Conducting research at the U of L

A practical guide

University of Lethbridge

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OFFICE OF RESEARCH SERVICES

Conducting Research at the U of L: A Practical Guide

2011-12 EDITION

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Chapter 1

Research Administration

The Vice-President (Research) is responsible for the overall administration of research at the University of Lethbridge. Responsibilities include supporting the University's research activities and helping guide the research agenda. Several offices work together to provide the best service to the U of L's research community. They are as follows:

Research Accounting

Research Accounting is part of the department of Financial Services and plays an integral role in supporting the research environment at the U of L. Research Accounting tracks funding for research projects that are conducted at the University. They keep in close contact with Research Services, as well as with both private and public donors who contribute research funds. Research Accounting opens research funds; processes financial transactions, including invoices; and provides reports on fund activities and balances. Also, Financial Services reviews and approves expense claims and Research Payroll Authorization forms for compliance with grant regulations and University policies.

Research Ethics

The University of Lethbridge is committed to maintaining high standards, and requires that all research, teaching, and testing conducted by its members conform to the highest ethical and scientific standards with respect to the use of animals, human subjects, radioisotopes and biohazards. Any research, teaching or testing conducted using University facilities, or undertaken by individuals connected to the University involving animals, human subjects, radioisotopes, and biohazards must be reviewed and approved by the appropriate University Committee.

Research Ethics provides administrative support to committees that review and approve research involving animals and human subjects.

Research and Innovation Services

Research and Innovation Services (hereafter Research Services) provides assistance and advice on sponsored research, research contracts and other research activities. Research Services works closely with government agencies and private sector industries to further advance research activities on campus.

Research Services provides the following services:

- **Funding information** – Research Services organizes information sessions and workshops for researchers on the policies and procedures of different funding agencies; and distributes information on funding opportunities, program changes and deadlines.

- **Grants and contracts** – Research Services offers advice on the preparation of research grant and research scholarship applications; acts as the representative between funding and contract agencies, and the University; and negotiates and signs research contracts on behalf of the University.

- **Internal research funding** – Research Services provides administrative support for numerous internal research grant and research scholarship programs.

- **Research accounting** – Research Services collects all documentation required to open the research fund and forwards the documentation to Financial Services for approval.

- **Research partnerships** – Research Services participates, on behalf of the University of Lethbridge, in meetings with organizations related to present and future research activities; enhances research efforts on campus through the development and coordination of new research initiatives; and links research activity at the University to funding opportunities and/or opportunities for industry collaboration.

University-Industry Liaison

The University-Industry Liaison Office (UILO) facilitates engagement between agencies and researchers at the University of Lethbridge. The UILO aims to encourage and promote the dissemination of Intellectual Property (IP) and commercialize research endeavours. The facilitation between university and industry agencies can take place in different forms, such as research collaborations in areas of mutual interest, licensing of discoveries, and the creation of spin off companies based on the innovations of the university's researchers

Who do I contact?

- For information on internal research grant programs?

  Research Services administers 6 internal grant programs. The contact for each program is as follows:

  CFI Infrastructure Operating Fund (IOF) .... Chris Picken
  Community of Research Excellence Development Opportunities............ Jane Allan
  Internal Artistic/Creative Research Grant .... Jane Allan
  Internal Research Dissemination Grant .... Jane Allan
  Internal SSHRC Grant (ISG).. Jane Allan
  University of Lethbridge Research Fund ....Susan Entz
  University of Lethbridge Research Grant in Lieu of Salary ....Susan Entz
  University of Lethbridge Travel Fund ....Connie Chaplin

- For advice on preparing external faculty grant applications?

  Your discipline will determine whom you should contact.

  Education .... Jane Allan
  Fine Arts .... Jane Allan
  Health Sciences..Penny D'Agnone
  Humanities .... Jane Allan
  Management.. Jane Allan
  Medical Sciences ....Penny D'Agnone
  Natural Sciences.. Chris Picken
  Social Sciences.. Jane Allan

- For advice on preparing student scholarship applications?

  Research Services administers undergraduate student scholarship and stipend applications for the tri-council and select foundations. Undergraduate students should contact Susan Entz for any questions pertaining to the following applications:

  - Alberta Innovates Health Solutions Summer Studentship
  - NSERC Undergraduate Student Research award
  - University of Lethbridge Chinook Research Summer Award
  - Undergraduate Research Enrichment

  For all other scholarship applications, please contact Graduate Studies or Scholarships and Student Finance.

- To disclose, patent, license or commercialize my research?

  All questions pertaining to technology transfer and commercialization should be directed to Morgan Guo or Pejman Ghanipour.

- To review a research contract?

  All contracts must be negotiated, signed and administered by Research Services or an authorized university representative.

  Industrial contracts..Pejman Ghanipour
  Non-industrial contracts.. Chris Picken

- To open a research fund?

  The post-award process is handled by the same person that assisted you with preparing your grant application.

- For information on funds to support travel to disseminate research or artistic works?

  Questions pertaining to undergraduate student travel should be directed to Connie Chaplin. Graduate student travel applications are handled by the School of Graduate Studies. All faculty travel questions should be directed to Connie Chaplin.

- For information on research ethics?

  Susan Entz is responsible for the administration of the approval process for the use of animal or human subjects in research. Please contact Susan if you have any questions pertaining to obtaining approval for the use of animal or human subjects in your research.

- For all questions pertaining to Research Accounting?

  If you are a member of one of these Departments or Faculties, contact Mark Sera:

  - Arts & Science – Dean's Office
  - Curriculum Re-Development Centre
  - Dramatic Arts
  - Economics
  - Geography
  - Graduate Studies – Dean's Office
  - Management
  - Music
  - Native American Studies
  - Neuroscience
  - Philosophy
  - Physics
  - Psychology
  - Office of the President

- History
- IT Administration
- Library – Information access
- Vice President (Academic)
- Vice President (Research)
- Women's Studies

If you are a member of one of these Departments or Faculties, contact Mike Fordham:

- Anthropology
- Art
- Art Gallery
- Biological Sciences
- Chemistry & Biochemistry
- Conference and Event Services
- Dramatic Arts
- Education
- English
- Fine Arts
- Health Sciences
- Kinesiology and Physical Education
- Liberal Education
- Liberal Education
- Math and Computer Sciences
- Modern Languages
- Music
- New Media
- Office of the University Librarian
- Political Science
- Religious Studies
- Sociology

If you have a question pertaining to any of the other services provided by Financial Services, please contact Financial Services directly at 403-329-2206 to be directed to the appropriate person.

Chapter

2

Research Project Cycle

Each project typically includes the following stages, which are elaborated in greater detail throughout this manual:

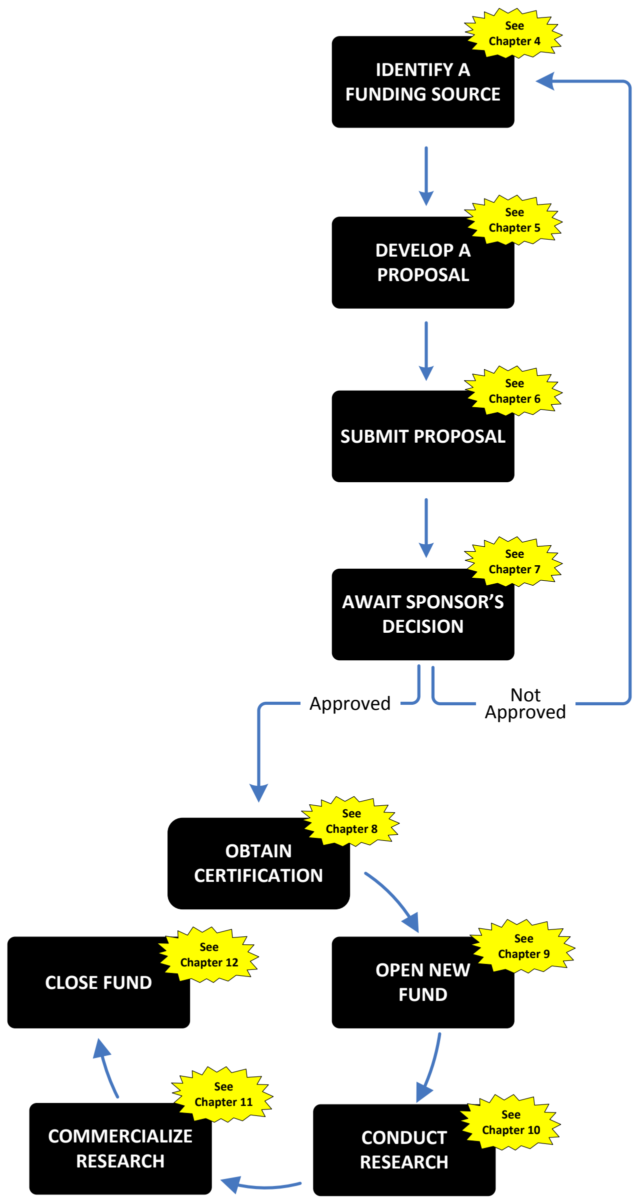

Figure 1 Research Project Cycle

It is the applicant's responsibility for developing the proposal and ensuring that each stage of the cycle has been appropriately addressed. The staff in Research Services and the University-Industry Liaison Office is available to assist you with where appropriate.

Identify a funding source	Research Services provides information on various funding opportunities through a variety of mediums including electronic distribution lists, information sessions and newsletters. Researchers should also consult with the appropriate subject librarian and/or the Community of Science Funding Opportunities database.
Develop a proposal	The researcher develops the project concept and initiates the grant process and/or industry collaboration. Research Services works with the researcher to ensure that all necessary UofL processes are in place and, in some cases, ensures the application is submitted to the agency on time. Where time permits, Research Services provides a substantive review of draft applications as "the non-expert" for compliance with the sponsor's requirements, eligibility and evaluation criteria. To aid in proposal preparation, Research Services hosts grant writing workshops and facilitates additional internal peer review.
Submit a proposal	Researchers must obtain approval for their project from their Department Chair and Dean, as well as the Vice-President Research. This indicates that the University supports the proposed research and any requested infrastructure.
Await Sponsor's decision	The funding agency reviews all applications for eligibility. Eligible applications are adjudicated by peer reviewers who make recommendations to the funding agency. The funding agency sends the competition results to Research Services, who then informs the applicant of the results. In some cases, the researcher is advised directly by the funding agency, or for applications where the UofL is not the lead institution, learns the result from colleagues at the lead institution or by the co-applicant him-/herself. In such cases, researchers are requested to advise Research Services and to forward any communications they have received. Where grant applications are unsuccessful, Research Services will assist in developing a strategy to strengthen the application.
Obtain certification	Projects that involve human subjects, animals, radioisotopes or biohazards must obtain appropriate approvals in advance of the release of any research funds or research being conducted.
Open new fund	Research Services authorizes the opening of all research funds and forwards all documentation to Financial Services. Financial Services approves and opens all research funds.
Conduct research	No expenditure may be made under any grant or contract until funding is received or confirmed in writing by the funding agency. Grant funds must contribute towards the direct costs of the research program or project for which the funds were awarded.
Commercial-ize research	The University-Industry Liaison Office advises on intellectual property (IP) and provides support for the commercialization of IP (e.g., patent filing, licensing, spin-off company formation).
Close fund	Research Services and Financial Services closes research funds upon completion of the research project and/or funding. Any required final reports must be completed prior to the closing of an account

Chapter

3

Definitions

Research Grant

A **Research Grant** provides financial support of research in a particular subject area or field without any formal detailed stipulations as to the direction of such research.

Under the terms of a grant, other characteristics which are typically present include:

- Flexibility exists to revise the course of the research, without prior approval of the funding agency;
- The monies are not attached to a specific performance outcome and cannot be retracted as a function of performance;
- No restriction is placed on the publication of research results by any approval or delay process;
- Any patents or inventions belong to the principal researcher or to the University, and not to the funding group;
- Purpose of the research is more in the nature of the general advancement of knowledge than goal-orientated for practical results;
- Principal Investigator or any co-investigator(s) cannot be compensated under the project;
- The principal researcher initiates the research project;
- The research project is designed and controlled by, or under the direction of, the faculty member;
- The research project involves no proprietary data protected by the funding agency or any other agency under any contractual commitment to the funding agency;
- Grant funds are not linked to achieving specific milestones;
- Grant funds are available before, not after, expenditures;
- Equipment purchased with grant funds belongs to the University not to the funding agency; and,
- Funds are not normally provided to cover the indirect or infrastructure costs of research which include faculty time, libraries, computing services, lab space and equipment, administrative services, and physical plant operating expenses.

Research Contract

Definition

A **Research Contract** is a legally binding agreement between two corporate bodies (namely, the sponsor and the University) whereby the sponsor provides financial support for research in a particular subject area or field under specific stipulations and conditions. A number of characteristics are typically present:

Contract research is carried out under the terms of a written agreement, which will normally include some or all of the following provisions:

- A description in specific terms of the work to be carried out for the sponsor (statement of work) and when its components are to be completed (progress reports / final report).

- A budget providing for payments based on actual expenditures, except that some portion of each payment may be withheld (holdbacks) until the contracted work is complete and a final report submitted and accepted.
- That detailed financial records be maintained in order that financial statements can be prepared and expenditures audited.
- Restriction on the publication of research results for a limited time period.
- A contribution to the indirect costs (overhead) of the University;
- Scope and nature of the research are outlined;
- Set time period for the research;
- Milestones and/or deliverables are defined;
- Payment schedule may be linked to meeting deliverables;
- Established ownership, patent rights and licensing arrangements;
- Provisions for confidentiality of information;
- Limited liability of participants, indemnity;
- Establish considerations for acceptance and/or termination of the contract.

Types of contracts

Research Services administers the following types of contracts:

- Affiliation – Agreement establishing a partnership arrangement with another institution.
- Contract Research – Agreement to conduct research where financial support is provided according to agreed upon schedule of payments or reimbursements.
- Contribution – Similar to a Grant-in-Aid, but the sponsor typically participates in the research.
- Fee-for-Service (also known as Technical Service) – Agreement to carry out specifically defined services.
- Grant-in-Aid – Agreement to transfer funds in support of a research program.
- Memoranda of Understanding – Institutional arrangements where the parameters of the relationship are defined at a high level.
- Network for Centres of Excellence – Inter-university agreements.

Personal Contracts

Personal contracts for research negotiated between an individual and an external agency and signed by that individual will not be accepted for administration by the University, nor may University facilities be used for activities carried out under such contracts.

Chapter

4

Funding opportunities

Finding funding

COS Funding opportunities database

The University subscribes to a fully searchable database called the Community of Scholars (COS).

The **COS Funding Opportunities database** is the largest, most comprehensive database of funding available from private foundations, public agencies, federal governments and corporations. It lists sources of funds to support research, collaborations, travel, curriculum development, conferences, fellowships, postdoctoral positions, equipment acquisitions, and capital or operating expenses.

Researchers in all disciplines ranging from the natural sciences, life sciences, health & medicine to the social sciences, arts, and humanities can find relevant information to help secure funding for their work, including information about deadlines, award amounts, eligibility criteria and sponsor contact information.

COS Funding Alert is a personalized electronic notification service of funding information. Subscribers receive a weekly email with a customized list of funding opportunities based on previously specified criteria provided by the individual COS members.

Results of COS searches can be saved, printed, emailed, or exported.

The COS Funding Opportunities database may be accessed via the library web page, http://www.uleth.ca/lib/indexes/title-description.asp#c or from Research Services' web page http://www.uleth.ca/research/research-services/resources/finding-funding.

For more information, contact your subject librarian:

Subject Area	Librarian
Agricultural Studies	Leona Jacobs
Alberta Gaming Resources	Maxine Tedesco
Anthropology	Marinus Swanepoel
Archaeology	Marinus Swanepoel
Astronomy	Leona Jacobs
Biochemistry	Leona Jacobs
Biological Sciences	Leona Jacobs
Chemistry	Leona Jacobs
Computing Science	Maxine Tedsco
Economics	Nicole Eva
Education	Rumi Graham
English	Glenna Westwood

Environmental Science	Leona Jacobs
Fine Arts, Faculty of	Glenna Westwood
First Nations Transition Program	Andrea Glover
Health Sciences, Faculty of	Rumi Graham
Geography	Maxine Tedesco
Globalization Studies	Brenda Mathenia
History	Marinus Swanepoel
Kinesiology	Andrea Glover
Liberal Education	Nicole Eva
Management	Nicole Eva
Mathematics	Maxine Tedesco
Modern Languages	Glenna Westwood
Native American Studies	Andrea Glover
Neuroscience	Leona Jacobs
Philosophy	Marinus Swanepoel
Physical Education	Andrea Glover
Physics	Leona Jacobs
Political Science	Marinus Swanepoel
Psychology	Leona Jacobs
Religious Studies	Nicole Eva
Social Work	Andrea Glover
Sociology	Andrea Glover
Women's Studies	Andrea Glover

Please consult the campus directory for contact information.

Funding Opportunities

Selecting the appropriate funding agency

In instances where your research falls between disciplines or requires the skills of several disciplines, you must apply to the agency that deals with the dominant research discipline, i.e., natural sciences and engineering, social sciences and humanities, health research, or fine arts. Be sure to consult the guidelines of each agency to select the one best suited to your application, prior to submitting your proposal. You may not submit the same proposal concurrently to NSERC, SSHRC, CIHR, or the Canada Council for the Arts. Applications submitted to the wrong agency will be rejected. This could require a new submission/application to the appropriate agency in the next competition cycle.

Most research grants are awarded in annual competitions with most application deadlines occurring in the fall semester. Adjudication is primarily through review, at the national level, by panels of experts in the relevant disciplines.

Internal sources

Individuals interested in applying for any of the University's internal research grants must be faculty members who wish to use the funds to support research and research-related activities. The funds may not be used to cover costs associated with degree completion or projects directed towards teaching or the development of teaching-related skills. For additional information on eligibility requirements, please consult the guidelines for the specific grant to which you intend to apply prior to submitting your application.

Research Services coordinates the adjudication of each competition. Guidelines and application forms for all University of Lethbridge internal grant programs are available on the Research Services web site. Please see, http://www.uleth.ca/research/

CFI Infrastructure Operating Fund

CFI Infrastructure Operating Fund is designed to contribute to the incremental operating costs and maintenance costs of infrastructure projects funded by CFI. All CFI projects approved after July 1, 2001, are eligible to receive IOF, with the exception of projects funded under the Canada Research Chairs Infrastructure Fund and the international funds. All eligible projects generate an IOF allocation of 30 percent of the total finalized CFI contribution. The University submits one request per year to CFI to access IOF funds.

Community of Research Excellence Development Opportunities

The **Community of Research Excellence Development Opportunities** (CREDO) Program supports social science and humanities research within the faculties of Arts and Science, Education, Fine Arts, Management and the School of Health Sciences. CREDO enables faculty to develop their strategic research programs and become more competitive in attracting external research funding.

Following completion of a two year term, CREDO grant holders are required to submit applications to appropriate external funding sources for ongoing support and are not eligible to reapply to the CREDO program for a minimum of 24 months from the completion of the award.

The CREDO program provides a maximum funding of $11,500 per year for a two-year term ($23,000 total) to each successful applicant. Funds are dispersed on a competitive basis. Applicants are advised that the demand for funds may exceed the funds available. The SSHRC Leadership Committee may not be able to recommend support for all eligible projects/activities and may recommend a reduction in the amount requested.

In addition to funding, successful applicants will have the opportunity to work with a committee member and receive feedback and advice for the duration of the grant.

Internal Artistic/Creative Research Grant

The intent of the **Internal Artistic/Creative Research Grant** is to encourage, stimulate and support research and scholarship in the Arts, including visual, digital and performing arts.

"Research" is broadly defined and will include, but is not limited to the:

- Creation of new literary, visual, performance or other artistic works;
- Interpretation, analysis, history and criticism of the arts;
- Development of techniques (e.g. musical, computer, material, etc.);
- Pedagogical studies; and
- Development of new art forms, new performance approaches or new exhibition strategies.

The Internal Artistic/Creative Research Grant is also intended to develop the research skills of graduate and undergraduate students in artistic and related disciplines through participation in programs of creative scholarship. A further objective is to provide artist/scholars a competitive edge through direct, short-term funding, enabling them to build upon and enhance developing programs and work towards applying for external funding.

Internal Research Dissemination Grant

The **Internal Research Dissemination Grant** provides grants of up to $2,000 to enable faculty members to disseminate the results of their research endeavors. Due to the funding source, this grant is open to only faculty members in the Social Sciences and Humanities.

Internal SSHRC Grant (ISG)

The **Internal SSHRC Grant (ISG)** supports small-scale social science and humanities research projects and activities within the faculties of Arts and Science, Education, Fine Arts, Management and the School of Health Sciences.

The intent of the ISG is to provide a competitive edge to newer scholars through direct, short-term funding, enabling them to build upon and enhance developing programs of research and work towards applying for external funding. It should be noted that the ISG grant is not intended to be considered as start up funding for new faculty.

Priority will be given to full-time faculty in their first few years of a probationary or tenure track appointment who are establishing a research program and are not currently receiving external funding.The ISG is valued at a **maximum** of $4,500.

Funds are dispersed on a competitive basis. Applicants are advised that the demand for funds may exceed the funds available. The University SSHRC Committee may not be able to recommend support for all eligible projects/activities and may recommend a reduction in the amount requested.

University of Lethbridge Research Fund

The **University of Lethbridge Research Fund (ULRF)** is the main internal source of funds to support research activities on campus. Research proposals from first time applicants receive the highest priority.

Awards to a single applicant are limited to a maximum of $4,500. Requests from multiple applicants will be considered for more than $4,500 with each applicant eligible to receive the maximum available to a single applicant.

Research Grant in Lieu of Salary

Faculty members and professional librarians may apply to the **Research Grant in Lieu of Salary (RGILS)** for funds, taken from their salary, to support their research. Applicants may apply at any time, but no later than 2 months prior to the proposed start date of the project.

The value of the RGILS varies depending on the status of the applicant. For faculty members on research/study leave, the leave salary will determine the maximum grant. In the case of a faculty member not on research/study leave, the amount of the research grant should not exceed 50% of annual salary.

University of Lethbridge Travel Fund

Faculty members, professional librarians and academic assistants are eligible to apply to the **University of Lethbridge Travel Fund**. Applicants whose contract is for less than 12 months or less than full load may qualify for a reduced amount on a pro-rated basis.

Applicants taking an active part (Priority One) in the dissemination of research or artistic works will receive the highest priority. The “first come first served” formula is applied to all categories of priorities.

Period	Travel Period	Application Deadline
1	July 1 to September 30	June 1
2	October 1 to December 31	September 1
3	January 1 to March 31	December 1
4	April 1 to June 30	March 1

For additional information on the Internal sources of funding, please consult Research Service’s web site http://www.uleth.ca/research/

External sources

All external research grant applications and letters of intent must be submitted through the Office of Research Services, and be signed by the appropriate signing authorities.

Whether a project is grant oriented or contractual in nature depends primarily on the nature of the work to be performed as well as the terms or conditions under which this work is to be performed.

Provincial

The Alberta government established a number of programs to support research activities on Alberta campuses.

Agriculture Funding Consortium

Agriculture Funding Consortium is the primary agency in Alberta for funding, coordinating and promoting strategic agricultural research initiatives and technology transfer in the agriculture and food sector.

Visit http://www.fundingconsortium.ca/ident.html to find out more about agricultural research programs and how to apply for funding.

Alberta Cancer Board

Alberta Cancer Board and Foundation (ACB) funds collaborative cancer research and provides evidence-based prevention, screening, diagnosis, treatment and care.

Visit http://www.cancerboard.ab.ca/research for additional information on ACB's funding opportunities and funded researchers.

Alberta Centre for Child, Family & Community Research

Alberta Centre for Child, Family and Community Research (ACCFCR) has a mission to develop, support, and integrate research across sectors and disciplines to provide a strong, evidence-based foundation for identifying and promoting effective public policy and service delivery to improve the well-being of Alberta's children, families and communities.

Visit http://www.research4children.com/default.cfm for more information on the Centre, research and funding opportunities.

Alberta Foundation for the Arts

Alberta Foundation for the Arts (AFA) supports individual artists and arts organizations in the visual, performing and literary arts, and cultural industries.

Visit www.cd.gov.ab.ca/all_about_us/commissions/arts for additional information on AFA's programs and how to apply for funding.

Alberta Gaming Research Institute

Alberta Gaming Research Institute (AGRI) supports research into gaming and gambling in the province. The identified research domains include bio-psychological and health care, socio-cultural, economic, and government and industry policy and practice.

For additional information on AGRI, its programs and funding opportunities please see the AGRI web site at www.abgaminginstitute.ualberta.ca/

Alberta Innovates Health Solutions

Alberta Innovates: Health Solutions (AIHS) supports biomedical and health research at Alberta universities, affiliated institutions, and other medical and technology-related institutions. AIHS grants and awards include: personnel awards and establishment grants for senior scientists; training awards for students; infrastructure grants, including equipment and conference grants; and special initiative funding in health research.

Visit http://www.ahfmr.ab.ca for additional information on AHFMR, its programs and funding opportunities.

Alberta Rural Development Network

The **Alberta Rural Development Network** (ARDN) is a not-for-profit partnership of Alberta's 21 public colleges, universities, and technical institutes. ARDN assists with the creation of community driven projects, provides opportunities to create new partnerships, collects and shares applied research and information, and works with rural communities to identify and address gaps in education training.

For additional information visit ARDN's web site at http://www.ardn.ca/

Federal

There are four main granting agencies in Canada, funded by the Federal Government: Canada Council for the Arts, the Canadian Institutes of Health Research (CIHR) Natural Sciences and Engineering Research Council (NSERC), and Social Sciences and Humanities Research Council (SSHRC).

Canada Council for the Arts

The **Canada Council for the Arts** offers a broad range of grants and services to professional Canadian artists and art organizations in the following disciplines:

- Dance
- Interdisciplinary and Performance Art
- Media arts
- Music
- Theatre
- Visual Arts
- Writing and Publishing

The Council also administers the Molson Prizes and the Killam Research Fellowships Program.

For further information on the Canada Council, its programs, and funding opportunities, visit http://www.canadacouncil.ca

CIHR

The **Canadian Institutes of Health Research** (CIHR) is Canada's premier strategic funder of health research. CIHR's institutes are not buildings or research centres but networks of researchers from a variety of disciplines, brought together to focus on important health problems. The thirteen Institutes are:

- Aboriginal Peoples' Health
- Aging
- Cancer Research
- Circulatory and Respiratory Health
- Gender and Health
- Genetics
- Health Services and Policy Research
- Human Development, Child and Youth Health
- Infection and Immunity
- Musculoskeletal Health and Arthritis
- Neurosciences, Mental Health, and Addiction
- Nutrition, Metabolism and Diabetes
- Population and Public Health

CIHR offers many funding opportunities, including salary support and operating grant competitions. CIHR has two types of grant programs: Open competitions (funding programs for investigator-initiated health research or research open to any subject area of health research) and Strategic Funding Opportunities (funding programs related to CIHR or partner priorities and designed to contributed to strategic objectives).

CIHR's Institutes hold Strategic Funding Opportunities call for proposals (called Research Funding Announcements – RFAs). These opportunities target specific research needs and are often funded by the Institute(s) and other partners. The

RFAs are normally announced in early June and in early December.
For further information about CIHR, its programs, and funding opportunities, visit www.cihr-irsc.gc.ca

NSERC

The **Natural Science and Engineering Research Council** (NSERC, also known as Science and Engineering Research Canada) supports research in the following disciplines:

- Engineering
- Life Sciences
- Mathematical and Computational Sciences
- Physical Sciences

NSERC's funding opportunities includes operating grants (Discovery Grants), equipment grants (Research Tools & Instruments), Special Opportunity Grants, and large scale Strategic Project Grants.

NSERC's Research Partnerships Programs foster collaborations between university researchers and other sectors, including government and industry, in order to develop new knowledge and expertise, and to transfer this knowledge and expertise to Canadian-based organizations. The partnership programs include the Collaborative Research and Development Grant that supports industry funded projects and the Idea to Innovation program to assist researchers commercialize their work

For additional information on NSERC, its programs, and funding opportunities please see the NSERC web site, http://www.nserc.ca

SSHRC

The **Social Sciences and Humanities Research Council** (SSHRC) promotes and supports research and research training in the in the following disciplines:

- Humanities
- Social Sciences
- Education
- Management
- Fine Arts
- Health Studies

To be eligible for SSHRC funding, the objectives of the proposed research activity must fall within SSHRC's mandate. The use of research methods, constructs or theories from the social sciences or the humanities are not sufficient to make a project or program eligible for SSHRC support.

For additional information on SSHRC, its programs, and funding opportunities please see the SSHRC web site, http://www.sshrc.ca

Institutional programs

Institutional programs are granting programs where, if successful, the grant is awarded to the University not the researcher. The University administers the award on behalf of the researcher.

CFI

The **Canada Foundation for Innovation** (CFI) strives to strengthen the ability of Canadian universities to carry out world-class research and technology development that will benefit Canadians. It funds up to 40 percent of a project's infrastructure costs with a contribution from the public, private, or voluntary sectors; and the institution providing the remaining 60 percent of a project's cost.

The CFI invests in projects through the following funding programs:

- Leading Edge Fund
- New Initiatives Fund
- Leader's Opportunity Fund

- Infrastructure Operating Fund
- National Platforms fund
- Exceptional Opportunities Fund
- Automotive Partnership Canada Fund

For further information on CFI, its programs, and funding opportunities, visit http://www.innovation.ca

Chapter

5

Application development

> The art of "grantsmanship" will not turn mediocre science into a fundable grant proposal. But poor "gransmanship will, and often does, turn very good science into an unfundable grant proposal. Good writing will not save bad ideas, but bad writing can kill good ones.
>
> Jacob Kraicer in *The Art of Grantsmanship*

Grant writing tips

When you write a grant proposal, picture a person in a windowless room with grant proposals stacked everywhere. This person's job is to read proposals, day in and day out. Ask yourself, "What can I do to make my proposal stand out?" To improve your odds of success, ask yourself the following:

Have I followed the guidelines?

Respect the application guidelines

- Keep within the page limits. Extra pages are removed and committee members are often advised that the applicant has exceeded the allowable space for the section.
- Include only allowable information; for example, avoid including publications from outside the allowable period.

Read application form(s) carefully

- Do what the application form asks you to do and in that order. Committee members who have to spend a substantial amount of time sorting out an application tend to get annoyed and suspicious. What are you trying to hide?
- Address all questions and/or points indicated in the application instructions.
- Do your objectives match those of the agency? State explicitly how the proposal relates to the objectives/priorities of the agency.

Have I used all available resources?

For information

- Find colleagues who have served on a review committee for, or received grants from, the agency you are applying. They can give you "insider" information on how the agency works and what "sells".
- Read your colleagues' successful funding proposals.
- If you have any questions, contact the relevant granting agency program officer. He/she will welcome your questions and answer them.

For review

- Ask a wide range of individuals to read numerous drafts of your grant proposal and to provide honest feedback on areas they think could be improved.
- Have your application reviewed by 1, but preferably 2 or 3, colleagues in your direct scientific area to check for relevance, accuracy, ambiguities and quality of science. Also, select someone who is a generalist to check for clarity, and someone who is a good editor.

- Give the internal reviewers enough time to do a thorough job.
- Contact Research Services early in the application process.

Is my application easy to read and understand?

Package your application material well. Consider:

Style / formatting

- The first impression made by the application is determined by its appearance. The appearance of your application is a reflection of your scholarly sophistication.
- Reviewers often do their reading in bits-and-pieces. Have your application organized so that it can be read this way. You do not want them to have to go back to the beginning after each break.
- Organize your application with appropriate headings and sub-headings. Use simple and obvious numerical classification.

Readability

- Make your proposal easy and inviting to read. Avoid narrowing your margins or reducing the font size just to squeeze more words on the page.
- Choose a dark, clear font. Break the text into paragraphs.
- Use highlighting (e.g., bold, italics) judiciously to help committee members identify important points while avoiding clutter.

Spelling and grammar

- Don't trust your computer spell checker.
- Ensure that there are NO errors in spelling, grammar or fact.
- "If you can't get the spelling right, how are you expected to get the research right?"
- Remember that reviewers are doing the reviews as a task over and above their daily mandated activities, and are often unpaid. They often carry out the reviews under less-than-ideal conditions (e.g., evenings, weekends, holidays, on the airplane etc.). They may wait until the last minute to begin their review. Make your proposal easy to read!

Am I using the minimum amount of words to make my point?

Write clearly and succinctly

Reviewers should be able to understand your research purpose and judge its relevance and importance without having to work to do so. Regardless of your project's intellectual merits, a proposal that puzzles reviewers with complex syntax, ill-defined terms, or inelegant prose is not likely to win a favourable rating.

Consider:

- Think first –The clearer the ideas in your head, the clearer they will be on paper.
- Use outlines/sketches – Thinking through the overall structure and logic of the proposal will help focus your writing and lead to a clearer proposal.
- Be explicit – A proposal should not read like a mystery novel. Never assume the reader knows what you mean.
- Write simply – "Write to express not to impress." Use short simple sentences. Write short paragraphs that begin with informative topic sentences that tell the reviewer what you are going to do in the paragraph; then do it.
- Minimize jargon – Use clear, unambiguous language. Avoid jargon and trendy terms. If you must use a technical term repeatedly, define the term or elaborate the phrase where it is first used.
- Be brief – Present a well-written and carefully crafted proposal, using the limited space to maximum advantage. The clarity is enhanced if you convey the maximum amount of information with the minimum number of words. More is not better. Committee members read 100s of pages of application material.

Be careful not to write sentences that sound pretty but don't say anything. It is the applicant's responsibility to represent the proposal in the clearest manner possible, not the reviewer's to figure out what the applicant is trying to say.

Am I telling a good story?

Successful applications must be a “joy to read” and must stand out from the ever-increasing competition. Make the reviewers your advocates not your adversaries.

Tone

The tone in which you express yourself is likely to influence the reviewer’s estimation of you and your capabilities. An inappropriate tone –one of arrogance or apology – can condemn a substantially sound proposal.

Remember:

- Be confident – Expressing confidence in your research and yourself is likely to enhance the reviewer’s faith in your ability to carry out a rigorous academic investigation. Avoid writing in the passive voice. For example, say “I will conduct interviews” instead of “If I am funded I would hope to conduct interviews. . .”
- Be passionate – Convey passion for your project when writing. It may help pique the interest of even the most jaded reviewer.
- Avoid arrogance and/or apology – Find and respect the line between being pompous and being confident; apologetic and modest; passionate and unprofessional. Do not apologize for what you do not know, but focus on your strengths and how you will overcome your shortcomings.

Persuasion

- Write persuasively – you’re selling a concept. You’re not writing a term paper.
- Present your application in such a way as to inspire confidence and convince your peers that the likelihood of your success is high.

Will anyone understand what I have written?

Avoid ambiguities

- Consider your audience. Prepare your proposal with the assessors and committee in mind. Anticipate possible questions or objections they may raise.
- Avoid abbreviations, acronyms and jargon that the non-expert may not understand. If you use abbreviations, then define them when used for the first time.
- The application must be understood readily by reviewers who might come from a range of backgrounds – especially true for committee members as compared to external referees.

Be mindful of international reviewers

- Use language that will be easily understood by those for whom the language is foreign and/or not their first language.
- Avoid using clichés.

Have I invested enough time in the proposal?

Preparatory work

- Ensure that the necessary groundwork has been done (e.g., literature review, verification of the availability of resources etc.).
- Do not submit a premature proposal. Is the proposal appropriate for your stage in your career?
- Put together and write up your recent work and submit it to appropriate peer-reviewed journal(s). Do this well in advance so that the work can appear in your application as “published”, “in-press”, or “submitted”. Most granting agencies will not accept a manuscript “in preparation”. Your track record, as judged by publications, is an important criterion in the assessment.
- Carry out appropriate preliminary (pilot) studies, so that these results can be included in the application. It will help establish for you, and your reviewers, whether the experimental approaches are feasible and where the pitfalls may be. Do not write your grant a day before the application deadline. Reviewers can tell when an application was pulled together hurriedly at the last minute.

What is the ratio of problem to solution?

A grant proposal is essentially a work plan. Focus on what you are going to do. Devote at least twice as many paragraphs or pages to the solution (goals, objectives, methodology etc.) as you do to defining the problem.

Methodology

- This section "makes or breaks" your proposal. Explain and justify the choice of methodology. Is the methodology appropriate? Does it correspond with the objectives? The importance of this section cannot be overemphasized: write this part of your proposal as rigorously as you would a refereed article.
- Explain how co-investigators and students will be involved.
- Outline objectives and the precise steps taken to achieve each objective. What will be done? When will it be completed?

Does the budget make sense?

Clarity of presentation

- Is the budget, as it appears on the page, easy to understand? Committee members must be able to understand your budget and budget justification.
- Show your requirements for each year and in all areas.
- Itemize proposed expenditures in detail. Explain briefly but fully necessary expenditures. Explain significant budget items by referencing to tasks or elements within the proposed research.

Be realistic

- Find out the median funding level for the agency. This will allow you to formulate a reasonable budget.
- When developing a budget, think project budget first. List every penny it will take to run the entire project. Don't forget about support staff, copying charges, postage, memberships, telephone charges etc. Then think, what part of this budget is appropriate to request from the funding agency (i.e., what expenses are ineligible?). Then put together an itemized list for the part of the overall budget you're requesting from the funding agency.
- Avoid overstating. Do not inflate the cost of materials. Committee members know what things cost. If you are asking for expensive equipment be sure to justify it.
- Avoid understating. Ensure you have requested enough funds to cover your costs. An underestimated budget may indicate to the Committee that you do not have the expertise to understand the effort required to accomplish your objectives.
- Balance activities between you and your co-investigators/student assistants. The cost for all proposed staff must be fully justified and linked to the work plan.

Have I addressed overhead?

Research contracts are subject to charges for overheads costs. These costs include those expenses which are real but not easily identifiable with a particular research project such as utilities; the provision of institutional facilities; space; accounting; payroll and personnel services; insurance coverage; janitorial services; and provision for equipment replacement.

Indirect research charges will be deducted from all research funds received and administered by the University of Lethbridge, except in those instances when it is expressly prohibited by the granting organization. No overhead will be charged on research projects with funding less than $5,000 per year. In instances where research projects have been completed or have been started prior to approval from Research Services and the applicable Dean they will be charged an overhead rate of 50% of total direct costs of the project funding.

Calculating

Overhead costs of research are calculated as a percentage of total direct costs of the overhead research project funding.

Research Organization	**Minimum overhead recovery rate** (of total direct costs)
Provincial Government	
Research contracts	40%
Research grants	20%
Government of Canada	
	65% payroll costs (on campus)
	30% payroll costs (off campus)
	2% travel expenses
Industry	
Research contracts	40%
Research grants	20%
Government (non-Canadian)	40%
Foundations	20%

In exceptional cases, the Vice-President (Research) may consider written appeals for exceptions or variations concerning the minimum amount of overhead charged. All exceptions require prior written approval from the Vice-President (Research), applicable Dean, and Vice-President (Finance and Administration). A Research Overhead Charge Waiver form must be completed.

The amount of overhead subject to distribution will be the actual amount recovered in accordance with the terms of the research project and the Research Overhead Charging Policy. Overhead will be distributed as follows:

Allocation to:	**Allocation**
University Central Administration	50%
Research Services	20%
Applicable Dean's Office	20%
Principal Investigator	10%

The Research Overhead Charging Policy may be read in its entirety at http://www.uleth.ca/policymanual.

Application review

Internal Review

Research Services has implemented the following deadlines for its review of research proposals, applications and letters of intent prior to specific granting agency deadlines. Please ensure that all information and documentation is provided so that the Office may provide an accurate and informed review.

- 14 days prior to agency deadline for review of proposals, applications and/or letters of intent. Where a high volume of proposals and applications are expected, such as the SSHRC Standard Research Grants and NSERC Discovery Grants, please allow sufficient time for quality review and feedback. Please consult with Research Services to confirm deadlines.
- 7 days prior to agency deadline for Letters of Support from the Vice-President Research.

Please note, if your request for assistance is not received by Research Services within these deadlines, the Office is cannot guarantee the full level of assistance.

Contract Preparation

When an opportunity arises to conduct contract research, contact Research Services immediately. Research Services will assist you in negotiating all aspects of the contract. Remember that only the University has the authority to enter into a contract with an external agency or client. The researcher will be noted as the Principal Investigator in the contract.

For the contract, the researcher needs to provide:

- Contact information for the agency or client.
- Dollar value of contract.
- Schedule of payment.
- Invoicing arrangements (if required).
- A budget detailing how the funds will be spent. This includes a defined percentage that is the university's overhead fee, as well as other expenditures (e.g., salaries, materials and supplies, travel, specified equipment).
- A description of the research service being delivered (i.e. a work plan).
- Any special terms for the research service being delivered (e.g. time frames, definition of a completed service, milestones, etc.).

Chapter

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Proposal submission

Research Proposal Form

The Research Proposal Form must accompany ALL applications submitted to an external funding agency. This form is not forwarded to the external funding agency but rather is kept on file in Research Services along with a copy of your application. Applications submitted without the accompanying Research Proposal Form WILL NOT be signed by Research Services and will be returned to the applicant.

Why is it required?

The Research Proposal Form provides Research Services with a “snapshot” of your application. From the information contained on the form Research Services is able to tell, at a glance, if your research requires approval by the Animal Welfare, Human Subject, Biosafety or Radiation Safety Committees. It indicates the research budget and source(s) of funds, the space required to conduct the research and/or if renovations to existing space are needed.

This form is available online, accessed via the Bridge. See Appendix A for further information on the Online Approvals system, which streamlines the approval of your grant application.

Obtaining signatures

Researchers are responsible for obtaining all required signatures. All applications, and the Research Proposal Form, must be signed in the following order by:

1. the principal investigator
2. the co-investigator(s)
3. the Department Chair
4. the Dean of the Faculty or School
5. The Vice-President (Research) or his representative

What do the signatures indicate?

Principal Investigator and Co-Investigator(s) – indicates acceptance of academic, professional, scientific and technical responsibility for the project. In addition, it represents an undertaking to observe sponsor and University policies and regulations, as well as any special award conditions.

Department Chair and Dean – indicates the Department is willing to accommodate the project, and the required facilities and services are available for any required renovations. It also represents general acceptance of expressed or implied time commitments, including a willingness to recommend leave or other special arrangements as specified in the application.

Vice-President (Research) – indicates that the University is willing to administer funds received for the project in accordance with University and funding agency regulations.

Submitting the proposal

Researchers are responsible for submitting their own application/proposal to the agency or sponsor. Institutional applications (e.g., Canada Research Chairs, Canada Foundation for Innovation) will be submitted by Research Services.

Internal deadlines

All proposals, applications, and letters of intent must be submitted to Research Services 7 days prior to the agency deadline. This will allow sufficient time for a final review by Research Services and for obtaining the Vice-President Research's (or designate) signature. Please ensure all other signatures, such as the Department Chair and Dean, are already obtained.

E-submissions

Please keep in mind that all proposals, applications and letters of intent that are submitted online must be received by Research Services one week prior to the agency deadline in order for Research Services to ensure the inclusion of all required information, provide institutional approval of the application, and submit it to the appropriate agency.

CIHR eApproval process

All CIHR applications must be submitted online. All investigators applying to CIHR must upload the institutional signature page as part of their application. The Principal Investigator is responsible for submitting the complete Research Proposal Form to Research Services prior to the agency deadline in order for the electronic submission of the application to occur in a timely fashion.

For assistance with CIHR Grants, contact Penny D'Agnone (Research Services). For graduate applications, contact the School of Graduate Studies.

SSHRC eApproval process

Standard Research Grant applications must be submitted electronically, and all paper attachments previously required (e.g., forms and CVs) will be submitted online as electronic attachments (uploads). Signed paper copies will no longer be accepted. Applications must be approved and submitted by Research Services. For further information please contact Jane Allan (Research Services).

Chapter

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Sponsor's decision

All applications submitted to a funding agency/sponsor are reviewed for eligibility and for compliance with formatting rules (e.g., adherence to page limits). Eligible applications are then adjudicated by peer reviewers who make recommendations for funding to the agency. The agency sends the competition results to Research Services, who then informs the researcher of the outcome. In instances where the researcher receives the competition results (i.e., if applied directly to the agency or is a coapplicant/collaborator on a project led by another institution), s/he advises the Office of Research Services on the outcome and forwards any communications s/he may have received.

Negotiation and administration of contracts

The University of Lethbridge requires that the agreement be in writing and signed by the **duly authorized University personnel**. Only the Vice-President (Research) has the legal authority to enter into research contracts that bind the University of Lethbridge. Research contracts must be between the University and the contracting agency, and cannot be written in the name of an individual, Department, Institute, Centre, School or Faculty.

Research contracts are inherently more restrictive than grants. Considerable care must be taken in the management and accounting of contract funds. Any intellectual property or overhead issues must be discussed with Research Services during contract negotiations before a contract will be signed on behalf of the University.

The signed contract is forwarded to Research Services to ensure that university compliance is maintained for research that requires committee review and approval (e.g. research involving animals, human subjects, biohazards and radioisotopes).

Financial Services will set up a research fund. Pre-spending authorization can be arranged through Research Services.

Invoices (if required) will be issued by Financial Services and not by the researcher or his/her designate. The agency or client will pay The University (not the researcher) for the research that was performed, as outlined in the agreement.

Chapter

8

Certification Requirements

If your project involves human subjects, animals, radioisotopes or biohazards, you are responsible for ensuring that the appropriate approvals are obtained in advance of research being done.

The Human Subject Research Committee and the Animal Welfare Committee are comprised of a selection of members that reflect the diversity of the research community engaged in the respective research. The Human Subject Committee includes a community member to represent community standards. The Animal Welfare Committee includes the university veterinarian and a community member. Research administrators sit on both committees.

Human Participants / Ethics Review

Research requiring ethics review

All research involving human participants as defined in Article 2.1 of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans, December 2010* (TCPS2) and involving either researchers or participants associated with the University of Lethbridge must be reviewed by the Human Subject Research Committee (HSRC). All research that involves living human participants requires review and approval by the HSRC in accordance with the *TCPS2*, before the research is started, except as stipulated below. This is to ensure that ethical principles and standards respecting the personal welfare and rights of participants have been recognized and accommodated.

Research involving human remains, cadavers, tissues, biological fluids, embryos or fetuses shall also be reviewed by the HSRC.

Research about a living individual involved in the public arena, or about an artist, based exclusively on publicly available information, documents, records, works, performances, archival materials or third-party interviews, is not required to undergo ethics review. Such research only requires ethics review if the subject is approached directly for interviews or for access to private papers, and then only to ensure that such approaches are conducted according to professional protocols and to Article 2.3 of the *TCPS2*.

Quality assurance studies, performance reviews or testing within normal educational requirements should also not be subject to HSRC review.

Student research involving human participants, for class projects or individual projects which involve data gathering with the intent to publish (including that which is accessible outside the classroom), should be reviewed by the HSRC. Minimal risk protocols will be given expedited review. Student research which has already been approved under another protocol will not require a separate review, if the procedures involving human participants are the same. In all cases, the instructor is responsible for ensuring that ethical standards are followed.

All individuals conducting research with human participants should be familiar with the

TCPS2. The policy statement is available on the Interagency Advisory Panel on Research Ethics, http://www.pre.ethics.gc.ca/.

Application process

Application for approval of a research project should be made, using the Application for Ethical Review of Human Subject Research which is available on the Research Services web site.

Allow up to one month from the date of submission for Committee review. Following approval of your protocol, any changes in procedures relevant to the ethical issues involved in the treatment of human participants are to be reported to the Office of Research and Innovation Services.

For additional information on the University of Lethbridge's guidelines and procedure for the review and approval of research involving human participants, visit http://www.uleth.ca/research/research-ethics

Animals

Research requiring approval

All research (including field studies), testing or teaching projects involving animals must receive prior approval by the Animal Welfare Committee.

All animal users must submit animal use protocol forms to the Animal Welfare Committee for review and approval. These animal use protocol forms should contain the information outlined in the CCAC Terms of Reference for Animal Care Committees. In the case of funded research, review and approval must occur before the release of funds.

Application process

There is a monthly call (with the exception of August) for protocol submission in order for the submission to be reviewed at that month's Animal Welfare Committee meeting. Please see contact Susan Entz for application deadline dates.

Protocol review

Protocols submitted to the Animal Welfare Committee should include sufficient information written in non-technical language, where possible, to describe and justify the experiments and methods to be used. All procedures must comply with Canadian Council on Animal Care (CCAC) guidelines and policy statements, and, if at variance with those guidelines and policy statements, justification for the variance on scientific grounds is required. Normally, protocols deemed to be CCAC Category of Invasiveness "E" will not be considered for approval.

Protocols will be reviewed with regard to the ethical treatment of animals in all aspects of the procedures, including housing, maintenance, and techniques. Pilot studies with few animals are encouraged when new approaches, methods or products are being tried.

The Animal Welfare Committee will ensure that research and testing projects receive a peer review for scientific merit. If the review is not conducted by an external peer review agency, the Committee will require that it be obtained according to CCAC policy statement on: the importance of independent peer review of the scientific merit of animal-based research projects. The Animal Welfare Committee will consult with an expert, if necessary, to determine the pedagogical merit of teaching animal welfare protocols.

Expedited review

Responsibility for interim review of protocols requesting immediate approval will be delegated to a protocol review subcommittee consisting of the Animal Welfare Committee Chair, the University Veterinarian, the Community Representative, and the Animal Welfare Committee Coordinator. If the protocol review subcommittee cannot reach an agreement, the protocol will be submitted to the Animal Welfare Committee for review. If approval is granted by the protocol review subcommittee, such interim approval will be subject to discussion and final approval at a full meeting of the Animal Welfare Committee.

The Animal Welfare Committee approval form is available on the Research Services web site, http://www.uleth.ca/research/research-ethics

Radioactive Materials

If your research involves the use of radioactive materials or sources of ionizing radiation, you are responsible for complying with the procedures and precautions contained in the Radiation Safety Policy and Procedures and with those prescribed in the University's license from the Canadian Nuclear Safety Commission (CSNC).

Prior to approval for using radioactive materials, an application for an internal permit issued under the University's license will be required for review by the Radiation Safety Officer and the Radiation Safety Committee.

For further information regarding radiation safety and applicable procedures, please contact the Radiation Safety Officer (Risk and Safety Services) at 403-329-2350.

Radiation emitting devices

The acquisition and use of radiation emitting devices is regulated by the Alberta Government. There is a registration and inspection process in place to ensure compliance with safety requirements for the following radiation emitting devices:

- Class 3b and 4 lasers
- Diffraction and analysis x-ray equipment
- Cabinet x-ray equipment
- Irradiation x-ray equipment
- Diagnostic or therapeutic x-ray equipment
- Computed tomography equipment
- Baggage inspection x-ray equipment
- Security x-ray equipment.

Note, this also includes equipment that may have imbedded devices.

In order to obtain a registration certificate, radiation facilities and equipment need to be inspected and tested. Risk and Safety Services maintains an inventory of radiation emitting devices and will arrange for inspection and registration with the Province's registry.

To ensure compliance, please contact the Radiation Safety Officer at 403-329-2350 prior to acquisition of any type of radiation emitting device.

For further information regarding radiation safety and applicable procedures, please contact Risk and Safety Services at 403-382-7176.

Biohazards

All grants involving biohazards must be approved by the Biosafety Committee in advance of the release of research funds.

For advice or literature on biohazards and applicable safety procedures, please contact a member of the Biosafety Committee or the Biosafety Officer, Bruce McMullin (Dept. of Biological Sciences).

Chapter

9

Post-award Administration

Types of Funds

Restricted funds

A restricted fund is one that is subject to externally imposed conditions that specify the purpose for which the contribution is to be used (e.g., externally sponsored research). These funds must be tracked separately in order to maintain budget control and enable Financial Services to provide financial reports to stakeholders and auditors as required.

Restricted funds cannot be comingled with University funds (unrestricted funds) or other restricted funds, unless the funding agency is providing only a portion of the funding for a project and has agreed that the University can submit a combined report that includes revenue from other sources.

Transactions must comply with external donor/sponsor terms and conditions. Externally restricted funds are also referred to as "trust" funds.

Unrestricted funds

An unrestricted contribution is one that is neither a restricted contribution nor an endowment contribution (e.g. provincial government operating grant, tuition fees, activities funded by self-generated revenues such as service activities or ancillary operations).

Unrestricted contributions can be internally restricted. Internal restrictions are imposed in a formal manner by the University, usually by resolution of the Board of Governors.

Opening new Funds

Fund holder eligibility

Only faculty members, professional research personnel and continuing staff employees may administer research funds.

All funds administered by the University, including sponsored research, are to be handled in accordance with the University of Lethbridge policies and procedures. Please see the Institutional Policies & Procedures web site for a listing of research policies and procedures (http://www.uleth.ca/policy/).

Change in status

Change in status must be communicated to the agencies on the eligibility status of researchers in a timely manner. Any change in your status should be disclosed to Research Services so the appropriate granting agency can be notified.

Authorizing and opening a research fund

Research Services authorizes the opening of all research funds. The following information is required before a research fund can be opened:

- Notice of Award

  Your Notice of Award will be: (1) a letter from the funding agency or sponsor outlining the terms of the funding support (i.e., period of award, payment schedule, timelines, purpose of award, funding restrictions, reporting requirements etc.); or (2) a research agreement/contract indicating the deliverables and obligations of each party.

- A copy of the grant application or research contract

  If a grant/contract has a proposal it must be included. All internally restricted research funds must have a grant proposal. If there is no grant/contract proposal for externally funded projects, this must be disclosed and explained why (e.g., the proposal is part of the agreement).

- Budget

  All research projects (internal/external) require a budget. Normally, the budget will be included with the grant/contract proposal or agreement. If not, or if the proposal has a different budget amount from actual funding, a new budget must be developed for funding received. The budget must add up to the funded amount of the agreement.

  For in-kind contributions, these contributions must be disclosed so that they can be verified and reported. In-kind contributions from other sources must have a contact person that can report on and verify contributions to Financial Services for reporting purposes.

- Research Proposal Form

  The Research Proposal Form must be complete. If there are space requirements or the UofL is contributing funding to the project it must be disclosed on this form. All appropriate signatures must be in place.

- Proof of animal welfare, human subject, radiation safety or biohazard committee approval, where applicable

- Request for New Fund Form

  The Request for New Fund Form must be complete and bear all required signatures.

- Overhead

  Overhead must be disclosed on all research projects. Where overhead is not being charged or is an ineligible expense, it must be documented on the "Overhead Charge Waiver" form.

A research fund *will not* be opened until all required documents are received by Research Services. For projects that are renewals and/or amendments to existing projects, the above documentation is still required by Research Services.

Once the documentation is complete and the research has been through the appropriate approval process (i.e., certifications obtained), Research Services will forward the Request for New Fund form and all relevant documentation to Financial Services. <u>All research funds are approved and opened by Financial Services.</u> See Appendix B for additional information on the process used to open a research fund.

All questions related to financial transactions should be referred to Financial Services [Mark Sera (ext. 2868) or Mike Fordham (ext. 7179)].

Understanding your fund number

All funds for research grants and awards are set up through Research Services. Each fund is comprised of 17 digits:

Fund - Organization – Account – Program – Activity – Location

- Fund (Digits 1 through 5)

  The fund represents "where the money came from" and answers the question, "what is the funding source?"

- Organization (Digits 6 through 9)

  The organization answers the question, "who is spending the money?" It identifies the faculty/department that is responsible for managing the funds. Each department will have a specific organization code.

- Account (Digits 10 through 13)

  The account answers the question, "what type of revenue was received or what was purchased?"

  Please see Appendix C for a listing of research related account codes.

- Program (Digits 14 through 17)

  The program identifies the type of research (e.g., internal or external research grant or contract).

- Activity

  The activity code is used to classify expenditures, which can span many funds, organizations, accounts, and program codes, so that they can be "lumped together" for reporting purposes. This code is optional.

- Location

  The location code is used primarily to classify expenditures by location. This code is optional.

Transferring funds from other universities

To transfer a grant from one university to another, regulations of the granting agency apply. However, the steps outlined below are more or less appropriate to most agencies:

Grant holders must inform the agency of their intention to transfer their grant and ensure that the following documentation is provided to that agency:

- Confirmation, by the university to which the funds are being transferred, of its willingness to accept and administer the grant;
- A financial statement from your former university to the receiving university (signed by the principal investigator) showing expenditures and balance of the grant up to the date of transfer, as well as confirmation of the actual transfer of the remaining grant funds;
- Confirmation from your receiving university that they have received the balance of the grant as shown on statement of account;
- Copies of any other correspondence relating to the transfer of the grant.

The following documents must be supplied to Research Services before a research fund can be opened:

- A copy of the grant including the budget;

- A copy of the Notice of Award;
- A letter or cheque indicating the amount of funds to be transferred to the University and animal welfare, human subjects, radiation safety and/or biosafety certification, if applicable.

Transferring funds to co-applicants

If you wish to transfer a portion of your funds to co-applicants located at another university, the following procedure applies:

- Inform Research Services of the identity of the grant to be shared, the amount, the co-investigator's name/university and any conditions that may apply;
- Research Services will send a letter to the recipient's university informing them of the desire to provide funds and asking for agreement to receive the funds under specific conditions;
- Once approval has been provided by the recipient university, installment payments will be made according to the agreed-upon payment schedule.

Financial reports will be sent by the recipient institution to the U of L in an agreed-upon format and time frame and these will be incorporated into the summary financial reports provided to the funding agency whose grant is being shared.

Financial Administration

Roles and responsibilities

The administration of grants awarded by a Federal Granting Agency is carried out by three partners: the Grant Holder or Grantee, the University, and the Agency. Refer to http://www.nserc.gc.ca/institution/mou_e.htm for more details on partners.

The Agency must adhere to federal laws and policies that dictate the conditions under which funds can be used. The Agency monitors the use of grants and interprets its rules and regulations for the University and the Grantee.

Grants are awarded to eligible researchers and are administered through Financial Services. The Grantee authorizes expenditures in accordance with Agency policies and regulations, as outlined in the relevant Agency Guide on its web site or as stated as a condition of a grant, and with Institutional policies. No one may initiate or authorize expenditures from a grant fund without the Grantee's delegated authority.

The University establishes appropriate procedures, systems and controls to ensure that Agency policies and regulations are followed. The University has the right and responsibility to withhold and withdraw approval of expenditures proposed by a Grantee that contravene the Agency's regulations or the University's policies and, when appropriate, seek advice or ruling from the Agency.

Administrative, personnel and accounting procedures must conform to the standards, practices and policies of the Grantee's Institution. The trust holder (i.e., the person who has signing authority for the fund) is responsible to ensure that the research is in accordance with the broad purpose of the grant.

Invoicing

Invoices for allowable expenditures should be issued by Financial Services and not by the researcher or his/her designate. Invoices are prepared by Financial Services in accordance with the restrictions, timing and format specified in the research contract. If Financial Services and the researcher disagree on a point of interpretation of the contract wording regarding invoicing, the onus is on the researcher to obtain clarification, in writing, from the third party contractor and to provide this to Financial Services. If this is not provided by the researcher, Financial Services will contact the third party to clarify the issue.

Reporting

All financial reports must be issued by Financial Services. Although financial reports are available in printable format through the iWeb reporting system (The Bridge), many funding agencies require reports to be provided in a specific format at specific intervals as outlined in the funding agreement.

To maintain the integrity of the accounting and reporting system, Financial Services will not reallocate expenditures for reporting purposes, except in the case of multi-sponsor projects that are not using the combined reporting method.

The Bridge

The Bridge supplies researchers with the financial details of their funds. The Bridge can be found on The University's web site at https://www.uleth.ca/bridge.

Four financial reports are available on the Bridge:

- Transaction Activity Report: Provides a detailed report of all revenue & expenditure transactions for a specific time period. You cannot request data from multiple fiscal years.
- Statement of Account: Displays the balance carryforward from previous years, year to date activity, any outstanding encumbrances (commitments) and the balance available for research and trust funds. A feature of this report is that it allows for a drill down capability for viewing the year to date activity details.
- Transaction Activity Report, Since Inception: Provides a detailed report of all revenue and expenditure transaction since the fund was opened.
- Statement of Account, Since Inception: Displays the balance carryforward at inception, inception to date activity, any outstanding encumbrances (commitments) and the balance available for research and trust funds. A feature of this report is that it allows for a drill down capability for viewing the inception to date activity details.

Chapter

10

Conducting Research

No expenditure may be made under any grant or contract until the funding is received or confirmed in writing by the funding agency. Under special circumstances, requests for prespending will be considered. Request for Prespending applications are available on the Research Services web site, http://www.uleth.ca/rch/funding/forms.cfm.

If the fund holder must meet certain conditions before the funding is secured, no charges can be made to the fund until the funding agency confirms in writing that the conditions have been met. If the applicable Dean and/or Vice-President Research or Vice President Academic pledges the funds in advance of receiving the funding or confirmation of funding, the expenditures will be made against the funds pledged, not the research fund.

Expenditures and commitments (encumbrances) may be charged to research funds according to the budget approved by the funding agency. Where the funding agency's permission is required to override a budget line maximum, it is the fund holder's responsibility to obtain this permission in writing and to provide it to Financial Services. If the budget submitted in the research grant application exceeds actual funds granted the fund holder must provide Financial Services with a revised budget approved by the funding agency.

In addition to University policies regarding procurement of goods and services and expense reimbursement, any additional restrictions placed on expenditures by the funding agency will be applied (i.e., some grants are to be used only for a particular piece of equipment).

In-kind contributions from vendors must be recorded by Financial Services in the accounting system as non-cash transactions and must be assigned an objective fair market value that is verifiable. This should be obtained through the requisitioning process (Materials Management).

Use of Grant Funds

Grant funds must contribute towards the direct costs of the research program or project for which the funds were awarded. The funds must be used effectively and economically, and the expenses must be essential for the research supported by the grant.

Contributions to shared expenses must be directly attributable to the funded research program or project, and agreed to and authorized by the Grantee. Additional eligible and non-eligible expenses specific to a program will be detailed in the Agency's program literature.

In the absence of a written Agency policy, the Institutional policy (e.g., per diem rates) is to be applied. In the presence of both an Agency policy and an Institutional policy, the Agencies require compliance with the involved Agency policy, recognizing that Grantees may also have to comply with Institutional policies.

The Institution has the right and responsibility to withhold approval of expenses proposed by a Grantee that contravene Agency requirements or Institutional policies.

For a greater discussion on the use of grant funds, please consult the Tri-council's spending guidelines at http://www.nserc.ca/professors_e.asp?nav=profnav&lbi=f3.

Deviation from proposed activities/budget

Grantees may generally deviate from the proposed research activities and/or schedules. Furthermore, they are not required to adhere strictly to the allocation of funds set out in the application as long as they use their grant for the broad purpose for which it was originally awarded. However, all conditions specified in the formal grant notification and relevant program requirements must be respected.

SSHRC only

- Major changes in research objectives require prior Agency approval.
- Research Time Stipend (RTS) funds may not be reallocated to research expenses, nor may research funds be applied to an RTS that has not been awarded.

NSERC only

- Grantees holding a grant for a specific research project must adhere to the activities specified in the proposal. Significant deviations from the original objectives of the research project, or the initial total budget, must receive prior authorization from NSERC.
- Research Tools and Instruments grants must be used only to purchase the specific equipment for which the grant was awarded. Grantees who wish to purchase equipment different from that specified in the application must obtain written permission from NSERC prior to its purchase. Grantees may, however, buy a model different from that requested in the application without prior NSERC approval.

Where the funding agency's permission is required to override a budget line maximum, it is the fund holder's responsibility to obtain this permission in writing and to provide it to Financial Services.

Ownership of items purchased or collected with agency funds

All equipment and material purchased or collected with Agency grant funds belong to the Institution and not to the individual Grantee. As custodian, the Institution is responsible for ensuring that the equipment is used to support the research program of the Grantee and Co-Grantees. Decisions on the use and management of the equipment should be made between the Institution and the Grantee or user group.

The Agency expects that the equipment will be made available to other faculty members and students for their research when not in use by the Grantee. The Institution may charge fees to these users to recover direct costs incurred. Insurance must not be charged to the Agency's grants. It is the Institution's responsibility to insure all of its equipment and assets, including powered vehicles. If Agency-funded equipment or vehicles are later sold, proceeds from the sale belong to the Institution and must be used for research-related purposes.

"One-Over-One"

The rule for approval is "one-over-one." All reimbursement claims must be signed by the claimant and approved by a senior person who is on an organizational level above that of the claimant. This will normally be the person to whom the claimant reports. To comply with "one-over-one" policy, anyone claiming an expense to your fund can get approval from you. Any claim to your grant by yourself requires the Chair’s approval.

Claims that do not conform to these policies and guidelines or that are incomplete will be rejected and/or returned to the approver for adjustment or completion. Expenses are subject to audit and may be adjusted even after reimbursement.

Over-expenditures

The trust holder (i.e., the person who has signing authority for the fund) is responsible for any over-expenditure and will be personally liable for any loss or over-expenditure not covered by other sources.

As soon as a trust fund is over-expended or shows an expenditure commitment in excess of the funding received, all payments from the fund, purchase orders, requests for salaries, etc. shall cease immediately.

In order to be allowed further use of the trust fund, the trust holder shall follow the following procedure:

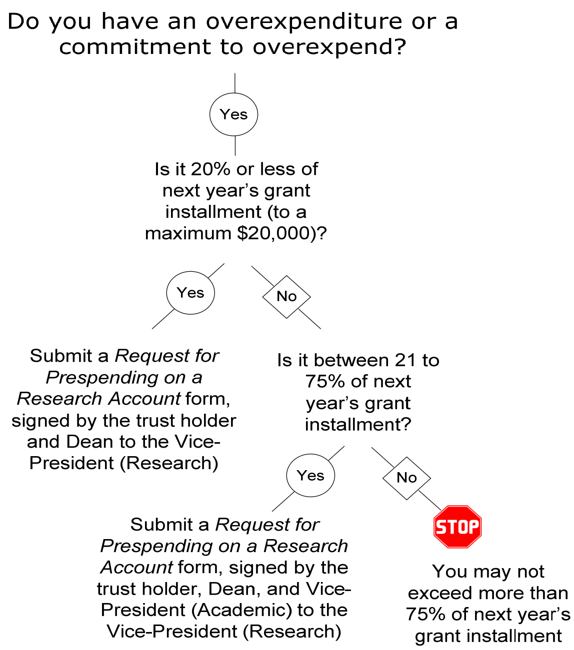


Figure 2 Overexpenditures Flow Chart

The University may provide interim funding to certain types of funds in recognition of the various methods and timing of the research funding, but will not permit expenditures in trust funds for which there is not appropriate funding. Limited over expenditures or interim financing will be allowed only for research grants which are of a continuing nature (i.e., grants awarded for two or more years paid in annual installments by a granting agency). No over expenditure or interim financing will be allowed, however; for the final annual installment unless the application for a renewal of the continuing grant was successful and notification from the granting agency has been received.

The Research Trust Account Over-expenditure Policy may be read in its entirety at http://www.uleth.ca/fsr

Residual balances

Each of the agencies comprising the Tri-council has guidelines pertaining to the use of residual funds. Residual funds are any funds that remain unspent by the grant holder at the conclusion of the grant period.

CIHR

- CIHR Common Grants – any funds remaining at the **end of the *extension* period** must be returned to CIHR.
- CIHR Common Awards – any funds remaining at the **end of the award period** must be returned to CIHR; but there is a 3 month period after the award period end within which to complete the expense claim paperwork.

NSERC

- Funds are transferred to the University's GRF (General Research Fund)

SSHRC

- Funds are transferred to the University's GRF (General Research Fund)

CIHR does not permit the use of a GRF for CIHR funds as any unspent balances must be returned to CIHR. The GRF for NSERC and SSHRC funds are kept separate. Both are held in trust by the University on behalf of Tri–council agencies.

Interactions with University departments

In the course of your research career at the University, you will interact with a number of departments on campus. The most common ones are listed below.

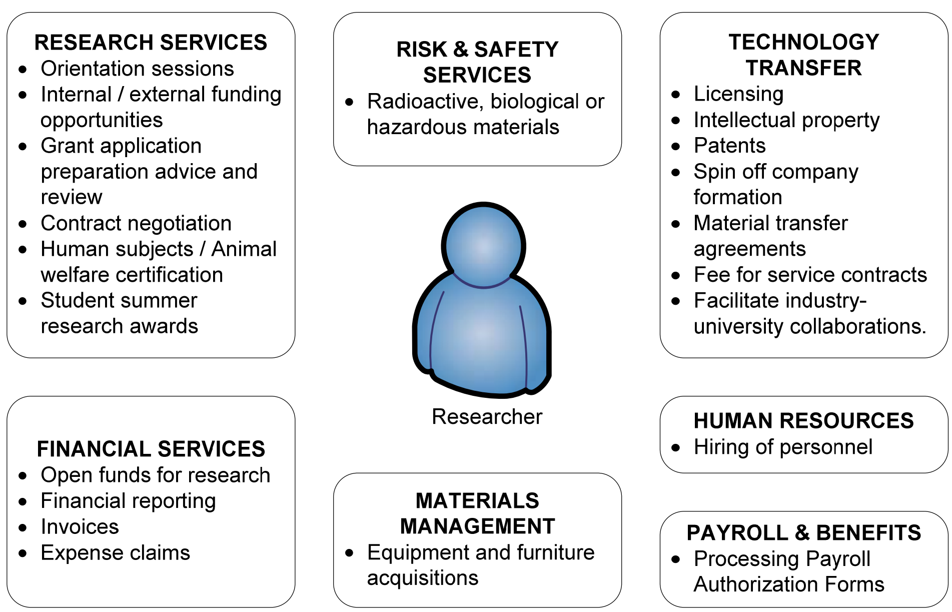


Figure 3 Departments you may interact with when conducting your research

Materials Management

All requests for outside purchases must use a Requisition Form and are to be processed through Materials Management. Only persons listed as signing authorities with Financial Services have the authority to issue requisitions.

When developing the budget for a restricted fund all quotes for capital purchases and contributions-in-kind must be obtained through Materials Management to ensure that University policies and government regulations are observed, that the budgeted amount takes into account all related costs and that the supplier is reputable. Unless there is only one vendor that can supply the required goods and/or services, the fund holder must provide a single source justification to Materials Management. The Research Sole Source Justification form may be downloaded from the Materials Management web site http://www.uleth.ca/fin-mm.

Contributions-in-kind from vendors must be recorded by Financial Services in the accounting system as non-cash transactions. It will be assigned an objective fair market value that is verifiable. This should be obtained through the requisitioning process.

Requisitions and purchase orders are discussed in greater detail in the Expenditures section.

Human Resources

The appointment, extension, or termination of an employee must be initiated through Human Resources.

Additional information is available on the Human Resources web site, http://www.uleth.ca/hum

Payroll and Benefits

Payroll and Benefits is responsible for employee compensation and benefits. Payroll Authorization Forms are used when appointing staff, terminating or changing current appointments. Examples include rate changes, additional pay, extensions, promotions, reclassifications, transfers, supplementary payments, etc. A Research Payroll Authorization Form must be completed for all employees employed by a research grant, regardless of the term of contract.

For additional information on completing the Payroll Authorization Form, please see "How to Complete the PAF" found on the Payroll web page (http://www.uleth.ca/hum/pay/listDocs?type=8).

Only persons listed as signing authorities with Financial Services shall have authority to submit a payroll authorization form. All hourly timesheets must be approved by the signing authority before Human Resources can process hours.

This form is available at http://www.uleth.ca/hum/pay

Risk and Safety Services

Risk and Safety Services endeavors to provide a safe campus for employees, faculty, and students, as well as the general public. Every reasonable effort will be made to prevent injuries and protect the University community from accidents.

Reporting of Accidents and Incidents

It is important to report any accident and/or near miss as soon as possible to Security at 403-329-2345.

When involved in an accident or incident, you must complete the Campus Accident Report Form and submit it to OHS within 24 hours. In cases of a near miss, please complete the Near Miss Investigation Report. The forms are available on the Risk and Safety Services web site (http://www.uleth.ca/hum/riskandsafetyservices).

Training and Certification

Occupational Health and Safety offers W.H.M.I.S. training for any Faculty, Staff or Student who works with or are in contact with Hazardous Materials and/or Controlled Substances. The course is designed to address three areas: Labels/Symbols, Material Safety Data Sheets (MSDS) and Employee Education. If you are interested in or require this training for yourself or your research team, please contact OHS.

Hazardous Wastes

Any hazardous wastes produced as a result of the work performed by workers must be properly disposed of according to both government and University Health and Safety guidelines and regulations. Chemical waste shall never be disposed of by pouring it down a drain. The hazardous waste shall be properly packaged and labeled prior to disposal.

Collection of hazardous wastes will be scheduled 4 times per year approximately 2 weeks after the semester has ended (i.e., May, August and January), and as required. If you are working with Hazardous Wastes please review the collection procedures at http://www.uleth.ca/hum/riskandsafetyservices .

Working Alone

OHS, Information Technology office and Campus Security have developed a web site that users can access to sign in and out when they are on campus working alone. This unique method of allowing employees to make Campus Security aware of their location when on campus working alone also provides a quick way to find out how many employees might be in a particular area or building in case of emergency situation. To access the Working Alone system, please see http://www.uleth.ca/workingalone.

Hiring and supervising research staff

If you are thinking about hiring a research assistant, you may need to know: THE UNIVERSITY, NOT THE GRANT OR GRANTEE, IS THE EMPLOYEE'S EMPLOYER.

Types of positions

A temporary position is a position not expected to continue beyond 3 months.
A term position is expected to exist beyond 3 months but not beyond 15 months.
A sessional position is a continuing position which is subject to seasonal lay-off.
A continuing position is expected to exist for at least 3 months from the date it is filled and has no specified end date.

Salary details

The University does not specify salary ranges for the various types of research positions. Instead, it is up to the supervisor to determine the salary. When budgeting, it is important to note that the cost of employment is greater than the employee's salary. The employee receives the hourly rate of pay plus 6% vacation pay; however, the supervisor's grant is also charged an additional 10% for CPP and EI. The exception to this is students whose employment relates to their post-grad thesis: CPP and EI expenses are not charged to the grant.

Employees classified as non-student (i.e., technicians) receive additional benefits – namely extended health and dental coverage – upon completion of a three month probation period.

If you would like to hire a research assistant, there are a number of funding sources available to augment the funds provided by your research grant. The main internal and external funding opportunities are listed below.

Application Signatures

Students must contact Research Services or the School of Graduate Studies, where appropriate, to arrange a signature for their studentship / fellowship application(s) if:

- The granting agency requires an institutional signature.
- The funds will be administered by the University on behalf of the student.

In both instances, all of the required University of Lethbridge signatures must be in place *before* the institutional signature is granted. This includes signatures from the applicant, his/her supervisor, Department Chair and Dean.

Students do not need to obtain an institutional signature on studentship / fellowship applications where awarded funds will be paid directly to the student.

Funding sources for undergraduate students

Please consult the appropriate agency's web site for additional information on each of the following funding opportunities. If you have any questions, please contact Susan Entz.

AHFMR Summer Studentship

The **Alberta Innovates - Health Solutions** (AI-HS) program, previously known as **Alberta Heritage Foundation for Medical Research** (AHFMR), funds the Summer Studentships award. This is an opportunity for diligent students with superior academic records to participate in medical or health research in Alberta during the summer. The aim of the award is to encourage the pursuit of formal training and career in health research. The award is tenable for a minimum of 2 months, and a maximum of 4 months during the period of May to August. The stipend is currently set at $1,300 per month.

Application procedures are outlined on Research Services' web site (http://www.uleth.ca/research/) under <Undergraduate Funding>. Summer Studentship guidelines and application forms are available from the AI-HS's web page.

Chinook Research Summer Award

The intent of the **Chinook Research Summer Award** is to stimulate interest in research and advance the training of undergraduate students from all Faculties, by providing them with a suitable research training experience with a University of Lethbridge faculty member who has an ongoing research program. In some disciplines (e.g., Fine Arts), the student may embark on a creative project with direction from a faculty member.

The maximum value of each award is $5,625 to be paid over a four-month period of full-time employment. A faculty member may supplement the award.

Application procedures are outlined on Research Services' web site (http://www.uleth.ca/research/research-services).

NSERC Undergraduate Student Research Award

The **NSERC Undergraduate Student Research Awards** are meant to stimulate an interest in research in the natural sciences and engineering. They are also meant to encourage applicants to undertake graduate studies and pursue a research career in these fields.

These awards have a value of at least $5,625 (which includes a supplement of at least 25% which supervisors are required to provide). The normal duration of the award is 16 weeks.

Application procedures are outlined on Research Services' web site (http://www.uleth.ca/research/research-services). Applications and guidelines are available from NSERC's Undergraduate Student Research Awards (USRA) in Universities web page (http://www.nserc.ca/sf_e.asp?nav=sfnav&lbi=1a).

Undergraduate Research Enrichment

University of Lethbridge students who are actively participating in research and/or creative activities with University of Lethbridge faculty members may apply to attend a recognized symposium or conference related to the research or creative work. Preference will be given to students who obtain financial support from other sources and are requesting funding to augment other funds. Awards will be limited to travel costs associated with a research presentation.

The maximum available per student throughout the course of his/her undergraduate program is $200. Funds are awarded on a first-come, first-served basis.

Applicants must apply for funding and receive notification of their award, prior to attending the conference and prior to submitting conference expenses. Submissions should be forwarded to the Office of Research Services. Applications will be considered as received, but allow three weeks for review and notification.

Funding sources for graduate students

Research awards

All graduate student awards are administered by the School of Graduate Studies. For additional information on each of the following funding opportunities, please consult the appropriate agency's web site or contact Graduate Studies:

- Canada Graduate Scholarship, Master's (CIHR)
- Doctoral Awards (SSHRC)
- J. Armand Bombardier Canada Graduate Scholarship (SSHRC)
- NSERC Alexander Graham Bell Canada Graduate Scholarship (NSERC)
- Postgraduate Scholarship (NSERC)
- Vanier Canada Graduate Scholarship

Travel awards

Graduate students may apply to the School of Graduate Studies for conference and travel grants. These awards provide financial support to travel to a conference, workshop or symposium wherein work directly related to their graduate program will be presented. Funds are available to attend such an event where it will significantly advance the student's thesis or program. Students must be first author or presenter at a nationally or internationally recognized conference and tenable upon confirmation of attendance and reimbursement.

Since funding is limited, contributions should be sought from other sources. Requests for funding and the amount obtained from other sources should be indicated in the letter of application. Applicants must apply for funding and receive notification of their award, prior to attending the conference and must provide proof of attendance upon their return.

Specific details about the individual awards are as follows:

The **Profiling Award** gives priority to Canadian citizens or Permanent Resident students who, at the time of the conference, are currently registered in a full-time M.A., M.Sc. or Doctoral program. Master's students may apply during their second year of study. Doctoral candidates may apply at any time in their third or fourth year of study. Normally, the maximum available per student throughout the course of his/her master or doctoral program is $3,000.

Applications for the Profiling Award are due once a semester with 11 awards available to those who meet the criteria. Applications will be considered as received, but decisions will be made close to the end of the semester for that competition. For additional information on this funding opportunity, please contact the School of Graduate Studies

The **Research Dissemination Award** gives priority to international students who, at the time of the conference, are registered in a full-time M.A., M.Sc., or Doctoral program. Master's students may apply at any point in second year of study. Doctoral candidates may apply at any time in their third or fourth year of study. Normally, the maximum available per student throughout the course of his/her master or doctoral program is $1,000. Funds are awarded on a first-come, first-served basis.

For additional information, please contact the School of Graduate Studies.

Other Government Programs

Summer Temporary Employment Program

The Summer Temporary Employment Program (STEP) was developed by Alberta Employment and Immigration and community partners to help Albertans who would benefit from temporary employment during the spring and summer months – typically post-secondary students and high school students.

STEP employees must be given full-time employment (30-40 hours per week), which may be funded for periods of continuous employment ranging from six weeks to four months. Employees must be paid minimum wage. STEP provides a wage subsidy of $7.00 per hour.

Additional information is available on the Government of Alberta's web site: http://www.employment.alberta.ca/CES/3158.html

Canada Summer Jobs

Canada Summer Jobs is an initiative of the Summer Work Experience program. It provides funding for not-for-profit organizations, public-sector employers, and small businesses with 50 or fewer employees to create high-quality summer job opportunities for students between the ages of 15 and 30.

Additional information and application instructions are available on the Government of Canada's web site: http://www.servicecanada.gc.ca/eng/epb/yi/yep/programs/scpp.shtml

Payroll

Payroll Calendar

The Payroll Calendar produced by Payroll is a useful tool for keeping abreast of various payroll deadlines. The calendar highlights:

- Statutory holidays;
- Cut-off dates for the submission of Payroll Authorization Forms, Timesheets and Exception Reports; and,
- Pay dates for regular pay runs.

The Payroll Calendar is available on Payroll's web site: http://www.uleth.ca/hum/pay/

Research Payroll Authorization Form

When employees are to be hired to positions that are funded by research grants, supervisors must use a *Research* Payroll Authorization Form (PAF). This form is to be used when appointing staff, terminating or changing current appointments (e.g., rate changes, additional pay, extensions, promotions, reclassifications, transfers, supplementary payments).

The Research PAF should not be confused with the other PAF form in use by Payroll. The Research PAF requires information specific to the employee and his/her involvement in the research. In the 'Position Appointment Type' section, the supervisor must categorize the research assistant as it makes reporting easier. To do so, the supervisor must:

- Identify the employee's status (e.g., student, non-student, or postdoctoral fellow) and citizenship;
- Indicate if the research relates to his/her post-grad thesis;
- State if the employee is related to the researcher; and,
- Specify if the employee is already employed at the University.

The supervisor must also complete the 'Position Duties' section on the second page. This is important as it proves the employee is working on research. Research PAFs submitted without the required information will not be processed by Financial Services or Payroll.

Payroll will not accept photocopies of the Research PAF. Payroll is unable to process copies, incomplete, and/or unsigned documents. The original document, bearing an original signature, must be on file in Payroll.

Timesheets

Hourly paid employee's timesheets are from the 16th of the previous month up to and including the 15th of the month they are submitted. Timesheets must be submitted via the Bridge, no later than the 17th of each month, or next working day. Cut-off (deadline) dates must be adhered to in order to ensure employees receive their pay on the appropriate pay date. It is the supervisor's responsibility to verify that the timesheet is complete and correct.

Roles and responsibilities

It is the employee's responsibility to:

- Ensure Timesheets/Exception Reports are completed fully and correctly and submitted to his/her supervisor by the deadline.

It is the supervisor's/manager's responsibility to:

- Ensure PAF's are completed fully and correctly with appropriate signatures and sent to Payroll in advance of the deadline;
- Ensure Timesheets/exception reports are completed fully and correctly;
- Approve the Timesheets/exception reports before the deadline (17^{th} of each month, or next working day).

It is Payroll's responsibility to:

- Ensure that all PAF's/Timesheets/Exception Reports are completed fully and correctly with appropriate signatures and those that are received on time are processed for payment on time;

If forms are submitted incomplete/incorrect and beyond the deadline(s), the supervisor/manager must inform the employee that payment will be received the following month.

Purchasing Equipment and Supplies

Requisitions

Internal

For purchases between university departments, a paper Internal Requisition form is used. There are two internal requisition forms. The nature of the purchase will dictate which form is used:

- Printing Services requisition – for all printing requests submitted to the Copy Centre or Printing Services.
- Internal requisition – for all other requests.

External

All requests for outside purchases must be submitted on a requisition form, which is accessed via the Bridge. Once processed, a purchase order is generated.

Departments submitting the requisition must provide the following mandatory information:

- Name and department
- Suggested vendor
- Date required – Enter a realistic specific date; do not use RUSH or ASAP
- Insurance – indicate if transit insurance is to be included or excluded
- Complete description of the material or service required – include the unit cost and quantity required
- Fund number – complete FOAPAL to be charged
- Supporting documents – where there are documents to support the requisition, indicate if the documents are sent to Materials Management via email, fax or campus mail.

Materials Management will not accept a requisition until it has received all of the above items. For additional instructions on completing the requisition form, please consult the *On-line Requisition Entry Instruction* document, which is available on Material Management's web site (http://www.uleth.ca/fin-mm/listDocs?type=7)

Occasionally, goods are shipped F.O.B. Origin (Freight on Board Origin). This means that the buyer owns the goods in transit and must pay freight and insurance charges. The department (the buyer) must indicate whether it will assume the risk of loss and rely on the University of Lethbridge Self-Insurance Program, subject to a $2,500 deductible. For additional information, please consult the Risk & Safety

Services web site at: http://home.uleth.ca/ins/self.html

All equipment purchases are to go through Materials Management. For purchases from **Fisher Scientific, VWR Canlab Canada** and **Sigma Aldrich Canada** Materials Management has made arrangements with these suppliers that allow individual requisitioners to order directly online. The only exception is when a formal quotation has been obtained. An online requisition is still required; however, only the order number or confirmation number from the company needs to be referenced along with the total dollar amount of the order.

In order to order online, the requisitioner must be registered with the respective supplier. For additional information on how to register with each company, please contact Materials Management.

Equipment such as computers, cameras, video recorders, and other equipment must go through Materials Management rather than purchasing them yourself and claiming on an expense claim. Expense claims are not intended for such purchases. A list of common expense claim items can be found at http://www.uleth.ca/fsr/Documents/travel_policy.htm

Exceptions

Requisitions are required for all expenditures, with the following exceptions:

Expenditure	How to be reimbursed
1. Travel related items (e.g., travel expense claims, conference registration fees, airfare etc.)	Submit an expense claim for personal reimbursement
2. Personal reimbursements	Submit an expense or professional supplement claim, or request reimbursement from departmental petty cash fund
3. Personnel services (e.g., benefits, wage and salary administration)	Submit a Payroll Authorization Form. If the position is research related, submit a Research Payroll Authorization Form
4. Bookstore retail activities	Invoices processed by the Bookstore and paid by Accounts Payable
5. Library book acquisitions	Invoices processed by Library and paid by Accounts Payable
6. Contracts for construction	Alterations or renovations are processed through Physical Plant
7. Contract stationary purchases (e.g., corporate express)	Authorized individuals may order online
8. Items which cost less than $1000 (exception: cell phones)	Submit merchant's invoice to Financial Services with the following information: signature of order originator, FOAPAL, reason for purchase, signature of approver with signing authority.
9. Legal fees	As in #8 above.
10. Memberships – Professional Associations	As in #8 above.

Standing Orders for Frequent Purchases

Standing Orders are open purchase orders for the procurement of goods, services or maintenance/repairs on an as-needed basis during a specified period of time. Standing orders may not be used for purchases involving contracts and grants, or for purchasing capital equipment. A standing order is issued on a yearly basis and is subject to review (renewal or cancellation) annually.

Creating a Standing Order

A Standing Order is created in the same manner as external requisitions – through the Bridge. In the requisition, indicate the goods and/or services to be purchased, the estimated annual usage (both in quantity and cost) and the University employees authorized to place orders under the standing order. After all approvals are received, a Purchase Order is generated in the system.

Using a Standing Order

In order to purchase goods and/or services against an existing, approved Standing Order, the vendor must be given the Purchase Order number. Vendors should be instructed to quote all purchase order numbers on all invoices and credit notes and forward to the University of Lethbridge Accounts Payable Department.

Renewing a Standing Order

Materials Management will send each Department/Fund Holder a list of current Standing Orders prior to the end of the current fiscal year. If the Standing Order should be renewed, it is important to renewal the standing order prior to the end of the current fiscal year. This will ensure there is no disruption of services or supplies. The process for renewing a Standing Order is the same as that used to create the Standing Order. The exception is that the new requisition must reference the current Standing Order Purchase Order number.

When submitting a Standing Order renewal request, it may be useful to review the historical amount spent on that standing order to determine the amount needed for the next fiscal year. As well, it is important to indicate if there are any changes to the employees authorized to sign for the merchandise.

Canceling a Standing Order

If the Standing Order is no longer needed, please notify Materials Management as soon as possible. It will be removed from the system.

Tendering

All public funded institutions are required to procure goods and services, of a significant value, through a competitive bidding process. This ensures that all qualified suppliers are given equal opportunity to compete, are treated fairly and evaluated equally.

Tendering Process

Step 1 – User Department and Materials Management discussions prior to tendering

Prior to initiating the tendering process, Materials Management will discuss with end-users the key elements involved in the process. Materials Management and the end-user department(s) should agree to the following *before* issuing the tender:

- Most suitable tendering format (i.e., RFP or RFQ)
- Selection criteria and evaluation process
- Venders to be included/excluded
- Vendor requirements
- Minimum specifications to be included
- Essential terms and conditions to be included in the tender documents
- Clarification of the roles and responsibilities of both departments before and after the tendering process
- Any end user concerns regarding the vendors or bidding process.

Step 2 – Evaluating Tender Responses

Normally, one of two evaluation methods is selected depending whether a Request for Quotation (RFQ) or Request for Proposal (RFP) document is used. For RFQ documents, the assumption is that all bidders are qualified. In the absence of any other selection criteria, contract awards must be made upon the basis of the supplier submitting the lowest, qualified bid.

Three main approaches can be used for evaluating proposals: (1) elimination or short listing, (2) using weights and scores, or (3) a combination of the two.

Step 3 – Developing a Letter of Justification

Materials Management requires a brief Letter of Justification from the department before a purchase order can be issued. This Letter confirms,

- That only the selection criteria listed in the tendering documents were used to evaluate the bidders.
- That the process to select/eliminate the bidders was fair and consistent with the criteria specified in the RFP or RFQ.
- That the University's tendering process was properly conducted.

A sample Letter of Justification is available on Material Management's web site: http://www.uleth.ca/fin-mm

Exceptions

There are three exceptions to the tendering process:

- Sole source justification

  The specifications of the product/service limit its purchase to only one known source of supply. This does not mean a 'Single Source' where one vendor is preferred over another. A brief statement should accompany the requisition form stating the reason(s) for the specification(s) and why an alternative(s) is not acceptable.

- Emergency purchase

  The product or service is needed to protect life and property, prevent substantial economic loss, and/or prevent the interruption of essential services. This does not apply to poor planning. Emergency purchases are at the discretion of the Manager of Materials Management.

- Sole source justification by reason of compatibility

  To ensure validity and reliability of research results, a researcher can request that the same manufacturers equipment be purchased as is already in their laboratory. This is usually because both pieces of equipment will be integrated in some way in conducting experiments. A brief written request is to be forwarded to Materials Management outlining the need for compatibility.

- Goods/services are already under contract

  Certain contracts may already exist for some commodities. These may be through contracts the University has issued or through authorized third party contracts.

The "Department Single Source Justification" and "Research Sole Source Justification" forms are available on Material Management's web site: http://www.uleth.ca/fin-mm/listDocs?type=8

Tendering Thresholds

Not all purchases are subject to the competitive bidding process. The tendering process is informal and fast for inexpensive items (i.e., <$5,000). For larger dollar amounts, the process usually takes more time relative to the complexity of the need. The decision whether to tender a request or to obtain quotes is dependent upon the value and complexity of the purchase. The following amounts are to be used as a guideline for this purpose:

Value	Procedure
<$5,000	Goods/services – at the discretion of the requisitioning department or Materials Management. Capital purchases –it is recommended to obtain at least 3 quotations for purchases valued in excess of $1,000, if known vendors exist.
$5,000 to $14,999	Goods/Services – at least 3 written quotations should be obtained, if known vendors exist. Construction projects – at the discretion of Facilities to obtain competitive quotes.
$15,000 to $24,999	A formal tender is recommended to be sent to at least 3 qualified bidders and attempt to receive at least 3 written quotations, if known vendors exist.
$25,000 to $74,999	Goods/Services – a formal tender (Request for Quotation [RFQ] or Request for Proposal [RFP]) should be sent to three or more qualified bidders, if known vendors exist.
$75,000 to $99,999	Goods/Services – a formal tender (RFQ/RFP) must be posted on the Alberta Purchasing Connection or through an approved Alberta/British Columbia Trade Investment and Labour Mobility Agreement (TILMA) medium.
$100,000 +	Goods/Services – a formal tender (RFQ/RFP) must be posted nationally through an approved Agreement on Internal Trade (AIT) medium.
$200,000 to $249,000	Construction projects -- a formal tender (RFQ/RFP) must be posted through an approved Alberta / British Columbia TILMA medium.
$250,000 +	Construction projects – a formal tender (RFQ/RFP) must be posted nationally through an approved AIT medium

Equipment Quotes for Grant Applications

To comply with the Tri-Council Memorandum of Understanding and University Policy, all research grant / contract applications that include equipment purchases greater than $1,000 require a formal quote before submission. Materials Management will take care of the quote process. They can negotiate the best terms for a purchase including freight costs, insurance risk, discounts, and payment terms. Imported items are subject to stringent regulations and may require NAFTA certificates or other documentation.

Who to contact?

Obtaining formal quotes at the application stage will expedite how quickly equipment is obtained once the grant is awarded. Please ensure that equipment quote requests are submitted in a timely fashion, at least ten days before the grant/contract application deadline.

Multimedia/computer equipment quotes .... Jen Seabrook
Scientific equipment quotes .... TBA

If the purchase of new equipment involves renovations, new space requirements, or any other restrictions (such as Laboratory Equipment), please contact John Claassen (john.classen@uleth.ca, phone: 403-329-2592)

Shipping and Receiving Goods

The Shipping/Receiving department within Materials Management is responsible for shipping all goods on- and off-campus, with the exception of postal shipments, government courier and personal shipments.

Couriers

All courier mail must have the fund clearly indicated on the envelope/package. The envelope/package will be picked up in the morning mail delivery or must be delivered to Mail Services before 2:30 p.m. Next day delivery is available for most major centres in Canada and the USA. Depending on the destination, 4 to 6 working days may be required for international shipments.

For all other goods, such as returns for repair or credit, dry ice etc. a "Request for Shipping Services" form must accompany the goods explaining any special instructions. This form is available on Material Management's web site: http://www.uleth.ca/fin-mm/Services/shipping.htm

Receiving services

Suppliers of goods and services to the U of L are instructed to ship goods to the University's Shipping/Receiving department. Receiving personnel are responsible for identifying shipments by purchase order number or procurement card number, recording the receipt of goods, and for delivering the shipment to the originating department or end user. It is the responsibility of the originating department or end user to verify that the goods received correspond with the items ordered on the purchase order or procurement card. Upon receipt of goods, if there is concealed damage, notify the Shipping/Receiving Department immediately.

Tracing

Tracing of all shipments is done through the Shipping/Receiving department or Mail Services.

Mail delivery

Mail is picked up and delivered once daily from all departments on campus. All incoming mail from Canada Post is sorted and delivered to departments with the regular mail delivery service. All outgoing mail is charged to the department unless otherwise indicated on the envelope. Shipping/Receiving personnel provide mail delivery services in the mornings only.

Intercampus mail must be addressed by name and department. Please avoid addressing mail by room number as it does not have enough information to be processed.

Surplus Equipment and Materials Disposal

Equipment that is worn out, obsolete or no longer required by a department may be traded in on new equipment or disposed of as surplus.

Equipment and Furnishings Declaration form

The department must complete an "Equipment and Furnishings Declaration" form for all surplus equipment. When completing the form, please ensure the following is completed:

- Bar code number (use the serial number if the bar code is not available)
- Description
- Reason for disposal
- Value of item (if available)
- Detailed condition
- Any additional information that would assist in the proper disposal of the item

The Declaration Form should be forwarded to the appropriate approver (e.g., Department Chair and Dean), then forwarded to Financial Services. The approved Declaration Form will be the authorization for the removal of the item to the appropriate storage area.

Trade-ins are to be handled as above and a copy of the paperwork must be attached to the purchase requisition of the item it is being traded against.

If there are any questions regarding the disposal or surplus equipment or materials please contact Materials Management.

Travel and Business Expenditures

All university travel and business expenses, regardless of the ultimate source of funding, should adhere to the following guidelines. Granting agency grant holder guides or terms of research contracts will usually indicate any variations from these guidelines. If it is unclear which travel expense procedure applies, contact the Manager, Research Accounting.

Allowable travel expenses

Transportation

Reimbursement of public transportation costs will not normally exceed the lowest logical cost of air transportation (i.e., economy class). Additional air costs incurred for stopovers that are no related to University business will not be reimbursed.

Use of private automobile should be limited to those trips where no suitable public transportation is available or where private automobile is more economical considering all costs. When a private automobile is used strictly for personal convenience only actual costs (i.e. kilometres driven, hotels, meals, etc.) will be reimbursed up to but not exceeding the cost of equivalent public transportation such as lowest logical air fare.

If you are claiming mileage and are unsure as to what figure to use, Appendix D lists mileage calculations for destinations in Alberta from Lethbridge.

Hotels

Reimbursement for accommodation will be limited to reasonable single occupancy rates, as per receipts. A specified rate can be claimed when staying with friends or relatives to provide a token of appreciation – no receipts are required.

Meals

Reasonable expenses for meals while travelling on University business may be reimbursed by actual costs, per diems or a combination of both.

- Actual Costs

  Claims for meals and incidentals must be listed separately on the expense claim and may include taxes and gratuity. Detailed restaurant cash register receipts, must be submitted to support claims based on actual costs. Financial Services may adjust claims where meal costs are considered excessive.

- Per Diem Allowance

  An allowance by meal or a composite daily allowance may be claimed instead of actual cost. Where this allowance is claimed, no additional amount may be claimed for meals. The per diem allowance must be adjusted where meals are included in transportation charges, in conference registration fees or in the event of a partial day's travel, etc.

  Per diem allowance rates will be paid at the US dollar equivalent for travel outside of Canada. Individuals may not claim per diem allowances for another individual;

only actual costs may be claimed. Per diem amounts may not be charged if a third party (including another University employee) has paid for meals on behalf of the claimant. Meals charged to hotel rooms must be supported by detailed receipts if claimed.

Reasonable gratuities for meals (max. 15%) may be claimed, unless claiming the per diem meal allowance in which case gratuities are included. Other gratuities are to be covered by the Daily Travel Allowance.

Insurance

The cost of additional health insurance during travel outside of Canada is eligible for reimbursement.

Private automobiles used for university business are not covered by the University's insurance policy. Accordingly, staff members are advised to consult their own insurance agent to secure any necessary additional insurance coverage. It may be advisable to rent a vehicle as all insurance coverage is then provided by the rental agency and the University. Individuals may be reimbursed for any additional insurance required for business travel.

Other travel costs

- Daily travel allowance – minor out of pocket expenses such as local telephone calls, gratuities to porters etc., and parking may be recovered (no receipts are required).
- Taxi/ground transportation – reasonable expenditures will be reimbursed and receipts should be provided whenever possible.
- Registration fees – Expenditures for conference registration, workshop registration etc. will be reimbursed as per receipts.
- Telephone – Long distance toll charges related to business calls only will be reimbursed and shown separately.
- Sundry – Miscellaneous expenditures for conference proceedings, books etc. will be reimbursed as per receipts and should be itemized.
- Parking – parking expenses related to off-campus University business are allowable expenses

Allowable business expenses

Entertainment

Expenses under the public relations expense policy include the cost of teas, luncheons, parties, or the cost of meals and refreshments for a guest or a visitor to the University. The expenses may only be in the form of food or refreshments. The costs of gifts, flowers, guest admissions to theatre performances, etc. are not included in entertainment expenses.

Gifts

Reasonable amounts for gifts will be reimbursed. Note that certain gifts may be considered taxable as determined by Financial Services and Canada Revenue Agency.

The Travel and Business Expense Policy and Procedures may be viewed in its entirety on the Financial Services web site at http://www.uleth.ca/fsr/Documents/travel_policy.htm

Reimbursement

Expense claim procedure

Expense claims should be submitted online through The Bridge at https://www.uleth.ca/bridge. Please refer to the Online Expense and Professional Supplement Claim User Manual, available under Policies on the Financial Services web site (http://www.uleth.ca/fsr/) or contact Financial Services for details. **Original receipts must be provided to support the claim.**

Expense claims should be submitted for reimbursement within 30 days of incurring the out-of-pocket expenses. Financial Services does not require a hard copy of the expense report, but does require original receipts, where applicable.

Reimbursement cannot take place until Financial Services has received the receipts, and all approvers have approved the claim. All expense claims must include original receipts (e.g., air ticket stubs, detailed hotel bill, meal receipts or other proof of payment) and documents or explanations to support and verify all expenditures claimed, including payments made directly to the suppliers by the University. **Credit card receipt slips alone are not valid receipts for these types of expenditures.**

Expense claims must include the following information:

For travel – the purpose of the trip, the persons, places or organization visited, and the dates of the visit must be shown. If the trip is funded from a research fund, the nature of the research activities must be indicated.

For entertainment – the purpose of the expense, the name of the group or the names of the individuals on whose behalf the charges are being incurred, the number of persons covered by the charge and the actual cost must be shown.

Where a free or discounted service is provided, e.g., air tickets, car rentals, hotel accommodations, etc., only actual out-of-pocket expenses will be reimbursed.

Expenses to be reimbursed to an individual by an outside organization or agency will not also be reimbursed by the University. In the event that the individual is reimbursed by an outside organization or agency subsequent to being reimbursed by the University, a refund must be made promptly to the University.

Normally, all reimbursements to University staff will be paid in Canadian funds in amounts equivalent to the actual expenses incurred. All expenses must be listed on the claim in the currency that was used for the actual expenditures. Where possible, the exchange rate should equal the claimant's actual cost of obtaining foreign funds. Otherwise, appropriate exchange rates will be applied by Financial Services.

Certain expenses are reimbursed at a standard rate. See Appendix D for current rates.

The Travel and Business Expense Policy and Procedures may be viewed in its entirety on the Financial Services web site at http://www.uleth.ca/fsr/Documents/travel_policy.htm

NechoExpense

NechoExpense is web-based and allows you to report business related expenses and be reimbursed through direct deposit. This software can be used to process personal reimbursements for both professional development and expense claims. If you are unfamiliar with Necho and would like to receive online expense / professional supplement claim training, please contact Financial Services.

Financial Services has developed a number of documents to guide you through the NechoExpense system. They are:

- *Online Personal Reimbursement System User Manual* – this manual is designed to assist you in preparing, submitting and approving claims.
- *Online Expense Frequently Asked Questions* –this document should answer any questions you may have concerning the online system.
- *Personal Reimbursements, Receipt Submission Process* – this document outlines the process for submitting your expense receipts.
- *NechoExpense Proxy Assignment* – this document outlines the process for setting up a proxy assignment. This is useful for setting up an online expense claim approver proxy who will approve claims during your absence, or a submitter proxy who will submit claims on your behalf.

- *Checking the Status of Your Online Claim* – this document outlines how to check the status of your claim or to see who the next approver is in the approver chain.

All of these documents are available on the <Procedures and Forms> page on the Financial Services web site -- http://www.uleth.ca/fsr/listDocs?type=8

Chapter

11

Technology Transfer & Commercialization

Technology Transfer

The term "technology transfer" generally applies to the dissemination of technical knowledge, skills, and products from a point of origin into a broader sphere of use (e.g., industry, government and academia). Technology transfer can take place through a number of different channels. Key channels can include foreign direct investment, licensing agreements, joint ventures, and research collaboration between private companies and universities or government agencies. The Technology Transfer Office (UILO) is a vehicle for the process of sharing knowledge and facilities among federal laboratories, industry, universities, government, and third party intermediaries. The underlying goal of the UILO is to encourage and enhance the dissemination of Intellectual Property (IP) and commercialize research endeavors.

University-Industry Liaison Office

The University-Industry Liaison Office (UILO) provides the following services:

- Facilitates disclosures from members of the university community.
- Identifies research with commercial potential.
- Assesses and evaluates technologies with services such as patent searches and market research.
- Manages Intellectual Property (IP) with licenses or the development of start-up companies.
- Manages agreements and contracts that involve Intellectual Property provisions such as Material Transfer Agreements (MTAs), Research Service Agreements, or Confidentiality Agreements.

Technology transfer networks

The UILO is a member in a number of organizations and networks that help to foster collaboration between researchers and industry or other academic institutions as well as help to develop funding proposals. .

Some of these networks include:

- **Westlink Innovation Network:** Westlink works to connect its publicly-funded members and educational organization members as well as affiliate members with industry experts through a range of programs and services. They provide the UILO with venues with which to advertise potential licenses and collaborative opportunities on behalf of U of L researchers.
- **Association of University Technology Managers (AUTM):** AUTM is a global network of members representing more than 350 universities, research institutions, teaching hospitals and government agencies as well as hundreds of companies involved with managing and licensing innovations derived from academic and nonprofit research.
- **Alliance for the Commercialization of Canadian Technology (ACCT):** The ACCT functions to implement programs and services to enhance Canada's technology commercialization infrastructure, capacity, and collaboration and serve as the focal point for exchange with government and industry.

Intellectual Property

Intellectual Property (IP) has many forms. In general, IP takes into account any form of knowledge or expression created with one's intellect. The objective of IP protection is to encourage the creation of valuable ideas and prevent them from being stolen.

Types of IP

The most common types of IP are:

A *patent* is a legally granted monopoly to use, manufacture and sell an invention, for a specified period of time, given to an inventor in exchange for the inventor's disclosure of his or her invention to the public. An invention must be new, useful, and non-obvious in order to be patented. Exceptions to this rule include higher life forms, methods of medical treatment, and business methods which are not currently patentable in Canada.

Copyright is the exclusive right to produce or reproduce the "work" or any substantial part of the "work" in any material form, and the right to prevent others from doing so. Copyright protection applies to literary, artistic, dramatic and musical "works" in addition to things such as computer software.

A *trade secret* is confidential information that is not disclosed or known to the public and its value is protected by the barrier of silence or non-disclosure. The content of the information may include proprietary processes, formulae, techniques, or compilations of information.

A *trademark* is a symbol used by a seller of goods or services to distinguish its goods or services from the goods and services of others. Trademarks can be words, symbols, or pictures used to distinguish the goods or services of one person from those of another.

Domain names may incorporate key trademarks and may themselves be valuable corporate assets. They must be used to identify the goods or services of the person or firm claiming the mark which goods or services are provided via the Internet.

Integrated circuit topographies or mask works refer to the three-dimensional configuration of the electronic circuits used in microchips and semiconductor chips. Registration offers you exclusive rights for 10 years on your original circuit design. Protection can extend to the layout design as well as to the finished product.

The *Plant Breeders' Rights Act* provides protection for plant propagating material in Canada. It enables breeders to obtain royalties on the reproduction of their varieties.

Ownership

Each University has an individually tailored policy on the ownership and the protection of IP. Creator(s) can be defined as the individuals who initiated and developed the IP. This can include any member of the academic or administrative staff, visitor, or student. At the U of L, the right to the ownership of IP for Faculty is outlined in the Faculty Handbook (Section 30: Copyrights and Patents). The University acknowledges that IP created exclusively by a student in the course of completing the requirements for an academic degree or certificate is owned by the student Creator(s).

There are circumstances where ownership may not lie with the Creator(s). For example, in sponsored or contract research activities, ownership of IP may be determined in whole or in part by the regulations of the sponsor or the terms of the contract. The regulations of such research are negotiated prior to research being conducted. Participants in these research activities must be made aware of any such stipulations of the contract by the Principal Investigator. Under such circumstances it is important to contact the Office of Research Services and the UILO to assist in the negotiations of contract research to ensure U of L members' rights are protected.

What are the implications of collaborative research?

Anyone who has participated in your research may have a legitimate claim of co-ownership and might seek to share in any of the benefits from the commercialization of your research. Determining the proper ownership of IP is fundamental to the successful commercialization of your technology. Consider participants such as professors who supervised your work; students who have worked with you on the project; visiting researchers or casual collaborators from other institutions; or gifts, grants or contracts from organizations or companies. Although sometimes difficult, it is much easier to deal with ownership and other related issues at the beginning of the process. Each case can be very different and you are not expected to do this alone. It is always worth-while to seek legal advice in these matters either independently or through the UILO.

What are the obligations concerning IP for major grant agencies in Canada?

It is important to consider the obligations you have to funding agencies which may have supported the development of your IP. Some policies hold that every effort should be made to disseminate the research results produced from the project supported with federal funds. If you require further information, please contact the UILO or the respective funding agency.

- *Natural Sciences and Engineering Research Council* (NSERC): NSERC claims no ownership of IP. NSERC expects that ownership of IP will be awarded according to University guidelines. Grantees are required to disclose to their institutions any IP with commercial potential arising from the award, should they decide to pursue commercialization. The Grantee and the Institution agree to obtain the greatest possible economic benefit to Canada from any resulting economic activity.
- *Social Sciences and Humanities Research Council* (SSHRC): SSHRC claims no ownership to IP. Ownership is determined according to the institutional guidelines. Scholars in collaborative projects must retain the ownership of IP.
- *Network Centres of Excellence* (NCE): Ownership shall be determined by applicable Canadian law and the guidelines of participating institutions. Every reasonable effort must be made to have the results exploited for the benefit of Canadians.
- *Canadian Institutes of Health Research* (CIHR): CIHR does not claim ownership but must be informed of any commercial exploitation arising from CIHR-supported activity. Any grant or award holder planning to commercialize the results must disclose to their institution any prospective IP.
- *Canadian Foundation for Innovation* (CFI): CFI does not claim ownership. The associated institution determines these rights in accordance with its own guidelines.

Commercialization

Commercialization is the process of identifying, developing, and ultimately extracting tangible value from intellectual assets, whether those assets are in the form of inventions, processes, designs, databases, or other things. The Creator(s) plays a critical role in the commercialization process. He or she will usually be relied upon to participate in discussions with potential commercial partners and, on occasion, may be actively involved in negotiating a particular agreement. The pathway of commercialization will vary with the technology as well as with financial and market conditions.

Benefits

Commercialization of research results may not be a high priority of many researchers. Some may see the process as expensive and time consuming. Others may see it as something that will detract from their publication records and therefore decrease funding opportunities. Some of the benefits of commercialization of research are listed below:

- Practical application of your research in developing products fostering recognition of your research efforts.
- Collaboration with industrial partners may also result in financial sponsorship of additional research and support for students providing them with valuable experience and possible future career paths.
- Potential monetary compensation in the form of equity, license fees or royalty payments may sponsor further research.
- Public benefit from University research through the dissemination of IP and knowledge gained.
- Enhancing the University's research environment.

Commercialization options

Below are some additional things to consider when developing a commercialization plan for your IP:

1. Start by defining your objectives. What are your goals? Would you like to achieve personal wealth, academic recognition, a short-term exit to enable you to pursue other activities, the avoidance of personal risk, or the most effective way to maximize the impact of your technology?

2. Choose a path of commercialization. There are a few choices in the path of commercialization of IP:
    a. Selling or assigning ownership of the technology to an existing company.
    b. Licensing the technology to an existing company.
    c. Starting a new company.

3. Selling or assigning ownership of the technology could be a viable solution in the following situations:
    a. When there are major companies who control the market and will make starting a competitive business very difficult.
    b. When your IP could offer a competitive advantage to one of these major companies who may offer to buy it in order to improve their products and services.
    c. When there is only one market in which the IP could be commercialized, or when one company in particular is an ideal target for the IP.

4. Licensing a technology could be a feasible solution in the following situations:
    a. When the IP can be applied to a variety of different markets, it may be licensed to different partners who will commercialize in each of these markets and potentially created multiple revenue streams.
    b. Unlike selling or assigning the technology, you can give the licensee only the rights that you are willing to grant.
    c. When the Creator(s) wants to commercialize, but does not have the resources or interest to develop a new business.
    d. When the market opportunity is too small to warrant the creation of a new company.

5. Commercialization via a Start-up Company could be an appropriate answer in the following situations:
    a. The market potential for the opportunity is worth the added risk.
    b. The primary objective is to maximize the value of the IP.
    c. They wish to work with an experienced business team and access to other support and resources.
    d. Attempts to license the technology have been unsuccessful.

Alternatives to traditional commercialization methods

The university has access to resources that allow the advertisement, distribution, and licensing of research technologies. For example, the University of Lethbridge is a member of Flintbox (www.flintbox.com). Flintbox is an online platform for marketing, sharing and licensing the outcomes of innovative research. For further information, please contact the UILO.

Commercialization process

Below is a figure describing a general pathway to commercialization. It illustrates the steps from research to the transfer of the technology to a new or existing company. The process and services that are provided tend to differ significantly between institutions and between different types of IP. The process of commercialization is very complex. It is best to consult your UILO or legal professionals for the path that is most applicable to your research endeavor.

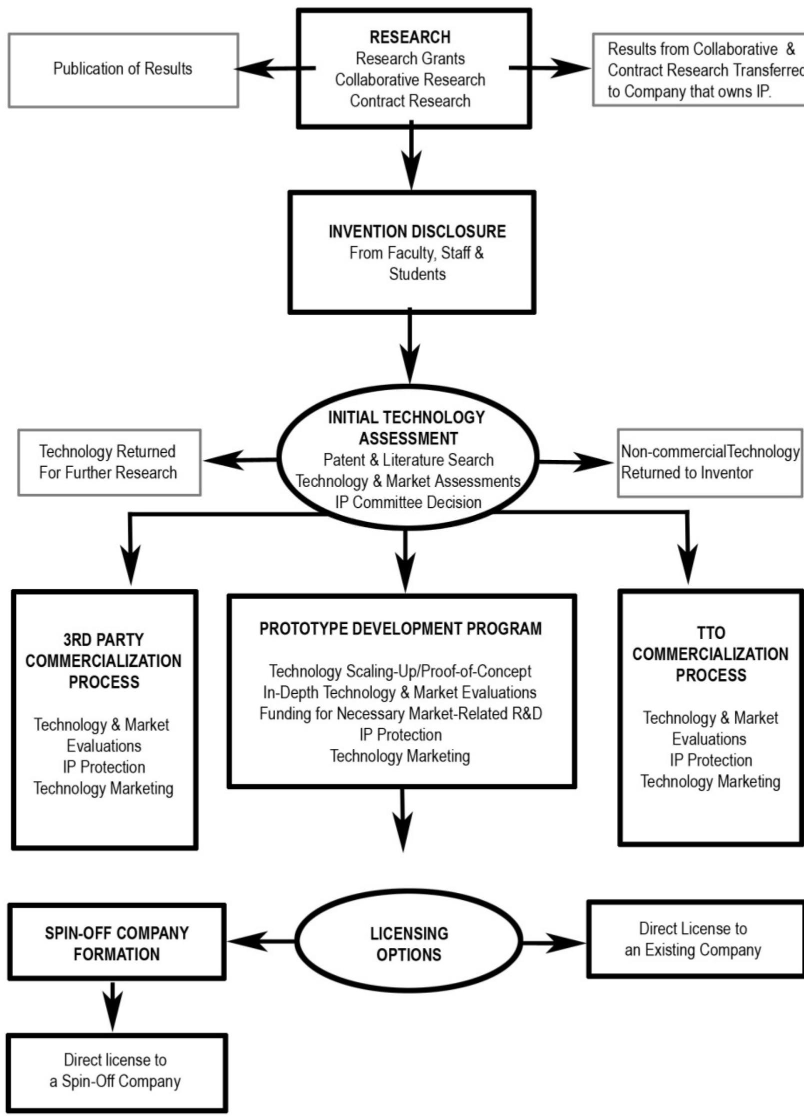


Figure 4 Commercialization Pathways

Research can lead to IP that can be published, disclosed to the institution, or licensed to an external agency. Following a technology assessment, the IP may be commercialized or returned to the Creator(s) for further development or because of a lack of marketability. If the process is successful, the IP may be turned into a prototype, marketed, licensed, or used to form spin-off companies.

What issues are common to all pathways?

There are issues that are common to all pathways in which an IP could be commercialized. The concerns that are shared by all paths to commercialization are:

- Control Issues: No matter which commercialization path is chosen, Creator(s) need to collaborate and communicate with others who may have different perspectives.
- Technology Issues: Creator(s) will be required to establish some tangible proof-of-concept, or better, a functional prototype. The UILO may have resources or have access to programs to help support proof-of-concept or prototype development.
- Market Issues: Be realistic about the value of the technology and carefully weigh the size and structure of the market.

Team Issues: If Creator(s) are not prepared to make a large commitment, or are not interested in working as part of a management team, then a licensing path might be appropriate. When creating a start-up company, investors must recognize their skills and limitations and seek to fill any gaps with the right expertise.

Commercialization Process

Commercialization can be done in a number of ways unique to each technology. The following steps should be included:

1. The researcher and the UILO complete a Confidential Invention Disclosure Form. This form is available on the Office of Research Services website (www.uleth.ca/rch/transfer/info.cfm).

2. The UILO reviews the Invention Disclosure for transfer and commercialization options for the technology. Additional examination may include technology including technology review, IP evaluation, market research, and ownership due diligence.

3. Researcher discusses assignment options with the UILO.

4. If the technology is assigned to the U of L, the UILO may follow these steps in cooperation with the Creator(s):
    a. IP protection.
    b. Marketing.
    c. Negotiation and administration of agreements.
    d. Technology partnering (licensing or spin-off company formation).

Invention Disclosure

The first step in the commercialization of research results is an ***Invention Disclosure***. An Invention Disclosure is a confidential document which describes an invention in semi-technical language so that it is understandable to a non-expert. A clear description of the invention itself, contributing parties, sources of funding, and possible applications provides a tool which aids in making decisions regarding IP protection, verifies the absence of contractual obligations, establishes dates of inventions, and establishes contributions of multiple or serial Creators. An Invention Disclosure may appear as an invasion of a researcher's privacy but there are legal reasons for having a formal disclosure. For example, in a patent application you must be able to prove the invention is new and the completion of an Invention Disclosure provides a formal timeline in the development of a technology.

An Invention Disclosure can easily be done in conjunction with the UILO personnel. Normally, an Invention Disclosure is performed as an interview between the UILO and the Creator(s) to ensure that all questions are clear to the Creator(s) as well as all the answers are sufficient. The document will be marked confidential. The Vice-President (Research) will sign the Invention Disclosure on behalf of the University of Lethbridge. The original copy will be retained by the UILO and a copy will be delivered to the Creator(s).

What kind of IP can be commercialized?

Technology should have the following characteristics to be considered an "*invention*" (2):

- 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, whether or not patentable.
- Computer software (non-teaching).
- Research data or a research tool, including, without limitation, biological material and other tangible research material.
- Proprietary information, know-how or trademark related to any of the foregoing items.

Will an Invention Disclosure interfere with the publication of results?

The University believes that the dissemination of knowledge is a high priority. The manner in which knowledge or results are shared with the public is a decision that must be made by the Creator(s). An Invention Disclosure is confidential and does not change the ownership of the IP so control remains with the Creator(s). However, if the Creator(s) wishes to patent the IP, there must be *no public discussion* of the research results or the IP does not continue to be "new". This applies to presentations, poster sessions, and abstracts that are published in conjunction with conference proceedings. If there is a question regarding public disclosure, please contact the UILO.

Public Disclosure

Public Disclosure of private facts arises where one person reveals information which is confidential. It includes journal publications and conference proceedings as well as anything in the public domain (2). Public disclosure takes into account any communication medium that can be read, spoken and/or viewed by the general public, such as internet, radio, television, written publications, e-mail to broad distribution lists, presentation slides, posters at conferences or talks, workshops or lectures, advertisements, public use, or, in the United States, sale or offer for sale.

Public Disclosure of the IP before filing a patent application can make your IP *unpatentable.* In Canada and the United States, Creator(s) are given a one year grace period in which to file a patent application following public disclosure. If the grace period lapses, you are unable to file for a patent in any country. IP that has already been published generally has no commercial value.

Technology Assessment

After a formal Invention Disclosure, the University will perform an initial ***Technology Assessment***. The Technology Assessment procedures have been adapted from the University of British Columbia's technology assessment strategy. The summary assessment document will be used to make the decision as to whether to proceed or return it back to the Creator(s). It consists of five main categories: background tests, technology tests, market tests, commercial tests, and management tests. The assessment is prepared by the UILO on behalf of the Vice-President (Research).

Intellectual Property Protection

Investigating your IP protection options should be one of the first steps in the commercialization of your technology. You may wish to consult a patent lawyer or agent or your UILO as early as possible in the process. Patenting IP is only one way to commercialize research endeavors. Copyright has many implications in an academic institution. If you have any questions regarding the other methods of commercialization, contact the UILO.

Determining patentability

Determining patentability can be extremely complicated and it is always advisable to have an experienced patent agent or attorney who can sort out any legal and technical complexities. If the technology is to be patented, a patent agent is required to prepare the detailed description and claims that are key components of a patent application.

IP is generally patentable if it satisfies the following criteria (2):

- It has to be ***novel***. Not only must your invention not be publicly disclosed by someone other than the Creator(s), but it must not be publicly disclosed more than one year before the filing date of the patent application by the Creator(s).
- It has to have ***utility***. The invention must perform a function and have some benefit.
- It has to be ***non-obvious*** to an expert in the field. IP must be a new combination of features and/or give new and non-obvious results compared to known approaches.

Retaining patentability

To prevent public disclosure, it is recommended that you request the recipient of proprietary information to sign a ***Confidentiality Agreement*** (Appendix E). This type of Agreement should be signed by any person you are concerned with sharing certain information that may impact the protection of your invention. This will legally commit them to not disclosing the information they receive and protects you against public disclosure of your invention. You will also need an authorized representative such as the Vice-President, research to sign the Confidentiality Agreement on behalf of the University. Please contact the UILO to draft a Confidentiality Agreement specific to your needs.

Patent application requirements

A patent must provide an ***enabling disclosure*** that is sufficient to allow others to make and use the invention. The information required for a patent application can be extensive. The process of filing for a patent application differs with each IP and it is important to obtain specific advice based on particular circumstances. The following actions are an example of the patents process that may be taken following completion of an Invention Disclosure and a favorable Technology Assessment:

1. The Creator(s) and the UILO construct an enabling disclosure or detailed description which includes:
    - Background including a summary of prior art and the disadvantages of the prior art, resulting in the need for the invention.
    - Extensive drawings illustrating the invention;
    - Technical description of the invention, based on a logical description;
    - All aspects of the invention should be explained;
    - One or more examples of the implementation of the invention; and
    - Summary of the advantages of the invention over prior art.

2. The UILO performs a patentability search to identify prior art and establish any due dates such as dates of public disclosure.

3. The UILO reviews existing material and feedback from patent agent where

further documentation is required.

4. The UILO creates a list of action items for completing the technical disclosure.

5. The Creator(s) and UILO in cooperation with legal counsel or a patent agent finalize claims including adequate support for each of the claims in the detailed description.

6. The Creator(s) and the UILO complete patent related documents such as a Multiple Inventorship Form signed by all inventors stating contributions.

7. The UILO and the patent agent file patent application.

8. The UILO monitors newly published patent applications and infringements in the marketplace.

Funding sources

There are a number of funding programs to assist you in moving your research from the university environment to the market. . Please contact UILO officers for the most up-to-date, comprehensive funding resources. Major federal funding programs include:

CIHR – Proof of Principle

Canadian Institutes of Health Research (CIHR) – Proof of Principle Phase I (POP –I) will fund research projects of up to 12 months duration which are designed to advance discoveries/inventions to the commercialization stage, with a view to attract new investment and create new science-based businesses.

Proof of Principle Phase II (POP-II) will fund research at the co-investment stage undertaking follow-up proof of principle activities in partnership with a non-academic investor. It is aimed at providing a platform to better enable the academic institution/researcher to move the discovery/invention further down the innovation pipeline.

Funds available:
- Phase I – Up to $150,000 per application (up to 12 months).
- Phase II – Up to $250,000 per application. An investor must match CIHR funds at a 2:1 ratio (investor:CIHR).

For additional information on the CIHR POP Grants, visit: http://www.cihr-irsc.gc.ca/e/26626.html.

NSERC

The **Natural Sciences and Engineering Research Council (NSERC) of Canada** makes strategic investments in Canada's capability in science and technology. NSERC supports both basic university research through discovery grants and project research through partnerships among universities, governments and the private sector, as well as the advanced training of highly qualified people. For more information on any of the following programs, visit: http://www.nserc.gc.ca/professors_e.asp?nav=profnav&lbi=toc_b.

Collaborative Research and Development (CRD) Grants support well-defined projects undertaken by university researchers and their private-sector partners. CRD awards cover up to half of the total eligible direct project costs, with the industrial partner(s) providing the balance in cash and in-kind contributions.

Idea to Innovation (I2I) Program provides funding to university researchers for research and development activities leading to technology transfer to a new or established Canadian company. Two distinct funding phases are available. Phase 1 funding is limited in time and the direct costs are supported entirely by NSERC. Phase 2 funding costs are shared with a private partner.

NSERC/The Canada Council for the Arts: New Media Initiative is a joint initiative to support scientists and engineers collaborating with artists to create novel and synergistic ways of thinking and working across disciplines, thereby making contributions to both the arts and industry.

Research Partnership Agreements (RPA) with Canadian Government Departments and Agencies whose objective is to build strong linkages between the private sector and researchers in universities and federal institutes and to create synergy among the partners.

Conclusions

The UILO has many responsibilities within the dynamic environment of the University. Our goal is to provide an office which fulfills the demands of the University itself, the University members, and the general public. If there are any questions, concerns, or general comments relating to any of the topics contained in this document as well as others, please feel free to contact the Office of Research Services and the Technology Transfer Office at the University of Lethbridge.

Chapter

12

Project closure

Closing funds

Upon completion of a research project, please contact Research Service to close your research fund. Research Services will ensure that all the terms and conditions of the grant or contract have been met and determine if there are any obligations and undertake any procedures required for termination.

If there are any funds remaining in the fund after the grant or contract concludes, Financial Services will disperse of the funds according to the stipulations in the funding agreement (i.e., returned to the funder or reallocated to the University).

Chapter

13

Policies and Procedures

Researchers are expected to familiarize themselves with all of the policies and procedures of the University that might apply to them, as well as any related procedures and policies of the granting agency.

Internal Policies

The policies listed here are policies of general application to the University, which are currently in effect. All of the policies, procedures and protocols listed below are available on the University's web site, http://www.uleth.ca/policymanual. The web versions of the policies are provided for your information and convenience. In the event of any discrepancies between the policy documents formally passed by the appropriate governing body and documents on this site, the offline version will prevail.

Academic — Academic Legislation Policies/Procedures

Athletics — Athletic Program Policies And Procedures [Feb 16, 1989]
Inter-University Athletics [Nov 15, 1984]

Employees — Board of Governors' Compensation Policy [March 16, 1989]
Board of Governors Research Chairs [February 17, 2000]
Board of Governors Teaching Chairs [December 21, 2006]
Conflict of Interest [July 1, 1996]
Contractual Arrangements For Senior Administrative Officers [June 20,1986]
Definition of Academic Staff [Sep. 14, 1968]
Definition of Visiting Professor [Oct. 10, 1978]
Delegation of Authority, President [Jun. 23, 1998]
Designation of Senior Administration [Sep. 20, 1990]
Diversity and Employment Equity [Dec. 16, 2004]
Employee Assistance Program Policy [May 17, 1990]
Employee Ethical Conduct [Dec. 16, 2004]
Employee Fitness Policy [April 21, 2004]
Employee Recognition Expenditures Policy [February 7, 2007]
Employment of Relatives [Feb. 26, 2002.]
Guaranteed Housing Loans [Jun. 26, 1996]
Guidelines - Benefits For Families Of Deceased Employees [Feb. 15, 2007]
Hospitality Expense Policy [February 7, 2007]
Market Supplements For Faculty Members [Oct. 26, 1989]
Research Trust Account Employees [May 20, 1982]
Retirement Age Policy [Mar. 24, 2004]
Review of Senior Academic Administrators [Oct. 4, 2004]
Travel Risk Reduction Policy, Key Personnel [Oct. 01, 2001]

Facilities — Animals On Campus [May 3, 2004]
Flag Policy [April 21, 2004]
Identification of User Groups and the Association of Scheduling Priorities in the

Max Bell Regional Aquatic Centre [Dec. 19, 1985]
Impartiality and University Facility Utilization [Nov. 18, 2004]
Key Control Policy [May 7, 2001]
Keys Held by Terminating University Employees [June 29, 2005]
Managing Unacceptable Behaviour [May 20, 2004]
Naming Facilities Policy [Jun. 22, 2006]
Signage & Advertising On University Premises [June 17, 2004]
Sweat Lodge Ceremonial Policy [July 8, 1993]
Timetabling And Classroom Management [Apr. 26, 1989]
University Drive Billboard Posting Policy [July 26, 2006]
University Facilities, Use and Rental [Dec. 18, 2003]

Finance	Carry Forward Fund Policy [Fiscal Year: 2007/2008. Approved Nov. 28,2006] Employee Donations & Forgone Payments [June 9, 2008] Endowment Management Policy [Mar. 23, 2006] Finance/Budget Approval and Signing Authorization [Dec. 18, 2003] Investment Management Policy [May. 18, 2006] Investment Valuation Policy [Mar. 31, 2003]
Finance and Administration	Computer Purchase Plan [PDF] Emergency Loan Form T2200 - Declaration of Conditions of Employment Funds Held on Behalf of Others Administration Charge (April 1996) Invoice Approval and Processing (July 1994) NSERC/SSHRC Grant Policies (March 2006) [PDF] Procedures for Administering Restricted Research Funds (April 2003) Professional Supplement Policy (July 2003) [PDF] Relocation Allowance Regulations Research Trust Account Overexpenditure Policy & Procedures (Feb 1989) [PDF] Travel and Business Expense Policy and Procedures (April 2004) Travel/Cash Advances (April 2004) Notice Board Posting Guidelines Exceptions to Requisitions [PDF] Expenditure of Funds - Policy and Procedure Manual [PDF] General Procedures for Tendering [PDF] Introduction – Materials Management Policy and Procedure Manual [PDF] Organization and Objectives – Materials Management Policy and Procedure Manual [PDF] PCard Policy [PDF] Special Procurement Policies - Policy and Procedure Manual [PDF] Supplier Selection and Quotations - Policy and Procedure Manual [PDF] Table of Contents – Materials Management Policy and Procedure Manual [PDF] The Purchase Order - Policy and Procedure Manual [PDF] Parking Enforcement Parking Map Parking Meters Parking Violations Physical Plant Mandate - Interdepartmental Charges [PDF] Fine Arts Policy Radiation Safety Policies and Procedures Working Alone Complete Policy [PDF] Working Alone Protocol [PDF] Lost and Found Campus Card Replacement Guidelines Computer Lab and Study Centre Acceptable Use Guidelines Software Installation Guidelines Student Computer Lab Room Booking Guidelines Student Computer Lab Staff Guide Surplus Sales

	WebCT Test Centre Guidelines Corporate Data Policy Telephone Policy
Food Services	Compulsory Board Plan First-Year Residence Students [Oct. 20, 1988] Provision of Food and Alcohol Services [Dec. 18, 2003]
General	Alcohol [Dec. 18, 2003] Archives and Records Management [May 31, 1989] Bicycles, Skateboards, Scooters, Rollerblades, and In-Line Skates [Jan. 14, 2004] Charitable Gaming Events [April 20, 2005] Corporate Memberships [Nov. 22, 1990] Courses Offered By Another Post-Secondary Institution On Campus [Dec. 17, 2003] Enterprise Risk Management Policy [Mar. 19, 2008] Fraud Policy [Dec. 16, 2004] Fundraising Coordination Policy [Oct. 13, 2005] Non-Credit Instruction or Conference On Campus [May 14, 1998] Personal Security Policy [June 22, 2006 (See References for Related Policies)] Policy Against Hazing [March 23, 2006] Safe Disclosure Policy [Dec. 16, 2004] Safety Policy [Dec. 19, 1990] Selection of Architects & Construction Consultants [Dec. 16, 2004] Supplier & Contractor Ethical Practices [Sep. 22, 2004] Surveillance of Public Areas [May 20, 2004] Tunnel Mural Painting Procedures [EDC Approved December 18/07]
Information Technology	Computer Use [Nov. 20, 2003] Password Policy [June 26, 2008] University Lab & E-mail Station Screensaver Policy [July 26, 2006]
Health	Campus Smoking Policy [May 20, 2004] Guidelines On Scented Products [July 26, 2006] Serious or Communicable Disease [Jun. 16, 1988] Transportation of Injured/Ill Persons Procedures [Dec. 21, 2007]
Library	Library Borrowing Policy
Marks & Names	Chairs and Named Professorships [Sep. 15, 1986] Copyright and Patents [Feb. 16, 1984] The University of Lethbridge Marks [June 19, 1986]
Parking	Parking Permit (Special) [Oct. 19, 1999]
Program Reviews	Reviews Of Academic Units And Programs And Academic Support Units [Jan. 12, 1987]
Research	Animal Welfare Committee [October 2, 2007] Conducting Fee For Service Research Procedure [Aug. 27, 2004] Human Subject Research Committee [June 7, 2004] Integrity In Research And Scholarship [July 1, 1995] Research Overhead Charging Policy [March 19, 2008] Privacy Statement [PDF] http://www.uleth.ca/fsr/Documents/restrict_research.htmProcedures and guidelines for administration of restricted research funds [Apr. 2003] Research Policy [Nov. 1988] Research Trust Account Overexpenditure [Feb. 23, 1989] Travel Fund Policy [Mar. 31, 2003]

Students [Academic Quality Assurance Policy & Process] [Dec. 16, 2004]
[Board of Governors and Meliorist Society Accord] [Dec. 16, 2004]
[Confidentiality Of Student Records] [Sep. 10, 1990]
[Emergency Student Loan Fund] [Mar. 27, 1986]
[Involvement of The University Of Lethbridge In International Development] [Oct. 15, 1981]
[Principles of Student Citizenship] [Feb. 3, 2003]
[Students With Disabilities Policy] [Oct. 18, 2006]

External Policies

The external policies are applicable in so far as they have been agreed upon by the researcher and the University. For example, Tri-Council policies are in force only if the researcher has a grant agreement with NSERC, SSHRC or CIHR.

Post Secondary Learning Act
http://www.canlii.org/ab/laws/sta/p-19.5/20040623/whole.html

Memorandum of Understanding on the Roles and Responsibilities in the Management of Federal Grants and Awards (MOU)
www.nserc.ca/institution/mou_e.htm

Tri-Council Policy Statement: Integrity in Research and Scholarship
http://www.ncehr-cnerh.org/english/code_2/

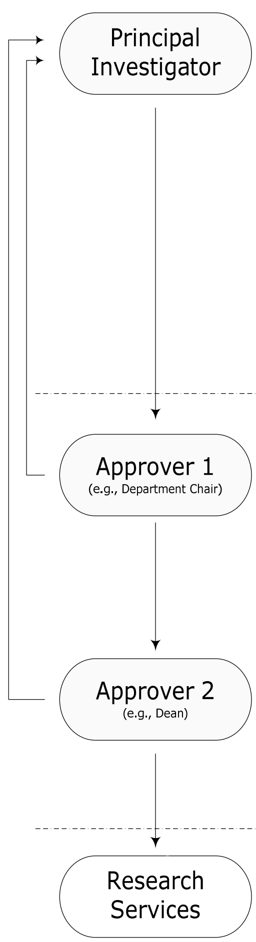
Appendix A

Using the online approval system

The Online Approvals system streamlines the approval of your grant application. The Research Proposal Form is available online and must accompany **ALL** applications submitted to an external funding agency.

E-signature Approval Process

All applications must originate from the Principal Investigator. You may not give out your ID number and password to another individual (i.e., co-applicant, student) to log-in and submit a form on your behalf.



As the **Principal Investigator**, you can

- Create and submit internal research grant application forms (only applicable for ULRF and Internal SSHRC competitions) and external Research Proposal Approval Forms.
- Edit and resubmit a form that was returned by an approver.

An electronic copy of your application must be attached to the Form. Attachments may be in Word or PDF format. Do not attach image files (i.e., .jpeg, .bmp, or .tiff).

Once the form is complete and all appropriate attachments are attached, click the <Submit> button.

Your form must be approved by your Department Chair, if applicable, and Dean.

The database contains a list of all signing authorities for each Department and Faculty along with their role and approval sequence number for that role. E.g. A Department Chair must approve the form before a Dean. Note: A higher signing authority will not see the form in his/her menu until all previous levels have already approved it.)

Both the Department Chair and Dean have the option of refusing the form. If the form is refused, it is returned to the PI for corrections/revisions. Once the corrections are made, the form is resubmitted and must go through the entire approval sequence.

Once the form is approved by the highest signing authority (i.e., the Dean), it is sent to Research Services for final approval. Once approved, the application becomes Research Services' copy.

Frequently Asked Questions

How do I access the online system?

The online system is accessed through the Bridge (https://www.uleth.ca/bridge). Use your nine-digit University Identification Number and your six-digit Personal Identification Number to log into the system. From the menu, choose <Research Services>.

What fields in the online forms are mandatory?

Fields identified by a red * are mandatory.

Can I save a form?

No. The online system does not have the capability to store the forms before being submitted.

Will I have access to my form once it is submitted?

No. The forms are not stored in the system. Once submitted, you will not be able to access the form. If you would like a copy of the form, you must print it before clicking on the <submit> button.

Can I edit a form after it has been submitted?

No. Once your form is submitted, it enters the approval queue. You may only edit your form if it has been returned to you by your Department Chair, if applicable; Dean, or Research Services.

Will my form expire after a certain number of days?

Yes. Once your form is submitted, it is kept in the system for 30 days. After 30 days, it is deleted.

Why do I have to submit a Research Proposal Form?

This form provides Research Services with a "snapshot" of your application. From the information contained on the form Research Services is able to tell, at a glance, if your research requires approval by the Animal Welfare, Human Subject, Biosafety or Radiation Safety Committees; it indicates the research budget and source(s) of funds; and it indicates the space required to conduct the research and/or if renovations to existing space are needed.

The granting agency only accepts applications in hard copy. Do I still have to complete an electronic Research Proposal Form?

Yes. In instances where the funding agency will only accept a hard copy, you must complete the online form and circulate a paper copy of your application in order to obtain the necessary signatures.

Can I submit the Research Proposal Form at a later date, after the application deadline?

No. Research Services must receive the External Research Proposal Form BEFORE the Vice-President (Research) will sign the hard copy of the application. Similarly, for grants that are submitted electronically, the form must be received by the Vice-President (Research) before Research Services will complete final submission to the granting agency.

Can I submit a paper copy of the Research Proposal Form instead of the electronic copy?

No.

How do I approve forms?

1. Log into the Bridge using your nine-digit University Identification Number and your six-digit Personal Identification Number to log into the system.
2. From the menu, choose <Research Services>.
3. Choose <Approve Proposals> from the menu.
4. To view the proposal, click on the <Form number> at the far left hand side of the page. To view the attached documents, click on the <View Attached Documents> button at the bottom of the page.
5. To approve the proposal form, click on the <Approve> button at the bottom of the page.
6. To return a form/grant proposal to the PI, click on the <Disapprove> button. In the comment field, you can indicate why the form is being returned and what changes must be made.

What do the electronic signatures indicate?

By submitting and/or approving an online form, you are providing an electronic signature, which indicates:

Principal Investigator – the signature indicates acceptance of academic, professional, scientific, and technical responsibility for the project. In addition, it represents an undertaking to observe sponsor and University policies and regulations as well as any special award conditions.

Department Chair and/or Dean – the signature indicates the Department/Faculty is willing to accommodate the project, that required facilities and services are available, that funding is available for any required renovations and that the applicant meets known University and sponsor eligibility requirements. It also represents general acceptance of expressed or implied time commitments, including willingness to recommend leave or other special arrangements as specified in the application.

Vice-President (Research) – the signature indicates that the University is willing to administer funds received for the project in accordance with University and funding agency requirements.

My form was returned by the Department Chair or Dean. What should I do now?

Your form will be returned with comments for consideration. You will need to edit and resubmit the form.

How long will the electronic approval take?

This is dependent on the procedures within each Department/Faculty. The form must be approved in the correct sequence. That is, the form will only appear in the Dean's approval queue once it has been approved at the department level.

When is a form considered 'approved?'

The form is approved when all necessary signatures have been obtained and Research Services has closed the request by marking it 'complete.'

Will I receive an email indicating that my form is 'approved?'

No. However, you can monitor the status of your form. To do so, from the main Research Services menu, click on <View Application Status>. This will allow you to see where your form is in the approval queue, as well as who has/has not approved the form.

Process for opening a research fund

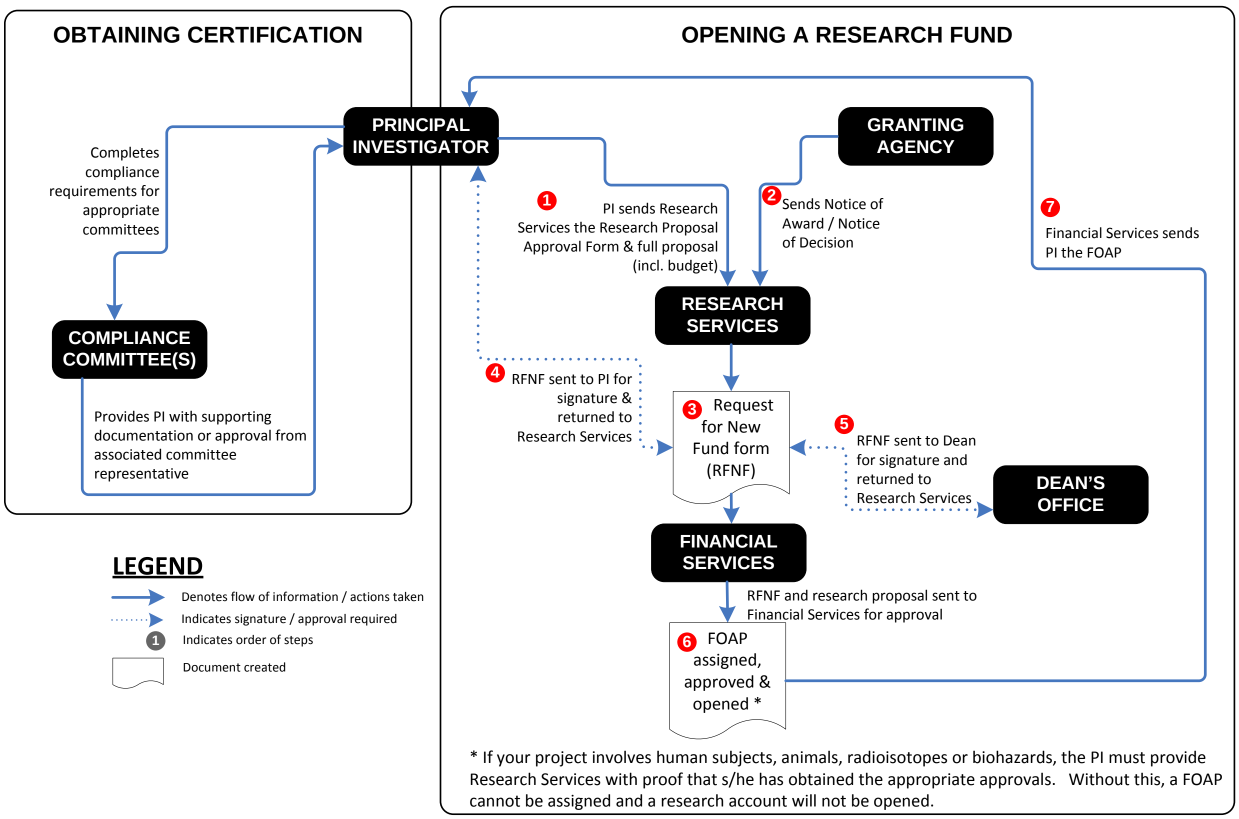


Figure 5 Process for opening a research fund

All requests to open a research fund originate with the Principal Investigator. There are two key components to the process: (1) obtaining certification, and (2) opening a research fund.

Obtaining Certification
For research projects that involve human subjects, animals, radioisotopes or biohazards, a fund will not be opened until the PI provides Research Services with documentation indicating that the appropriate approvals are obtained in advance of research being conducted. For additional information on how to obtain the necessary approvals, please see the Certification section (chapter 9).

Opening a research fund

1 The PI initiates the process. Research Services must receive the full application and a fully signed Research Proposal Form. These documents should be provided to Research Services when the application is submitted to the granting agency.

2 Research Services must receive a Notice of Award, or Notice of Decision. Normally, this is provided by the granting agency but may also come from the PI.

For additional information on the documentation that must be provided to Research Services in order open a research fund please see “Authorizing and opening a research fund”, p. 38.

3 Upon receipt of all required documentation, Research Services prepares a Request for New Fund form. This form provides Research Services and Financial Services with an overview of the project (e.g., start/end dates, funding source, restrictions on the use of funds, reporting requirements and committee certification), identifies the fund holder and any other individuals that require iWeb access.

4 The Request for New Fund form is sent to the Principal Investigator for signature. The PI’s signature indicates s/he accepts responsibility as the signing authority for the fund and will use the monies for the specified/agreed purposes. At this point, Research Services cannot proceed with opening the research fund until the PI returns the signed form and provides documentation that the appropriate committee approvals are in place.

5 Upon receipt of a signed Request for New Fund form and committee certifications from the PI, Research Services forwards the form to the PI’s Dean for approval. The Dean must sign the form. His/her signature indicates that if the fund is overspent, and overexpenditures are not recovered from any other source, s/he authorizes the transfer of the overexpenditure to the Faculty/Department. The Dean returns the Request for New Fund form to Research Services.

6 Only Financial Services may approve and open the research fund. Research Services forwards the entire file to Financial Services. This includes the research proposal (including the budget), the Research Proposal Form and the Request for New Fund form. Financial Services reviews the file, assigns the fund number, and approves the fund and returns all documentation to Research Services. The file is stored in Research Services for the duration of the award.

7 Financial Services provides the PI with the FOAP for his/her research project. Any further questions about the research fund are to be directed to the appropriate contact in Financial Services (see “Who do I contact?” in the Research Accounting” section, p. 8).

Appendix

C

Account Codes

The following are a few of the account codes you will likely encounter while conducting research at the University of Lethbridge. This list is not exhaustive. A complete listing of Account Codes may be found on the Financial Services web site, http://www.uleth.ca/fsr/Documents/acctcodes_budgetpool.htm

B. Labour	
Academic Salaries	
5150	Salaries – Scholar and Bursaries
5152	Salaries – Fellowship
Research Salaries	
5601	Research Assistants – Undergrad, Canadian student
5602	Research Assistants – Undergrad, Foreign student
5603	Research Assistants – Masters, Canadian student
5604	Research Assistants – Masters, foreign student
5605	Research Assistants – Doctorate, Canadian student
5606	Research Assistants – Doctorate, Foreign student
5607	Research Assistants – Post Doctoral, Canadian
5608	Research Assistants – Post Doctoral, Foreign
5609	Research Assistants – Canadian non-student
5610	Research Assistants – Foreign non-student
Student Salaries	
5211	Salaries – Student Positions

C. Expenditures	
Materials and Supplies	
6011	Supplies -- Stationary
6016	Duplicating
6017	Printing
6019	Chemical products & solutions (for use in laboratories)
6021	Postage
6022	Computing Charges
6024	Freight
6025	Catering
6026	Registrations (fees for workshops, conferences, etc.)
6031	Expenses specifically associated with the upgrading of employee skills
Memberships (professional or technical associations)	
6081	Memberships – Institutional (where required by University departments, schools and faculties).
6082	Memberships – Miscellaneous (purchased on behalf of the employee)
Library Charges	
6091	Interlibrary loans

Expendable Equipment (value <$5,000)	
6111	Software <$5,000
6112	Media <$5,000
6114	Office equipment <$5,000
6116	Computers <$5,000
6118	Equipment and Furnishings <$1,000
Travel – Includes local travel (i.e., workshops/conferences held in Lethbridge). Travel costs **include** airfare, meals, hotels etc.	
6171	Travel – Lodging
6172	Travel – Airfare
6173	Travel – Mileage
6174	Travel – Ground Transportation
6175	Travel – Meals
6176	Travel – Incidentals and Daily Allowance
Professional Fees	
6181	Consultants
Capital Equipment & Furnishings (value >$5,000)	
8071	Office equipment (typewriters, fax machines etc.)
8072	Furnishings (Desks, cabinets, tables etc.)
8073	Computers, printers, networks etc.
8074	Media Equipment (TVs, projectors etc.)
8080	Musical Instruments
8082	Telecommunications equipment
8084	Scientific Equipment (Analysis equipment, centrifuges etc.)
8085	Control/Measuring Equipment (Lab instruments etc.)
8086	Specific Industries Equipment
8088	Misc. Products/Equipment
8089	Software
8091	Vehicles
8092	Learning Resources (for studying, teaching and researching – tapes, maps, films, etc.)

Appendix

D

Per diems and daily rates

MEALS:
Meal charges are to be detailed by date and may be claimed in one of three ways:

Option 1	Option 2	Option 3
Individually Meal rates: Breakfast $10.00 Lunch $10.00 Dinner $20.00	Daily Rate $40.00	Reasonable actual expenditure will be paid when accompanied by receipts

Individual meal allowances or the daily rate will be reimbursed in US dollars converted to Canadian dollar equivalent for all foreign travel.

DAILY TRAVEL ALLOWANCE: $5.50
Minor out-of-pocket expenses such as local telephone calls, gratuities to porters, redcaps, etc., and parking will be reimbursed at a rate of $5.50/day - no receipts required.

PRIVATE AUTOMOBILE: $0.40 per km
Private automobile kilometers will be reimbursed at the current rate of $.40/km. Where a private automobile is used for travel to points having major airline connections, reimbursement will be made on the basis of the lowest logical air fare. Note that private automobiles used for University business are not covered by the University's insurance policy. Accordingly, employees are advised to check with their own insurance agent to secure any necessary additional insurance coverage. Employees travelling as passengers in an automobile may not claim mileage or the cost of any equivalent transportation. Typical mileage distances are:

Athabasca	1344
Banff	690
Blairmore	290
Brooks	322
Calgary	434
Drumheller	556
Edmonton	1028
Fernie	474
Fort McMurray	1892
Grande Prairie	1868
Great Falls	644
High River	308
Jasper	1252
Kananaskis	600
Kalispell	702
Lake Louise	794
Medicine Hat	334
Moose Jaw	1148
Olds	610
Penticton	1774
Pincher Creek	217
Red Deer	724
Regina	1270
Saskatoon	1336
Standoff	172
Vancouver	2524
Victoria	2758
Waterton Park	260

ACCOMMODATION ALLOWANCE: $ 20.00 per night
Reimbursement for hotels, motels and other lodgings will be limited to reasonable single rates, as per receipts. A rate of $20.00 per night may be claimed when staying with friends or relatives to provide a token of appreciation - no receipt required.

Appendix

E

Glossary

This glossary briefly defines some of the more common acronyms and terms that are used in research, research accounting, and technology transfer.

Common Acronyms

AARI	Alberta Agricultural Research Institute
ACB	Alberta Cancer Board and Foundation
ACCFCR	Alberta Centre for Child, Family and Community Research
ACCT	Alliance for the Commercialization of Canadian Technology
AFA	Alberta Foundation for the Arts
AGRI	Alberta Gaming Research Institute
AHFMR	Alberta Heritage Foundation for Medical Research
AIF	Alberta Ingenuity Fund
AMHB	Alberta Mental Health Board
AUTM	Association of University Technology Managers
AWC	Animal Welfare Committee
CCAC	Canadian Council on Animal Care
CFI	Canada Foundation for Innovation
CIHR	Canadian Institutes of Health Research
CIPO	Canadian Intellectual Property Office
COS	Community of Science
CRC	Canada Research Chair
FOAPAL	Fund-Organization-Account-Program-Activity-Location
FOB	Freight on Board
GRF	General Research Fund
HSRC	Human Subject Research Committee
HQP	Highly Qualified Personnel
I2I	Idea to Innovation program
iCORE	Informatics Circle of Research Excellence
IP	Intellectual Property
MOU	Memoranda of Understanding
MTA	Material Transfer Agreement
NCE	Network Centres of Excellence
NIH	National Institutes of Health
NSERC	Natural Science and Engineering Research Council of Canada

PAF	Payroll Authorization Form
POP I/II	Proof of Principle, Phase I / Phase II
RFP	Request for Proposal
RGILS	Research Grant in Lieu of Salary
RPAF	Research Proposal Form
RTS	Research Time Stipend
SAIP	Southern Alberta Intellectual Property Network
SSHRC	Social Sciences and Humanities Research Council of Canada
UILO	University-Industry Liaison Office
ULRF	University of Lethbridge Research Fund
ULTF	University of Lethbridge Travel Fund
WIPO	World Intellectual Property Organization

Common terms

Account	Identifies a unique asset, liability, net asset (equity), revenue or expense. Transactions are accumulated; shows increases, decreases, and a balance.
Account code	The first "A" in "FOAPAL" that identifies the transaction as revenue, expenditure or transfer.
Account holder	See Grant holder.
Account number	A six-part number used in the University's accounting system (see *Banner*) for tracking and reporting transactions. Commonly referred to as FOAPAL, the six parts are Fund-Organization-Account-Program-Activity-Location. Generally, for most transactions, only the Fund-Organization-Account-Program is required.
Accounts payable	An amount owed to a supplier for purchase of goods or services. Payment is usually due within a short time period, 30 days or less.
Accounts receivable	A current asset representing money due for the sale of goods or services.
Activity code	The second "A" in "FOAPAL" that is optional, used for independent reporting needs and not mandatory for external reporting purposes. This optional code is available to Departments to help track groups of transactions.
Affiliation	An agreement establishing a partnership arrangement with another institution.
Agency	An outside entity that pays for / requests the research. Also see: Sponsor.
Allocation	A predetermined amount of money placed in a fund.
Allowable costs	Those categories of costs that can be charged to a grant or contract as determined by the terms and conditions of the award, such as salaries and equipment.
Amortization	The process of spreading the cost of an asset over the expected useful

	life of the asset.
Ancillary services	An operational unit within the University, whose function is to provide support services or supplies to the University community on a fee for service basis.
Applied research	Research undertaken with the intention of applying the results to a specific problem. One of the biggest differences between applied and basic research is that in applied work the research questions are most often determined, not by researchers, but by policy makers or others who want help.
Approval	The act of approving or giving formal consent.
Audit	An examination of an agency's accounting or other documents by an outside expert. Upon review, the expert prepares an opinion or report of his/her findings.
Assignment	Transfer of intellectual property rights from the owner to another party.
Authorization	To give official approval to; to give power or authority to; or to justify.
Authorized signature	(1) Signature of the person authorized to commit funds and facilities on grants and contracts. The President and his authorized representative are the only authorized institutional officials to sign a proposal or enter into a contract on behalf of the University. (2) Signature of those persons authorized to commit project funds. The project director/principal investigator is the authorized signer for his/her own project, and may authorize other persons to commit project funds. All authorized signatures must be identified on a Request for New Fund form.
Award	Document received from a sponsor outlining the terms and conditions associated with a project or activity and authorizing the transfer of funds.
Bad debt	Uncollectible amounts owing by others to the University.
Balance	Amount shown in an account; arrived at by adding all the debits and subtracting all credits.
Banner	The software system used by the University for its accounting system. Much of the information in Banner is available via the Bridge.
Basic research	A systemic, intensive study, the primary aim of which is a fuller knowledge or understanding of the subject under study rather than a practical application thereof.
Billing	The generation of an invoice in payment of goods or services provided or for the recovery of expenses.
Biohazards	Infectious agents or hazardous biological materials that present a risk or potential risk to the health of humans, animals or the environment. Biohazardous materials include certain types of recombinant DNA; organisms and viruses infectious to humans, animals or plants (e.g., parasites, viruses, bacteria, fungi, prions, rickettsia); and biologically active agents (i.e., toxins, allergens, venoms) that may cause disease

	in other living organisms or cause significant impact to the environment or community.
Bridge, The	Online tool used to access employee information; library privileges; and benefit and deduction, job, pay, direct deposit and T4 information. It also provides access to Financial Services tools and reports.
Budget	A list of anticipated project costs that represent the Principal Investigator's best estimate of the funds needed to support the work described in a grant or contract proposal.
Budget Description	A written description that explains or describes the types of individual costs that make up a larger budget category. Also known as a Budget Justification or Budget Narrative.
Budget year	Budget year is the 12 month period that corresponds to a given fiscal year. Both the University budget year and fiscal year start April 1 and end March 31.
Bursary	An award, for undergraduate or graduate students, granted on the basis of academic standing and demonstrated financial need.
Carry-forward	Funds remaining on grants and contracts that are moved to the next funding period, where the agency allows the carryover of expended funds.
Co-Investigator(s)	Other researcher(s) who share the research responsibility for the research proposal, application, agreement, contract or award, often including responsibility for associated expenditures.
Commercialization	The process of identifying, developing, and extracting tangible value from intellectual assets, whether those assets are in the form of inventions, processes, designs, databases etc.
Commitments	A future promise to pay for goods and services. For example, when placing a purchase order with a vendor, a promise is made to purchase goods/services at a certain price. The amount of the purchase is encumbered (held or committed) from your available funds to pay for the good/service when they are received. See also: Encumbrance.
Community of Science	A web server containing information about scientific expertise, funded scientific research and funding opportunities.
Competition	A competitive, peer-reviewed processed used by sponsors for selecting projects worthy of funding.
Condition	A qualification, restriction, or limitation attached to a grant or agreement.
Confidentiality agreement	An agreement designed to protect trade secrets and expertise from being misused by those who have learned of them.
Conflict of Interest	When a University employee is in a position to influence the conduct of a project for personal gain due to responsibilities or arrangements with an outside entity. Conflicts of interest include situations which cause actual conflicts, present the potential for conflicts, or which cause the appearance of conflicts.

Consortium agreement	Collaborative arrangement in support of a research project in which part of an activity is carried out through a formal agreement between a grantee and one or more other organizations.
Contract	An agreement between two or more parties whereby each party promise to do, or not to do, something. Each party has reciprocal rights to demand performance of what is promised. Also see: Research Contract.
Contribution agreement	Agreement to transfer funds in support of a research program. The sponsor typically participates in the research.
Copyright	A right granted to an author or originator of certain literary or artistic productions, where he/she is given the sole and exclusive privilege of copying, publishing and selling them. Works of authorship include literary, musical or dramatic works, works of art, motion pictures or video tapes, audio recordings or computer programs.
Cost-Reimbursement Contract	A contract wherein the sponsor agrees to pay the full costs incurred in the conduct of the work.
Cost-sharing	An arrangement wherein more than one party supports research, equipment acquisition, demonstration projects, programs, institutions. See also: Matching funds.
Creator	The author of an artistic, literary, musical or dramatic work.
Direct cost	Those costs that can be specifically identified with and directly benefit a particular project, program, or activity. For example, salaries and benefits, travel, equipment, supplies.
Disallowed cost	Charges to a grant or contract that the sponsoring agency determines to be unallowable in accordance to the terms and conditions contained in the award.
Document status	Financial transactions created by way of online documents (e.g., requisitions, journal entries and inter-departmental charges). A document is assigned a ‘status’ to depict it’s phase in the processing cycle: • Incomplete. Document is created with a unique number assigned but is not officially submitted by the originator. The document may still be altered. • Complete. Document is submitted by the originator with the intention to post the related transactions. The document can no longer be altered, and is awaiting approval by local and/or central reviewers. • Approved. Document has successfully received all the necessary approvals and is awaiting posting. • Posted. The document’s resulting transactions are posted to the University’s ledgers. It is final and unalterable. • Disapproved. Document is rejected by one of the approvers; the document’s approval history shows a DENY record. In most cases the document’s status reverts back to ‘Incomplete’ allowing the originator or others to remove or modify/re-complete the document.
Effective date	The date signifying the start of the granting period, as indicated on the Notice of Grant award.

Enabling disclosure	Any document that reveals enough information about an invention to permit others in the field to make and use the invention without undue experimentation.
Encumbrance	Funds that have been set aside for projected expenses pending future payment. For example, purchase orders and salary commitments. See also: Commitments.
Expenditure	The cost of goods delivered or services rendered, whether paid or accrued.
Expiration date	The date signifying the end of the granting period, as indicated on the Notice of Grant award. May also be referred to as the termination date.
Extension	An additional period of time authorized by the sponsor to an organization for the completion of work on an approved grant or contract. An extension allows previously allocated funds to be spent after the original expiration date.
Fee-for-service contract	An agreement to carry out specifically defined services for a fixed price.
Fellowship	An award, for graduate students, granted on the basis of academic standing. Support is often provided to the fellow through a stipend rather than a salary.
Final report	The final technical or financial report required by the sponsor to complete a research project.
Financial statement	A report that summarizes the financial status and results of operations of a business entity.
First-to-file	When two or more applications for a patent for the same invention are pending, the patent will be granted to the first applicant to file a patent application. Most countries, including Canada, operate on under this system.
First-to-invent	A patent is granted to the person able to prove the earliest date of invention, regardless of the date of filing of the patent application. The United States operates on this system.
Fiscal year	A period of one year for which financial statements are prepared that may or may not coincide with the calendar year. At the University, the fiscal year is the period April 1 to March 31.
Fixed-Price contract	A contract in which one party pays the other party a predetermined price, regardless of actual costs, for services rendered or the delivery of a final product/report. Quite often this is a fee-for-service agreement.
Flintbox	Online platform for marketing, sharing and licensing the outcomes of innovative research.
FOAPAL	The acronym representing the six independent elements of the University's Chart of Accounts: Fund, Organization, Account, Program, Activity and Location.

Foundation	A nongovernmental, nonprofit organization managed by its own trustees or directors. Foundation funds are established to maintain or aid social, educational, or other charitable activities serving the common welfare.
Fund	An amount of money that may be available either for general uses or purposes or that may be dedicated to a specific use or purpose.
Fund code	The "F" in "FOAPAL" that identifies the type and source of funding.
Funding cycle	The schedule of events starting with the announcement of the availability of funds followed by the deadline for submission of applications, review of applications, award of grants, issuance of contract documents, and release of funds.
Freight on Board destination	Indicates that the supplier owns the goods until it arrives at the University and is responsible for freight and insurance costs.
Freight on Board origin	Indicates that the buyer owns the goods in transit and must pay freight and insurance charges.
General Research Fund	The General Research Fund is a pool of unspent funds accumulated through expired and/or terminated NSERC and SSHRC grants.
Gift	An award given with few or no conditions specified. Gifts may be provided to establish an endowment or to provide direct support for existing programs. May also be referred to as a Donation.
Grant	Money given to the University by an outside agency for a specific purpose. Terms and conditions of a grant outline how the funds are to be spent, and the period of time during which the funds may be spent. Also see: Research Grant or Project.
Grantee	See Principal Investigator or Grant holder
Grant-in-Aid contract	Agreement to transfer funds in support of a research program.
Grant holder	The individual who is authorized to manage a research project. This individual is accountable for ensuring project activities comply with University and Sponsor terms and conditions.
Grant period	The period between the “effective date” and the “expiration date”, during which time items may be charged against the grant or contract.
Honoraria	A payment provided to a lecturer or a professional person from outside the University community (not a University faculty or staff member) as an expression of thanks from the University.
Incremental funding	A method of funding grants and contracts that provides specific spending limits below the total estimated costs.
Indirect costs	Costs related to expenses incurred in conducting or supporting research or other externally-funded activities but not directly attributable to a specific project. General categories of indirect costs include general administration (accounting, payroll, purchasing, etc.), operation and maintenance, library expenses, and departmental administration expenses.
Industrial design	The visual features of shape, configuration, pattern or ornament applied to a manufactured article. Registration provides protection

	against imitation and unauthorized use of the design.
In-Kind contribution	Contributions or assistance in a form other than money. Equipment, materials, or services of recognized value that are offered in lieu of cash.
Institutional grant	Funding that is awarded to the University rather than to an individual.
Intellectual property	Any form of knowledge or expression created with one's intellect. Intellectual property is divided into two categories: (1) industrial property, which includes inventions (patents), trademarks, and industrial designs; and (2) copyright which includes literary (e.g., novels, poems, plays) and artistic works (e.g., drawings, paintings, photographs, sculptures).
Interdisciplinary research	Generally, defined as research that crosses the boundaries of more than 1 scientific or scholarly discipline.
Internal grant	Grants awarded from peer-reviewed, adjudicated programs funded by either University monies or funds originating from external sponsors provided to the University for allocation. Some internal grants are initiated by Departments or Faculties, e.g. new researcher start-up funds.
Internal requisition	Sale of goods and services between units within the University. Also includes internal expense recoveries. Payments are made from one University account to another.
Invention	Any process, machine, manufacture, composition of matter, or design, or any new or useful improvement thereof, and any variety of plant which is or may be patentable.
Invention disclosure	A confidential document which describes an invention in semi-technical language so that it is understandable to a non-expert.
Invoice	Document for goods or services rendered, or expense recoveries showing details such as quantities, prices, dates, shipping details, order number, terms of sale, etc. Invoices received from vendors are paid through accounts payable. Invoices generated for sponsors are processed through Financial Services.
iWeb	See the Bridge.
Joint venture	An entity formed between two or more individuals or businesses for a specific purpose. It is similar to a partnership, but limited to a specific project (such as producing a specific product or doing research in a specific area).
Journal entry	A record of a transaction that lists the accounts affected and in which the total of the debits equals the total of the credits.
Journal voucher	Document explaining the need for, and leading to, a journal entry.
Letter of Intent	Letter of intent expressing a sponsor's willingness to commit funds to a project.
License	Legal agreement granting someone permission to use a work for certain purposes or under certain conditions. A license does not constitute a change in ownership of the copyright.

Location code	The "L" in "FOAPAL" is an optional element to describe the physical whereabouts of financial transactions.
Matching funds	Institutional funds to be committed to the project as required by the sponsor, and its source. This "commitment" can include personnel salaries, supplies, and other costs committed to but not paid for by the grant.
Matching grant	A grant that requires a portion of the project cost be obtained from other sources. The required match may be more or less than the amount of the grant. See also: cost sharing.
Material Transfer Agreement	A legal document that defines the conditions under which materials can be transferred and used among research laboratories and/or institutions.
Memoranda of Understanding	Institutional arrangements where the parameters of the relationship are defined at a high level.
Moral rights	Rights an author retains over the integrity of a work and the right to be named as its author even after sale or transfer of the copyright. Moral rights fall into three categories: (1) the right of an author to receive credit as the author of a work, to prevent others from falsely being named author, and to prevent use of the author's name in connection with works the author did not create; (2) the right of an author to prevent mutilation of a work; and (3) the right to withdraw a work from distribution if it no longer represents the views of the author.
NechoExpense	Web based software used to process personal reimbursements for both professional development and expense claims.
New award	An award not previously awarded or a renewal award treated as a new award by the sponsor and given a new agency number.
New proposals	Proposals that are submitted to a particular sponsor for the first time.
No-cost extension	An extension of the grant period beyond the original expiration date that allows the PI to complete the project. No additional costs are provided.
Notice of Award	The legally binding document that notifies the grantee and others that an award has been made, contains or references all terms and conditions of the award, and documents the obligations of funds.
One-over-one rule	The requirement that all expense claims must be signed by the claimant and approved by a person who is on an organizational level above the claimant.
Organization code	The "O" in "FOAPAL" that defines the departmental entities or budgetary units within the University responsible and accountable for financial activity. Each unit in the University is assigned a specific organization code.
Over-expenditure	Over expenditures arise when Principal Investigators/Project Holders spend amounts in excess of the annual external funding commitment or funding received.

Overhead	See Indirect Costs
PCard	Procurement Card. A University selected credit card assigned to authorized Cardholders for the purpose of purchasing goods and services up to specified amounts for business purposes.
Patent	A legally granted monopoly to use, manufacture and sell an invention, for a specified period of time, given to an inventor in exchange for the inventor's disclosure of his/her invention to the public.
Peer review	A system for evaluating research grant applications and contract proposals using reviewers who are professional peers of an applicant.
Plant Breeders' denomination	A right that is granted to the owner for the control over the multiplication and sale of reproductive material for a particular plant variety.
Post-award	Research administration activities that occur after a project is authorized.
Pre-award	Research administration activities that occur up to the point of a project being authorized.
Prespending	The condition that exists when a project obtains approval to make expenditures in advance of receiving a final agreement for the proposed work or subsequent grant installments.
Principal Investigator	The lead researcher on a research proposal, application, agreement, contract or award responsible for the conduct of the research project.
Prior approval	Written permission to use project funds for purposes not in the approved budget or to change aspects of the program from those originally planned and approved.
Prior art	The existing body of technological information against which an invention is judged to determine if it can be patented as being a novel and non-obvious invention.
Program code	The "P" in "FOAPAL" that defines the functional area in which funds are being spent.
Program officer	A staff member who reviews grant proposals and processes applications for the granting agency, foundation etc.
Progress report	Periodic, scheduled reports required by the sponsor summarizing research progress to date. Technical and fiscal reports may be required.
Proposal	An application for funding that contains all information necessary to describe project plans, staff capabilities, and funds requested.
Protocol	The formal design or plan of an experiment or research activity. It is the research plan submitted to the University's Human Subject Research or Animal Welfare Committees for review and approval for the participation of humans or the use of animals in a research project.
Public disclosure	Revelation of confidential information. It takes into account any communication medium that can be read, spoken, or viewed by the general public.

Public domain	The status of an invention, creative work, and commercial symbol that is not protected by any form of intellectual property law. Items in the public domain are available for free copying and use by anyone.
Purchase order	The written authorization for a vendor to supply goods or services at a specified price over a specified time period. Acceptance of the purchase order constitutes a purchase contract and is legally binding on all parties.
Purchase requisition	A request for the creation of a purchase order; includes the material or service to be purchased, a requested delivery date, and may include pricing and vendor information.
Renewal	A competitively reviewed proposal requesting additional funds extending the scope of work beyond the current project period.
Research	Investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories in the light of new facts, or the application of such new or revised theories.
Request for Proposal (RFP)	A document generated in the tendering process. The RFP offers greater flexibility than the Request for Quotation. It is used in situations where the procurement decision is relatively complex, where there may be more than one solution or approach, and there is a need to select the best overall service/product where price is not the most important consideration.
Request for Quotation (RFQ)	A document generated in the tendering process. This format is generally used when the product or service required is basically straight-forward, the specifications are known, with the remaining factors usually being price and delivery.
Research contract	A funding agreement, often sponsored by industry for conducting research directed at answering questions typically of an applied nature. Project control lies with the agency.
Research grant	A funding agreement typically focused on basic or fundamental, curiosity-driven research. Monies received by the University from an outside agency, for the financial support of a principal investigator's research.
Residual funds	Funds that remains unspent by the grant holder at the conclusion of the grant period.
Restricted funds	Funds whose use is specified or restricted by grant, contract, gift instrument, policy, or regulation.
Scholarship	An award given to a student on the basis of overall superior academic achievement.
Seed money	A grant or contribution used to start a new project or organization.
Sponsor	An outside agency that provides funds to the University. A company or agency paying for/requesting the research.
Sponsored research	Research funded by an outside agency either through a grant or contract.

Stipend	A payment made to an individual under a fellowship or training grant in accordance with pre-established levels to provide for the individual's living expenses during the period of training.
Technology transfer	The dissemination of technical knowledge, skills, and products from a point of origin into a broader sphere of use.
Technology Transfer Office	The University's office that manages invention disclosures, patent applications and oversees technology transfer and licensing.
Terms of award	All legal requirements imposed on an agreement by the sponsor. The terms of an agreement may include both standard and special provisions that are considered necessary to protect the sponsor's interests.
Trade secret	Confidential information that is not disclosed or known to the public and its value is protected by the barrier of silence or non-disclosure.
Trademark	A word, symbol or design, or combination of these, used to distinguish the goods or services of one party from those of another.
Tri-council	The three federal agencies regarded as a whole: CIHR, NSERC, and SSHRC.
Trust holder	The person who has signing authority for a research account. See also: Grant holder.
Unallowable cost	A cost determined to be unallowable in accordance with the terms and conditions contained in an award.
Unrestricted funds	Monies with no requirements or restrictions as to use or disposition. Grants, contracts, and cooperative agreements are considered to be restricted funds.
Vendor	A seller of goods or services; the opposite of a customer.

Acknowledgements

Some definitions are adapted from glossaries found on the University of Alberta web site. For a more in-depth discussion of research terminology and financial management terms, please consult http://www.rso.ualberta.ca/glossary.cfm. Intellectual Property glossaries may be found on web sites for the Canadian Intellectual Property Office (http://strategis.ic.gc.ca/sc_mrksv/cipo/toolkit/gl-e.html) and the U.S. State department (http://usinfo.state.gov/products/pubs/intelprp/glossary.htm).

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