countries in which protection is sought. A patent application may be preceded by an invention disclosure to the institution.

Registration of copyright: This is intended **to cover new copyright registrations only**, not those copyrights that are obtained automatically. The kinds of works covered include:

- computer software and databases
- educational materials (e.g., broadcast lessons, Internet pages, booklets, posters)
- books, maps, lyrics, musical scores, sculptures, paintings, photographs, films and tapes.

A copyright means that the owner is the only person who may copy his or her work or permit someone else to do so. You obtain copyright automatically in Canada when you create an original work. It is not necessary to register copyrights with the federal Copyright Office but doing so can be a proof of ownership.

Registration of industrial designs gives the owner exclusive rights to use the design. The design must be an original shape, pattern or ornamentation applied to a manufactured article.

Registration of trade-marks or official marks gives the owner exclusive rights to words, symbols and designs, or combinations of these, that distinguish one's wares or services from those of someone else. Trade-marks and official marks are registered through Canada's Trade-Marks Office. Normally, trade-marks and official marks do not need to be registered, however, doing so gives the owner exclusive rights throughout Canada.

Registration of integrated circuit topographies gives the owner exclusive rights to use the design. Protection can extend to the layout design as well as to the finished product.

Filing of applications for plant breeders' rights gives the holder exclusive rights to new varieties of some plant species. To be protected, the varieties must be new, different, uniform and stable. A claim for protection is preceded by publication of a description of the plant variety in the Plant Varieties Journal.

Executing of non-disclosure or confidentiality agreements: Non-disclosure is an alternative to patenting. A non-disclosure agreement does not constitute a property right although the IP can be protected by contract. Parties to a non-disclosure contract agree not to divulge valuable technical knowledge and can be prohibited from doing so.

A **Material Transfer Agreement (MTA)** is a contract that governs the transfer of one or more materials from the owner or authorized licensee to another party for research purposes. Materials may include cultures, cell lines, plasmids, nucleotides, proteins, bacteria, transgenic animals, pharmaceuticals and other chemicals. (AUTM Educational Series: Material Transfer Agreements, 1998)

An **MTA outbound** is one in which the materials originate with the institution.

An **MTA inbound** is one in which the materials are received by the institution.

3.2 Number of instances of intellectual property that resulted in protection activity:

Report the number of **instances of** intellectual property (see definitions in Section 1.4 above) that resulted in a protection activity (see definitions in Section 3.1 above) initiated during the reference year. Do not include patent renewals or other maintenance files.

For copyrighted IP, include only those instances for which a copyright was registered. Do not include copyrights that were obtained automatically.

For each type of IP, the number that resulted in protection activity and the number declined for protection by the institution will not necessarily add up to the number of reports and disclosures in Question 2.1 due to timing differences.

3.3 Patents applications and patents issued

“Patent applications” refers to all patent applications completed during the reference year, regardless of country of application.

“Patents issued” refers to new patents issued during the reference year. If national and regional applications result in patents issued in multiple countries, count each patent issued in each country.

b. “Total number of patents held by the institution, including patents issued this year” refers to all patents in effect in Canada, the United States and other countries.

Section 4. Exploitation of Intellectual Property by the Institution

4.1 “*New licenses executed*” refers to the completion of an agreement with a client to use the institution’s intellectual property for a fee or other consideration (such as equity in the company).

An option is a right to negotiate for a license.

See Section 1.6a for definitions of **Canadian** and **foreign**.

“*Sole licenses*” are agreements allowing only one client the right to use the intellectual property.

“*Exclusive license*” refers to one granted that is exclusive for a territory, for a field of use worldwide or otherwise. Hence, there may be multiple exclusive licenses for a single patent.

In most cases, the number of new licenses recorded in the table (questions 4.1 a and b) should be included in the corresponding cells for number of active licenses (questions 4.1 c and d).

The total number of new licenses/options and the total number of active licenses/options in this (the Statistics Canada) survey should correspond to the same fields on the AUTM Licensing Survey if the two reporting periods are the same.

4.2 This question was adapted from one in the AUTM Licensing Survey. The answers to the two questions should correspond if the reference period for the two surveys is the same.

4.3 Running royalties are those based on the sale of products.

Milestone payments are those made by a licensee at predetermined points in the commercialization process.

Regarding item 3 - one time sales of IP in exchange for a single or several payments - include income from assignments to commercial exploiters.

Other income received from intellectual property: For example, if a potential licensee contributes the funds to apply for the patent, this could be considered another source of income. Please list all items whether or not figures are available.

In some instances, the **revenues received from disposition of equity holdings, options and warrants in a spin-off company** may be interpreted as a royalty. If possible, please exclude these values from the total and **report them under Question 5.3**. If this is not possible, please note that the value includes revenues from disposition of equity.

Section 5. Spin-off companies

5.1 This survey attempts to track all spin-offs created to date, including those that are now inactive, closed, merged, etc. If your institution has not previously sent in a list of all spin-offs created to date, we would appreciate receiving such a list now.

“*Legal name*” is the name used by the company on official documents, such as incorporation papers or tax forms. It is important to be as accurate as possible since the name permits us to obtain further information from our business records.

“Institutional link” refers to the nature of the relationship between the institution and the company: licensing, R&D and/or service. There may be one or several institutional links for a given company. If there are other institutional links, please note them.

- 5.2 For spin-off companies in which the institution holds equity, please report any cash dividends received during the reference year.
- 5.3 In cases where equity holdings, options or warrants in spin-off companies have been sold, please report the amount received from these sales.
- 5.4 **“Remaining equity held by the institution”** refers to the market value of shares in publicly traded spin-off companies at the end of the fiscal year. The remaining value of equity reported should be reduced by any cost to acquire it.