



RESEARCH AND INNOVATION SERVICES

INFORMATION GUIDE FOR NEW FACULTY
2019-2020

BIG IDEAS. BETTER WORLD.



Lakehead
UNIVERSITY

Research
Services

Thunder Bay | Orillia

Table of Contents

Welcome to Lakehead University	2
Who to Call	3
Office of Research Services	11
Tri-Agency and CFI Research Programs	12
Funding Opportunities Resources	14
Grant Writers	14
Senate Research Committee	14
Faculty of Graduate Studies	16
Research Support Services at the Library	17
Research Accounting	17
How to Set Up a Research Account	18
Research Ethics Board	18
Animal Care Committee	19
Biosafety Committee	20
Radiation Safety	21
Working with Media Relations	21
Research Policies and Procedures	22
Office of Research Services Forms	24
Economic Development and Innovation	25
Research Centres and Institutes	27
Instrumentation Laboratory	30
Lakehead University Centre for Analytical Services (LUCAS)	31



Welcome to Lakehead University!

Lakehead University is a relatively small university, but when it comes to research and innovation, we are anything but small.

Research is an essential and valued part of Lakehead University. New faculty are especially excited about their research careers, and the offices of Research Services, Economic Development and Innovation and Lakehead University Centre for Analytical Services (LUCAS) are here to help you fulfill your research goals as you start your career at Lakehead.

In this *Information Guide for New Faculty* you can learn more about our internal grants, our peer mentoring systems, dedicated research facilitators, external research funding opportunities, regulatory requirements for research and certification processes, technology transfer, and commercialization, etc. We have also provided you with important staff contact information. The Office of Research Services takes great pride in learning about the different research interests of each faculty member and will help you develop your grant writing expertise to enable you to better compete for valuable research funding. We work very closely with the Deans and the Faculty of Graduate Studies to ensure that you are able to make the necessary connections to establish your research as an integral part of your academic career. Issues such as open access, research data management, knowledge mobilization, intellectual property, research ethics and regulatory requirements can be complicated. We take pride in helping you to navigate through areas such as these, and, throughout the year, we offer many professional development opportunities and information sessions. If you are looking for industry partners or need assistance with intellectual property management, our Economic Development and Innovation office is here to help you. If you require access to advanced instrumentation, LUCAS is the place where you can get shared access to state-of-the-art equipment and analytical services.

For the last four years, Research InfoSource has ranked Lakehead University first in Canada in our peer university category for demonstrating superior achievement both in earning research income and publishing results in leading scientific journals. In Maclean's last year, we ranked number one in the number of citations and second in total research funding. While we take pride in these rankings, our greatest satisfaction is helping the individual researcher get their program underway and ensuring that they feel part of the strong research culture that exists at Lakehead University. I encourage you to read the information contained within this Information Guide, but I also welcome you to visit our offices to find out more about what we can do for you.

Andrew P. Dean, Ph.D.

Vice-President, Research and Innovation

Phone: (807) 343-8820

Email: vpresearch@lakeheadu.ca

Webpage: <https://www.lakeheadu.ca/research-and-innovation>

Who to Call for...

Office of Research Services and Administration

Contact: Anne Klymenko, Director
Office of Research Services, (807) 343-8223
Email: anne.klymenko@lakeheadu.ca



- For information or concerns related to services provided by the Office of Research Services.
- For guidance in interpreting university research policies and procedures.
- For information regarding the application of Lakehead University's indirect costs policy.
- For advice on preparing large-scale collaborative research proposals.
- For information regarding institutional research programs (e.g. Canada Foundation for Innovation, Canada Research Chairs, Industry Research Chairs, Lakehead University Research Chairs, etc.).
- For assistance in developing equity, diversity and inclusion strategies in research applications.
- For questions regarding Lakehead University's research integrity policy and procedures.
- For assistance with planning a research-related media event.

General Research Inquiries and Romeo Research Portal Database

Contact: Bonnie Knott, Administrative Officer
Office of Research Services, (807) 343-8934
Email: research@lakeheadu.ca



- For general inquiries regarding research services.
- To schedule a meeting with the Director, Research Services.
- To obtain information on accessing the Romeo Research Portal.
- For support when using the Romeo Research Portal to apply for SRC funding, human ethics, animal care, or biosafety applications; renewals or amendments.

External Funding Opportunities and Institutional Programs

Contact: Andrew Hacquoil, Research Grants Officer
Office of Research Services, (807) 343-8092
Email: ahacquo1@lakeheadu.ca



- For information on the various funding opportunities available to support research.
- For assistance with major institutional funding applications such as the Canada Foundation for Innovation, Canada Research Chairs program, Early Researcher Award, etc.

- For assistance and advice regarding complex funding proposals that involve leveraging multiple industry and government programs (such as the NSERC Alliance program, Ontario Centres of Excellence, NOHFC, etc).
- For general assistance in interpreting funding agency guidelines, technical assistance with on-line web applications and guidance with completing application forms.

Appointment of Postdoctoral Fellow and Visiting Scholars and Students

Contact: Andrew Hacquoil, Research Grants Officer
Office of Research Services, (807) 343-8092
Email: ahacquo1@lakeheadu.ca

- To obtain information on the appointment and hiring process for postdoctoral fellows.
- To obtain letters of invitation for postdoctoral fellows.
- To arrange for letters of invitation to visiting scholars (visiting professors, visiting undergraduate and graduate research students).

Proposal Development and Research Strategies in the Social Sciences, Humanities and Health

Contact: Dr. PhebeAnn Wolframe-Smith, SSHRC/CIHR Research and Knowledge Mobilization Facilitator, (807) 343-8862
E-mail: sshrc.research@lakeheadu.ca



- Pre-award assistance with proposal strategies and grant writing in the social sciences and humanities.
- Information on SSHRC, CIHR (health research in the social sciences and humanities), foundations, and other granting programs supporting SSHRC-related research.
- Knowledge mobilization strategies and partnership development with the not-for-profit sector, health sector, public sector, and First Nations.
- Information on how to participate in internal peer review and professional development programs.
- Facilitation of the annual SSHRC and CIHR Enhancement programs and other professional development workshops throughout the year.

Proposal Development and Research Strategies in the Natural Sciences and Engineering and Health

Contact: Dr. Alexandria (Lexi) Haslehurst, Research Facilitator (Natural Sciences, Engineering and Health), (807) 343-8290
E-mail: nserc.research@lakeheadu.ca



- Pre-award assistance with proposal strategies and grant writing in the natural sciences and engineering and health.

- Information on how to participate in internal peer review and professional development programs.
- Information on NSERC, CIHR (health and biomedical research in the sciences and engineering), and other granting programs supporting NSERC related research.
- Facilitation of the annual NSERC and CIHR Enhancement programs and other professional development workshops throughout the year.

International Research Collaborations, Partnerships and Faculty Mobility

Contact: Jill Sherman, International Research Facilitator
Office of Research Services, (807) 343-8014
Email: intl.research@lakeheadu.ca



- For information and assistance with international funding and faculty mobility opportunities (inbound and outbound).
- Coordinator for Mitacs' international programs.
- Pre-award assistance with proposals and grant writing on international funding opportunities.
- Assistance with strategies for developing international research collaborations, institutional partnerships.
- Assistance with international research MOUs.
- Secretariat for the CALAREO Consortium.

Research and Strategic Initiatives Facilitator, Orillia

Contact: Dr. Rebecca Heffernan, Research and Strategic Initiatives Facilitator
Office of Research Services, Orillia
(705) 330-4008 ext. 2022
Email: orillia.research@lakeheadu.ca



- For general inquiries and advice on strategies to increase research and innovation capacity at the Orillia campus.
- For assistance establishing research collaborations, opportunities, and community and private sector partnerships in Orillia, Simcoe County, and beyond.
- For assistance developing funding applications and proposals.

Ethical Procedures – Human Participants and Animal Care

Contact: Sue Wright, Research Ethics and Administration Officer
Office of Research Services, (807) 343-8283
Email: susan.wright@lakeheadu.ca



- For information on the application and approval process for research involving human participants through the Lakehead University Research Ethics Board.
- For information on research involving animals through the Animal Care Committee.

Research Contracts, Tri-Council Sub-Awards and Post-Award Administration

Contact: Sue Wright, Research Ethics and Administration Officer
Office of Research Services, (807) 343-8283
Email: susan.wright@lakeheadu.ca

- For the review and processing of standard research agreements, contribution agreements, contractor agreements, and sub-awards with external research sponsors and partners including the Tri-councils, other federal and provincial governments, and the not-for-profit sectors.
- To obtain approvals for the establishment of research accounts.
- For information on the hiring practices of research staff and students to be paid from research grants and contracts.
- To request conditional release of research funding prior to ethics approval.

Executive Assistant to the Associate Vice-President, Research and Graduate Studies and Research Ethics Coordinator

Contact: Sonya Matson, Executive Assistant, Associate Vice-President, Research and Graduate Studies, (807) 343-8933
E-mail: admin.research@lakeheadu.ca



- For general inquiries regarding research centres.
- General inquiries on the application and approval process for research involving human participants.

Establishing or Connecting with a Lakehead Research Centre or Institute

Contact: Dr. Batia Stolar, Associate Vice-President, Research and Graduate Studies, (807)343-8489
E-mail: avp.research@lakeheadu.ca



- For assistance in establishing new interdisciplinary research centres.
- Information on existing research centres and how to participate.
- Review and administration of research centres/institutes on campus.

Nominations for Research Prizes

Contact: Dr. Batia Stolar, Associate Vice-President, Research and Graduate Studies, (807)343-8489
E-mail: avp.research@lakeheadu.ca

- Information on university procedures for preparing university endorsed nominations for research prizes (i.e., Royal Society of Canada, Killam Awards,

Polanyi Prizes, Herzberg Canada Gold Medal for Science and Engineering, Gairdner Foundation, etc.).

- To obtain award nominations endorsed by the University President.

Internal Research Funding

Contact: Allison Whately-Doucet, Executive Assistant to the Vice-President, Research and Innovation, (807) 343-8201
Email: ea.vpri@lakeheadu.ca



- For general information on internal research funding from the Senate Research Committee, Regional Research Fund, and VPRI Strategic Fund.
- For general assistance in interpreting program guidelines or completing application forms for internal research grant programs.

Technology Transfer, Intellectual Property, Industry Research Partnerships and Economic Development

Contact: Ellen MacKay, Director, Innovation Development Economic Development and Innovation, (807) 343-8724
Email: emackay@lakeheadu.ca



- For advice and information regarding the protection of university Intellectual Property through patent, copyright and trademark.
- For the negotiation of university-industry research agreements.
- For commercialization, licensing and knowledge transfer services.
- For review of various IP related contracts, including material transfer agreements and confidentiality agreements.
- For advice and assistance with the creation of university spin-off companies.
- To provide marketing assistance for finding licensees for university-created IP.
- For the overall management of *Ingenuity*, Lakehead's business incubator.

Contact: Bill Maloney, Director, Industry Research Partnerships Economic Development and Innovation, (807) 343-8793
Email: bmaloney@lakeheadu.ca



- For assistance in accessing researchers, industry, government, businesses, etc. to identify potential research partnership opportunities.
- For assistance in accessing funds and preparing research proposals to support university-industry research projects.
- For small business start-up assistance and to access funding and entrepreneurship services.

Contact: Alyson MacKay, Manager, *Ingenuity*
Economic Development and Innovation, (807) 343-8324
Email: amackay@lakeheadu.ca

- For support of business development.
- For general knowledge and assistance on locating small business development resources including funding opportunities.
- For inquiries into accessing resources at *Ingenuity*.
- For booking events and meeting space at *Ingenuity*.



Contact: Taylor Gynane, Development Assistant
Economic Development and Innovation, (807) 343-8709
Email: development.edi@lakeheadu.ca

- For general inquiries regarding Technology Transfer, Intellectual Property, Industry Research Partnerships and Economic Development.
- For inquiries regarding Economic Development events; educational sessions, networking events, and other outreach initiatives.



Contact: Kelly Fettes, Administrative Officer
Economic Development and Innovation, (807) 343-8871
Email: kafettes@lakeheadu.ca

- For general inquiries regarding scheduling, events or administrative management of the Economic Development and Innovation office.
- To obtain meetings with either Director at the Economic Development and Innovation office.
- For assistance with planning industry partnership or innovation events.



University Instrumentation Laboratory (UIL) and Lakehead University Centre for Analytical Services (LUCAS)

Contact: Dr. Francis Appoh, Director
LUIL/LUCAS, (807) 343-8853
Email: francis.appoh@lakeheadu.ca

- For information on the policies and procedures for accessing scientific instrumentation located in the LUIL.
- For information on the analytical testing services available through LUCAS.



Biosafety and Radiation Safety

Contact: Tiffany Moore, Laboratory and Biosafety Specialist
Human Resources, (807) 343-8806
Email: labsafety@lakeheadu.ca

- For information about identifying biohazards, or to obtain an application to work with biohazards.
- For information about activities involving radioactive materials.

Research Accounting

Contact: Margot Ross, Manager, Research, Trust and Accounting
Financial Services, (807) 343-8730
Email: margot.ross@lakeheadu.ca

- For advice and information on the eligibility of research expenditures in accordance with Lakehead University policies and agency guidelines and the purchasing of research-related equipment and materials.
- For the preparation of financial reports and invoices for research grants and contracts.
- For access to the University financial system for electronic purchase orders and real time financial reporting of your grant funds.
- For the processing of research expense reimbursement requests such as travel claims.
- For access to the Concur Travel system for electronic travel requests and expense claims.

Media Relations

For Assistance with:

- Media events and media relations.
- Media training and other resources.

Thunder Bay Contact

Brandon Walker, Media, Communications and Marketing Associate
(807) 343-8372
Email: brandon.walker@lakeheadu.ca

Orillia Contact

Jaclyn Bucik, Media, Communications and Marketing Associate
(705) 330-4008 ext. 2014
Email: jaclyn.bucik@lakeheadu.ca

Graduate Studies

Contact: Trish Sokoloski, Manager
Faculty of Graduate Studies, (807) 343-8099
Email: trish.sokoloski@lakeheadu.ca

- For information on all student funding opportunities to support graduate training (Masters and Ph.D.).

- For assistance in the submission of graduate scholarship applications (e.g., NSERC, SSHRC, CIHR, OGS, etc.).
- To arrange payment of stipends and awards to graduate students from faculty research grants.

Office of Research Services

The Office of Research Services (ORS) is delighted to welcome you to Lakehead University. This guide is intended to help you begin the development of a successful research career at Lakehead.

The mandate of the ORS is to support and facilitate research and scholarship activities in accordance with the University's Strategic Plan and Academic/Research Plan.

ORS is the first point of contact for faculty members who are seeking financial support for their research or assistance in administering their program of research. We provide researchers with up-to-date access to information on major research funding programs, as well as a multitude of other research funding sources. We also serve as the central point of contact for all major research funding agencies, keeping abreast and advising researchers of upcoming changes in the funding environment and associated guidelines and application procedures, as well as new funding directions and initiatives.

We can assist with your proposal and post-award administration

The ORS provides assistance to researchers in preparing funding proposals, particularly those of a large-scale collaborative nature. ORS also initiates and coordinates visits and webinars to the University by program officers of granting agencies in order to provide University researchers with access to first-hand information about new programs and directions of these agencies. In addition, we act as a resource to the Senate Research Committee and its various sub-committees.

All research grant applications as well as contract proposals are reviewed by ORS staff prior to their submission to ensure compliance with the policies and requirements of the University and the particular funding agency. Once awarded, all research contracts with the federal and provincial governments and not-for-profit sector are negotiated by ORS on behalf of the University and its researchers. Research contracts with industry and IP related agreements are negotiated by the Economic Development and Innovation (EDI) office.

We can help facilitate interdisciplinary research collaborations and connect you to community partners and government organizations

Collaboration has emerged as a key requirement in many federal and provincial research programs. Lakehead's ORS, through its Research Facilitators, helps to connect researchers in the natural sciences and engineering, social sciences, humanities and health with academic colleagues, not-for-profit organizations, government, Indigenous communities, and other universities seeking to develop sustainable solutions to social, environmental, health, and cultural challenges. The ORS also works closely with Economic Development and Innovation to make connections with industrial partners.

We can help you with your research ethics and regulatory requirements

The ORS administers the University's research ethics programs (Research Ethics Board and Animal Care Committee). We also work with Human Resources to deliver our Biosafety program as it relates to research. The ORS works in collaboration with the office of Media Relations to promote Lakehead's research initiatives and impacts.

Location

The Office of Research Services is located in the new Centre for Advanced Studies in Engineering and Sciences (CASES) building of 955 Oliver Road, Thunder Bay. Please drop by and meet our staff. We are committed to assisting you with all your research needs. All researchers are encouraged to visit the ORS website for additional information at <http://research.lakeheadu.ca>/or contact:

Anne Klymenko, Director
Office of Research Services, (807) 343-8223
Email: anne.klymenko@lakeheadu.ca

Internal Deadlines

Please note that **all external funding applications must be submitted to the ORS for internal review at least two weeks prior to the external deadline**. Please refer to the Policy for Application and Administration of External Research Grants and Contracts at <https://www.lakeheadu.ca/research-and-innovation/policies/external-grants-contracts>.

Tri-Agency and CFI Research Programs

Natural Sciences and Engineering Research Council (NSERC)

NSERC aims to make Canada a country of discoverers and innovators for the benefit of all Canadians. The agency supports university students in their advanced studies, promotes and supports discovery research, and fosters innovation by encouraging Canadian companies to participate and invest in postsecondary research projects. NSERC researchers are on the vanguard of science, building on Canada's long tradition of scientific excellence.

For forms, guidelines, and other NSERC funding opportunities, please go to http://www.nserc-crsng.gc.ca/index_eng.asp

Social Sciences and Humanities Research Council of Canada (SSHRC)

SSHRC is the federal research funding agency that promotes and supports postsecondary-based research and training in the humanities and social sciences. By focusing on developing talent, generating insights and forging connections across campuses and communities, SSHRC strategically supports world-leading initiatives that reflect a commitment to ensuring a better future for Canada and the world.

For forms, guidelines, and more information on SSHRC funding opportunities, please go to <http://www.sshrc-crsh.gc.ca/home-accueil-eng.aspx>

Canadian Institutes of Health Research (CIHR)

CIHR is the Government of Canada's health research investment agency. CIHR was created in 2000 under the authority of the [Canadian Institutes of Health Research Act](#). It is an independent agency and is accountable to Parliament through the Minister of Health. Its mission is to create new scientific knowledge and to enable its translation into improved health, more effective health services and products, and a strengthened Canadian health care system. Composed of [13 Institutes](#), CIHR provides leadership and support to health researchers and trainees across Canada.

For more information: <http://www.cihr-irsc.gc.ca/e/193.html>

Canada Foundation for Innovation (CFI)

John R. Evans Leaders Fund (JELF)

Created by the Government of Canada in 1997, CFI strives to build our nation's capacity to undertake world-class research and technology development to benefit Canadians. Thanks to CFI investment in state-of-the-art facilities and equipment, universities, colleges, research hospitals, and non-profit research institutions are attracting and retaining the world's top talent, training the next generation of researchers, supporting private-sector innovation, and creating high-quality jobs that strengthen Canada's position in today's knowledge economy. One of CFI's major programs is the John R. Evans Leaders Fund (JELF). The John R. Evans Leaders Fund enables a select number of an institution's excellent researchers to undertake leading-edge research by providing them with the foundational research infrastructure required to be or become leaders in their field. In turn, this enables institutions to remain internationally competitive in areas of research and technology development, aligned with their strategic priorities.

Universities are provided with funding envelopes under the JELF. A CFI JELF internal call for proposals is usually sent out in early fall.

For more information on the CFI in general, please go to <http://www.innovation.ca>

Funding Opportunities Resources

A special weekly e-mail is sent to faculty members alerting them to any upcoming calls for proposals. This e-mail is sent via a special distribution list maintained by the Office of Research Services.

Grant Writers

The Office of Research Services maintains a list of grant/professional writers on its web site who are available to faculty members to aid in the planning, writing and/or editing of grant proposals. Information on the services that each individual offers can be accessed by clicking on "Services Offered" under his or her name. A particular grant writer can then be contacted through the use of an online form.

For more information about writers:

<https://www.lakeheadu.ca/research-and-innovation/research-services/resources/writing/grant-roster>

Senate Research Committee

The Senate Research Committee allocates internal seed grants to enhance research capacity development including the facilitation of external grant applications, and scholarly productivity of Lakehead University faculty members. Funds are for the support of research activities covered under the Tri-Councils' (NSERC, CIHR, SSHRC) mandates. Preference for funding is given to full-time eligible Lakehead faculty members, although in special circumstances part-time faculty and post-doctoral or research fellows may be considered. Limited funds are available so faculty are expected to develop their research to the point where applications can be made externally to NSERC, CIHR, SSHRC or other external funding sources. Senate Research Committee funds should be regarded as supplementary. The Committee considers requests from eligible faculty on the basis of merit, need, and the availability of funds. All funds are awarded on a competitive basis, although support is preferentially awarded to new faculty and to those who currently hold, or are currently applying for, external Tri-Council funds. Please note that these internal funds are generated through the success of Lakehead University faculty in external Tri-Council competitions.

Senate Research Committee - Internal Research Funds and Deadlines

Fund	Deadline
Applications for the following internal funding opportunities (except RGILS) are only available through the Romeo Research Portal. To access the portal, log into MyInfo, then select "Romeo Research Portal" under web utilities on the right.	
Research Development Fund maximum grant per year - \$7,000	January 20
Conference Travel Fund maximum grant per year - \$1,000	May 10 October 10
Publication Assistance Fund maximum grant per year - \$1,500	January 20
Visiting Scholar Grant maximum grant per year- \$1,000	January 20
Research Grant in Lieu of Salary (RGILS) To access guidelines & application form, click here	January 20
Distinguished Researcher Award	November 30
Contributions to Research Award	May 15

** Please note that the Senate Research Committee has revised its program categories to be more inclusive of CIHR eligible faculty.*

Please visit: <https://www.lakeheadu.ca/research-and-innovation/research-services/funding-prizes/internal> for more information, or contact:

Allison Whately-Doucet, Executive Assistant
 Vice-President, Research and Innovation
 955 Oliver Road - UC 2003, Thunder Bay
 Tel.: (807) 343-8201
 Email: ea.vpri@lakeheadu.ca

Other Internal Research Funds and Deadlines

Fund	Deadline
Regional Research Fund	March 31
Vice-President Research and Innovation Strategic Fund	<ol style="list-style-type: none"> 1. Research Facilitation Fund: <ul style="list-style-type: none"> • Sustainability Studies Research Grant: TBA • Strategic Research Opportunity Grant: Anytime • UMD Research Collaboration Grant: Anytime 2. Emergency Research Equipment Repair Fund: Anytime 3. Lakehead University Agricultural Research Capacity Development Program: October 1 4. International Research Partnership Awards: November 15

Please visit <https://www.lakeheadu.ca/research-and-innovation/research-services/funding-prizes/internal> for more information, or contact:

Allison Whately-Doucet, Executive Assistant
Vice-President, Research and Innovation
955 Oliver Road - UC 2003, Thunder Bay
Tel.: (807) 343-8201
Email: ea.vpri@lakeheadu.ca

Faculty of Graduate Studies

The Faculty of Graduate Studies (FGS) is responsible for the administration and development of graduate programs at Lakehead University. All graduate student funding is administered through this Office, including Graduate Assistantships. The Office administers both internal scholarships, awards and bursaries, and external scholarships such as CIHR, NSERC, OGS, and SSHRC.

To supervise graduate students you must be a member of the FGS. In some departments or schools, new faculty take on the role of graduate supervision immediately; talk to your Chair/Director and Graduate Coordinator about the practice in your particular department or school. For detailed information on Graduate Supervision, and how to apply to become a member of the Faculty, see the Graduate Supervision Policy at: <https://www.lakeheadu.ca/faculty-and-staff/faculty-resources/graduate-resources>

Faculty having any questions regarding their graduate program, graduate regulations or funding for their graduate students should contact the FGS. For more information, contact:

Trish Sokoloski, Manager
Faculty of Graduate Studies, (807) 343-8099
955 Oliver Road, FB 2010, Thunder Bay
Email: trish.sokoloski@lakeheadu.ca

Research Support Services at the Library

The Lakehead Library can help Lakehead researchers make their results public by:

- Submitting articles to Knowledge Commons, Lakehead's institutional repository which allows researchers to meet grant requirements for open access;
- Placing data sets in Dataverse, a repository that makes data visible on the Web;
- Providing publisher information – help with finding an open access journal or a journal that permits self-archiving within a grantor's timeframe; help with avoiding the predatory publisher trap, and providing information on publishers who offer discounted Article Processing Charges to Lakehead researchers.

Library staff can assist with creating data management plans that may include documentation on file formats, file-naming conventions, organization, data security and data-sharing. Staff can also provide assistance with tracking metrics such as article-level usage counts, journal impact factors and alt-metrics where available, with establishing research identifiers and with understanding author rights. In addition, for journal editors, the library offers hosting on Open Journal Systems (OJS).

More details at <http://libguides.lakeheadu.ca/scholcomm>. For more information, contact:

Moira Davidson
Scholarly Communications, Library, 807-343-8315
955 Oliver Road, Thunder Bay
Email: moira.davidson@lakeheadu.ca

Research Accounting

The Office of Financial Services has a team dedicated to assisting researchers with the financial administration of their grants. The department of Research Accounting is responsible for administering and monitoring all research accounts and for preparing financial statements and other reports to the funding agencies. We provide advice on the eligibility of expenses, arrange for transfers and cost recoveries, prepare invoices to sponsors, and maintain signing authority and access to the research accounts. We can assist with the budget management and payroll costing. Research Accounting is located in the basement of the University Centre in UC0002. More details are available at:

<https://www.lakeheadu.ca/faculty-and-staff/departments/services/finance/research-trust-accounting>. For more information contact:

Margot Ross
Manager, Research, Trust and Accounting
Financial Services, (807) 343-8730
955 Oliver Road, UC 0002C, Thunder Bay
Email: margot.ross@lakeheadu.ca

How to Set Up a Research Account

To ensure that all ethical protocols are in place prior to account establishment and to capture data for our records and statistics, all research accounts are to be authorized and established by ORS. **ORS requires the following documents before establishing a research account:**

1. **Copy of signed Agreement (contract) or Letter of Award (grant).**
2. **Copy of Research Proposal and any updates.**
3. **New updated budget if one is not included in the Agreement or Proposal (or if the amount awarded is different than requested).**
4. **Completed and signed Research Proposal Approval Form (RPAF).**
5. **If applicable, ethical approval from the appropriate certification committee/board (i.e., REB, ACC, Biosafety).**

If a project involves research with human participants or animals, contact Sue Wright at extension 8283. If the project involves biohazardous materials, contact the Biosafety Officer at extension 8806. Please note that a research account will not be established until ethical approval is in place or until early release of funds approvals are in place. To set up a research account, contact:

Sue Wright
Research Ethics & Administration Officer
Office of Research Services, (807) 343-8283
Email: susan.wright@lakeheadu.ca

Research Ethics Board

The Board of Governors of Lakehead University has established the Research Ethics Board (REB) which is committed to the ethical integrity of all research involving humans

conducted in its jurisdiction or under its auspices, by its faculty, staff or students, regardless of where it is conducted.

The REB is guided by the Tri Council Policy Statement: Ethical Conduct for Research Involving Humans 2 (TCPS 2).

The Lakehead University Research Ethics Board Terms of Reference is available at: <https://www.lakeheadu.ca/research-and-innovation/policies/reb>

The following forms are available through the Romeo Research Portal at <https://erpwp.lakeheadu.ca/>. To log in, use your myInfo username and password.

- Researchers Agreement Form (submission form)
- Request for Renewal form (under Events)
- Request for Amendment for an Approved Project form (under Events)
- Final Report form (under Events)
- Request for Early Release of Funds form

Ethics proposals are submitted to the Office of Research Services. The ethical review process for minimal risk research generally takes 3 weeks.

For additional information about the ethical review process, contact:

Dr. Kristin Burnett
Chair, Research Ethics Board
(807) 346-7721
kristin.burnett@lakeheadu.ca

Sue Wright
Research Ethics and Administration Officer
(807) 343-8283
susan.wright@lakeheadu.ca

Animal Care Committee

The Lakehead University Animal Care Committee is overseen by the Vice-President, Research and Innovation. It was established in the 1970s to ensure the ethical use of animals used in teaching and research. The Committee composition and Terms of Reference are governed by the Canadian Council on Animal Care and Ontario's Animals for Research Act. The administration office for the Committee is the Office of Research Services.

The Committee's role is to ensure that research and teaching activities involving animals at Lakehead University is conducted within the guidelines of the Canadian Council on Animal Care and the Animals for Research Act. Animal Utilization Protocol forms must be completed for all animal use including research, teaching, testing, and field studies, and submitted to the Committee via the Romeo Research Portal for approval. Researchers are invited to the Committee meetings to discuss their protocols and are encouraged to bring along students who will be involved in the research. Protocols are reviewed on an annual basis under the guidelines of the Canadian



Council on Animal Care. The Committee also provides training for researchers to enable them to become familiar with animal care issues.

Further information on Animal Care is available at:
<https://www.lakeheadu.ca/research-and-innovation/ethics/animals>

Applications, amendments, and renewals for Animal Utilization Protocols are available through the Romeo Research Portal at:
<https://erpwp.lakeheadu.ca/>. To log in, use your MyInfo username and password.

For more information, you may also contact:

Dr. Christine Gottardo
Chair, Animal Care Committee
(807) 343-8466
christine.gottardo@lakeheadu.ca

Sue Wright
Research Ethics and Administration Officer
(807) 343-8283
susan.wright@lakeheadu.ca

Biosafety Committee

Lakehead's comprehensive risk management program for biological hazards, the Biosafety Program is overseen by the Biosafety Committee, which reports to the Vice-President, Research and Innovation. All faculty, researchers, and students who work with biological hazards must acquire prior approval and act in accordance with the program.

A biological hazard is an agent of biological origin that has the ability to produce deleterious effects on human beings. Biohazards can include bacteria, viruses, fungi, parasites, and plants. Biohazards may not be as well known, or as visible as chemical or physical hazards, however, they are capable of causing very serious health effects to exposed individuals.

For information about identifying biohazards, or to obtain an application to work with biohazards, contact the Biosafety Officer, Human Resources at (807) 343-8806.

For additional information, please visit the Human Resources Health and Safety website at <https://www.lakeheadu.ca/faculty-and-staff/departments/services/hr/health-safety>, or contact:

Tiffany Moore, Laboratory and Biosafety Specialist
Human Resources, (807) 343-8806
955 Oliver Road, AC 153, Thunder Bay
Email: labsafety@lakeheadu.ca

Radiation Safety

It is a requirement of federal legislation that all activities involving radioactive materials are licensed by the Canadian Nuclear Safety Commission (CNSC); therefore, Lakehead University must maintain control of radioactive hazards on campus to ensure compliance with applicable federal legislation, guidelines and regulatory documents.

For additional information, please visit the Human Resources Health and Safety website at: <https://www.lakeheadu.ca/faculty-and-staff/policies/health-and-safety/radiation-use/node/964> or contact:

Tiffany Moore, Laboratory and Biosafety Specialist
Human Resources, (807) 343-8806
955 Oliver Road, AC 153, Thunder Bay
Email: labsafety@lakeheadu.ca

Working with Media Relations

Interacting with various media outlets, including radio, TV, print and online news sites, allows your research to potentially reach thousands or even millions of people. Media Relations and the Office of Research Services are the go-to places on campus for media seeking information about Lakehead research, scholarly and artistic work, and for researchers wanting to share their stories of research findings, impacts, discoveries, and innovations.

Why talk to the media?

The media can be a powerful and influential tool to reach out to people in all walks of life. Here at Lakehead, we rely on the provincial and federal governments and on funding agencies for more than \$23 million to support research, scholarly activity, and student training at the University. Consequently, it is crucial that we do whatever we can to demonstrate to governments, agencies, taxpayers, and sponsors that their money is well spent. One of the most effective ways to get that message across is through print and broadcast media.

You are the expert!

The media often calls upon Lakehead University faculty members and researchers to share their expertise because you are respected members of the community making important contributions through research that impacts society every day. In responding to a media opportunity, faculty obtain greater public awareness of their achievements and the University receives recognition for its scholarly efforts in the social, cultural, and economic life of our region and country.

Remember, you are the expert. If you are unsure about something, tell the journalist that and promise to get back with an answer right away or refer him/her to another faculty member who might be more qualified to answer that question. Stay within your area of expertise and responsibility. **If you are asked to speak on behalf of Lakehead University, please refer the journalist to your campus's Media Relations representative** (see contact information below).

Media Relations works closely with the Faculty Deans and the Office of Research Services to identify stories that demonstrate how Lakehead is pursuing its research mission. Captivating stories of success not only make a persuasive argument for attracting world-class faculty and students, but also encourage on-going financial support for research.

Communicating information successfully to the media requires a well-prepared strategy and an understanding of what the media expects from you. Upon request, Media Relations will provide faculty and researchers with media training designed to assist in becoming more effective in their interactions with print, radio, and broadcast reporters.

If planning a research-related media event contact your Dean for endorsement and then:

Anne Klymenko, Director
Office of Research Services
(807) 343-8223
anne.klymenko@lakeheadu.ca

To access media training opportunities or additional media relations support for yourself or your research group, please contact:

Thunder Bay Campus
Brandon Walker, Media, Communications
and Marketing Associate
(807) 343-8177
brandon.walker@lakeheadu.ca

Orillia Campus
Jaclyn Bucik, Media, Communications
and Marketing Associate
(705) 330-4008, Ext. 2014
jaclyn.bucik@lakeheadu.ca

Research Policies and Procedures

Faculty should be familiar with the following Lakehead University research-related policies:

❖ **Animal Care Committee Policy**

For more information: <https://www.lakeheadu.ca/faculty-and-staff/policies/research/terms-of-reference-for-lakehead-universitys-animal-care-committee>

❖ **Policy Framework for Research Involving Humans**

For more information: <https://www.lakeheadu.ca/faculty-and-staff/policies/research/policy-framework-for-research-ethics-involving-humans-at-lakehead-university>

❖ **Biosafety Policy**

For more information: <https://www.lakeheadu.ca/faculty-and-staff/policies/health-and-safety/biosafety>

❖ **CFI Infrastructure Operating Fund (IOF) Lakehead University Institutional Allocation Plan**

For more information: <https://www.lakeheadu.ca/faculty-and-staff/policies/research/cfi-infrastructure-operating-fund-iof-lakehead-university-institutional-allocation-plan>

❖ **Guidelines on the Use of Students as Research Subjects**

For more information: <https://www.lakeheadu.ca/research-and-innovation/policies/guidelines-on-the-use-of-students-as-research-subjects>

❖ **Intellectual Property**

For more information: <https://www.lakeheadu.ca/faculty-and-staff/policies/research/intellectual-property>

❖ **Policy for Application and Administration of External Research Grants and Contracts**

For more information: <https://www.lakeheadu.ca/research-and-innovation/policies/external-grants-contracts>

❖ **Policy for Recovery of Overhead (Indirect Costs) on University-Administered Research Funds**

For more information: <https://www.lakeheadu.ca/faculty-and-staff/policies/research/overhead-indirect-costs-on-university-administered-research-funds-recovery-of>

❖ **Research Integrity**

For more information: <https://www.lakeheadu.ca/research-and-innovation/policies/research-integrity>

❖ **Policies and Procedures for the Establishment of Research Centres and Research Institutes**

For more information: <https://www.lakeheadu.ca/research-and-innovation/policies/centres-and-research-institutes-policies-and-procedures-for-the-establishment-of>

❖ **Procurement Policy**

For more information: <https://www.lakeheadu.ca/faculty-and-staff/policies/financial/procurement-policy>

❖ **Postdoctoral Fellows and Visiting Scholars**

For more information: Please contact the Office of Research.

- **New Postdoctoral Fellows Policy** (in effect January 1, 2019)

❖ **Conflict of Interest**

For more information: <https://www.lakeheadu.ca/faculty-and-staff/policies/general/conflict-of-interest>

❖ **Travel Expense Policy**

For more information: <https://www.lakeheadu.ca/faculty-and-staff/policies/financial/travel-expense-policy>

Office of Research Services Forms

All forms concerning Office of Research Services can be found at <https://www.lakeheadu.ca/research-and-innovation/forms>

Economic Development and Innovation

"Development through Innovation"

Lakehead's Economic Development and Innovation office (EDI) is responsible for management and commercialization of the University's intellectual property (i.e. licensing and start-up companies), and the handling of legal and other issues related to IP protection, development and marketing. The EDI office also assists researchers in transferring knowledge and innovations to those outside the University community.

The EDI office is integral in developing and maintaining linkages with research and business partners, including industry, not-for-profit groups, all levels of government, and other universities.

The EDI office is responsible for the following main areas: Industry Liaison; Contract Creation, Review, and Negotiation; IP Commercialization Services; Commercialization Funding; and Outreach Activities.

Industry Research Partnerships

The EDI office works closely with members of the University community and the University's partners facilitating interactions between groups of researchers and specific sectors of the non-academic world. By connecting new and established companies with the technologies and resources of Lakehead University, the EDI office creates partnerships between Lakehead University researchers and industry in local and global markets. These strategic links generate new investment and long-term economic benefits for the University, its industrial partners, and the community.



Contract Review & Negotiation

The EDI office drafts and negotiates legal agreements such as:

- intellectual property assignments;
- licensing agreements;
- industrial grants;
- industrial research contracts and related partnership agreements (including conditional purchase orders);
- data sharing agreements;
- confidentiality, non-disclosure agreements, and material transfer agreements.

Researchers are always encouraged to contact the EDI office for assistance with negotiating such research agreements as early as possible.

IP Commercialization Services

The EDI office offers assistance in each of the five major steps of the IP Commercialization Cycle:

- **Research:** assisting with intellectual property and related clauses in research contracts, and all aspects of industry sponsored research including finding industry partners;
- **Discovery:** helping researchers determine which discoveries to consider moving through the commercialization cycle;
- **Disclosure:** helping researchers create valid invention disclosures, the first step in protecting your discoveries;
- **Evaluation:** a business, intellectual property, and technical evaluation of potential products or services;
- **Commercialization:** including commercialization plan development and implementation, and where appropriate, new business creation and support.

Commercialization Funding

Several funding programs exist to help move inventions further down the innovation continuum, from concepts to prototypes to marketable products and/or services. The EDI office is here to assist University faculty and researchers with sourcing potential funding for IP commercialization.

Outreach Activities

The EDI office offers seminars and other continuing education periodically on request to faculty, staff, students, and the local community as a whole. Seminars can cover various topics, including intellectual property in general, steps to commercializing technology, and protection of inventions.

For more information about the EDI office and more details about the services we provide, please visit the EDI office website at <https://www.lakeheadu.ca/research-and-innovation/innovation> or feel free to contact:

Economic Development and Innovation

955 Oliver Road, FB 2004, Thunder Bay

Bill Maloney

Director, Industry Research Partnerships
(807) 343-8793
bmaloney@lakeheadu.ca

Ellen MacKay

Director, Innovation Development
(807) 343-8724
emackay@lakeheadu.ca

Kelly Fettes

Administrative Officer
(807) 343-8871
kafettes@lakeheadu.ca

Alyson MacKay

Manager, *Ingenuity*
(807) 343-8324
amackay@lakeheadu.ca

Research Centres and Institutes

Biorefining Research Institute (BRI)

The BRI's mandate is to develop cost-effective and environmentally-sound technologies and products from renewable resources as a substitute for imported oil-based fuels and petrochemicals that can create new opportunities for the Bioeconomy. Contact:

Dr. Lew Christopher, Director
Tel: (807) 343-8844
Email: admin.bri@lakeheadu.ca
<https://www.lakeheadu.ca/research-and-innovation/facilities-centres/bri>

Centre of Excellence for Sustainable Mining and Exploration (CESME)

CESME will encourage and support research, education and outreach activities regarding the nature and impacts of mineral resource exploration and extraction, particularly in Northern Ontario. Contact:

Dr. Peter Hollings, Director
Tel: (807) 343-8329
E-Mail: peter.hollings@lakeheadu.ca
<http://cesme.lakeheadu.ca/>

Research Centre for Sustainable Communities (RCSC)

The general aim of the RCSC is the development of an improved understanding of factors that influence the sustainability of communities. Contact:

Dr. Nandakumar Kanavillil, Director
Tel: (705) 330-4008 ext. 2633
Email: nkanavil@lakeheadu.ca
<https://www.lakeheadu.ca/research-and-innovation/facilities-centre/research-centre-for-sustainable-communities>

Centre for Education and Research on Aging & Health (CERAH)

CERAH's mission is to advance health and social care for an aging population and promote the health and well-being of people aging across the lifespan. Contact:

Dr. Elaine Wiersma, Director
Tel: (807) 766-7294
E-Mail: ewiersma@lakeheadu.ca
<https://www.lakeheadu.ca/research-and-innovation/facilities-centres/cerah>

Centre for Innovation and Entrepreneurship Research (CIER)

The primary purpose of the Centre for Innovation and Entrepreneurship Research is to promote and support research on innovation and entrepreneurship at Lakehead University. Contact Information:

Michael Dohan
Tel. (807) 343-8635
E-Mail: msdohan@lakeheadu.ca
<http://cier.lakeheadu.ca/>

Centre for Health Care Ethics (CHCE)

The CHCE is dedicated to promoting ethical health care in Northwestern Ontario. Contact:

Dr. Kristen Jones-Bonofiglio, Director
Tel: (807) 343-8079
E-mail: chce@lakeheadu.ca
<http://bioethics.lakeheadu.ca/>

Centre for Northern Studies (CNS)

The CNS is a senate approved research centre comprised of faculty from various disciplines and programs who are active researchers in the field of northern studies. Contact:

Dr. Chris Southcott, Director
Tel: (807) 343-8349
E-mail: chris.southcott@lakeheadu.ca
<https://www.lakeheadu.ca/research-and-innovation/facilities-centres/northern-studies>

Centre for Research on Safe Driving (CRSD)

The mandate of the CRSD is to contribute to the reduction of traffic-related crashes through the understanding of the fundamental processes that support safe driving and through the development of interventions to optimize safe driving. Contact:

Dr. Michel Bédard, Director
Tel: (807) 343-8630
E-mail: michel.bedard@lakeheadu.ca
<http://crsd.lakeheadu.ca/>

Centre for Rural & Northern Health Research (CRaNHR)

CRaNHR aims to contribute to existing knowledge on rural, northern and Indigenous health and provide evidence that supports policy makers, planners and decision-makers in understanding health services delivery; documenting health status and determinants

of health; and exploring factors that facilitate or impede access to socially just health care. Additionally, our work addresses education, recruitment and retention of health professionals and paraprofessionals. Contact:

Dr. Christopher Mushquash, Director
Tel. (807) 343-8239
Email: chris.mushquash@lakeheadu.ca
<https://www.lakeheadu.ca/research-and-innovation/facilities-centres/rural-northern-health>

Centre of Education and Research on Positive Youth Development (CERPYPD)

The CERPYPD at Lakehead University is focused on generating, disseminating and applying knowledge about children and adolescents and their well-being. Our research specializes in the areas of mental health, addictions, education, and youth justice.

Contact:

Dr. Edward Rawana, Director
Tel: (807) 343-8453
Email: ed.rawana@lakeheadu.ca
<https://www.lakeheadu.ca/centre/cerpyd>

Enhancing the Prevention of Injury & Disability @ Work (EPID@Work) Research Institute

The mandate of the EPID@Work Research Institute is to bring people together to reduce impacts of work-related injury and work disability through collaborative applied research and provision of education to enhance knowledge related to injury and disability. Information generated from our research will inform practice and policies aiming to improve health and social outcomes in Northwestern Ontario and beyond.

Dr. Vicki Kristman, Director
Tel: (807) 343-8961
Email: epid.hbsc@lakeheadu.ca

Green Process Research Centre (GPRC)

The Green Process Research Centre (GPRC) will be a hub for local and international researchers working on cutting-edge green technologies that will develop new products with the aim of transforming Canadian industries to adopt new sustainable processes with green products that will protect the environment. With its focus on sustainability, the vision of GPRC is well aligned with the Strategic Research Priorities of Lakehead University including Advanced Systems and Technologies and the Environment and Natural Resources. As a hub that brings together local, national, and international researchers, the GPRC also fits well with Lakehead University's internationalization mandate.

Dr. Pedram Fatehi, Director
Tel: (807)-343-8697

Email: pfatehi@lakeheadu.ca
<https://www.lakeheadu.ca/research-and-innovation/facilities-centres/green-processes-research-centre>

Lakehead Social History Institute (LSHI)

The Lakehead Social History Institute is a partnership of historical researchers at Lakehead University and in the Thunder Bay community. The Institute was constituted by meetings of persons interested in historical research. Contact:

Beverly Soloway
Tel: (807) 343-8852
Email: shi@lakeheadu.ca
<https://www.lakeheadu.ca/research-and-innovation/facilities-centres/social-history-institute>

Instrumentation Laboratory

The Lakehead University Instrumentation Laboratory (LUIL) is a multi-purpose, centralized facility which serves researchers and students from various faculties, providing access to the fundamental tools needed for modern research and training. The lab occupies 372 m² of space, which is centrally located on campus.

The Laboratory houses more than two million dollars of research equipment and much of this equipment is unique to the region. Early in its development, the University made a decision to operate single versions of fundamental research tools such as a nuclear magnetic spectrometer, an electron microscope, and spectrometers in a central analytical facility. Sharing of equipment is essential to this strategy. This wide range of instrumentation, which is in first-class condition, is accessible to all members of the University community including undergraduate and graduate students under staff supervision. For more information: <http://lucas.lakeheadu.ca/luil/>

The Instrumentation Laboratory is equipped to analyze the composition and structure of a wide range of materials, enabling our staff to provide valuable information towards solving industrial problems. Instrumentation Laboratory External Services is a member of LUCAS and provides accessibility to external users to the laboratory for a fee. Users may visit the laboratory to discuss results or consult with staff by phone. Proprietary information will be kept confidential.

For more information about the Instrumentation Laboratory and more details about the services we provide, please visit the LUIL website at: <http://lucas.lakeheadu.ca/luil/materials-analysis/> or feel free to contact:

Dr. Francis Appoh
Director, Analytical Testing Services LUCAS/LUIL/PDNA,
Email: fappoh@lakeheadu.ca
Phone: (807) 343-8294/343-8853

Dr. Guosheng Wu, Materials Scientist
Contact for SEM, TEM and XPS materials analysis
Email: gwu@lakeheadu.ca
Phone: 807-343-8294
Fax: 807-346-7864

Mr. Michael Sorokopud, Technician
Contact for NMR, XRD, FTIR analysis
Email: msorokop@lakeheadu.ca
Phone: 807-343-8294 (NMR Laboratory, 807-343-8488)
Fax: 807-346-7864

Mr. Greg Kepka, Technician
Contact for Image Analysis, Optical, Chromatography, ICP, GC-MS, CHNS, analysis
Email: gkepka@lakeheadu.ca
Phone: 807-343-8294
Fax: 807-346-7864

Lakehead University Centre for Analytical Services (LUCAS)

Lakehead University Centre for Analytical Services operations have a proven track record in producing timely and accurate reports, allowing users to maintain productivity by responding quickly to production problems. LUCAS facilities are multiple use, providing advanced testing services to regional as well as international clients using the latest in research equipment. The laboratories also welcome Lakehead University's brightest students providing the necessary training and hands-on access to the technologies of the future allowing them to develop essential skills to further their research careers or to secure jobs in fields that directly have an impact on Northern Ontario's economic future.

LUCAS provides administrative and marketing support to member laboratories. Researchers who might be interested in attracting clients by providing services to commercial companies are encouraged to contact the Director of Analytical Services and Office of Research Services. For more information see <http://lucas.lakeheadu.ca/>
New faculty members are encouraged to contact:

Dr. Francis Appoh
Director, Analytical Testing Services LUCAS/LUIL/PDNA, 343-8853
Email: fappoh@lakeheadu.ca

or any of the individual laboratory Directors for information about the services they offer.

The following research facilities are members of LUCAS:

Aquatic Toxicology Research Centre (ATRC)

The ATRC is an aquatic facility that supports research into the evaluation and prevention of toxic effects from industrial wastes in the environment. The ATRC also offers a full range of toxicity testing services to both industry and government, designed to meet current regulatory requirements. These services currently include acute testing with rainbow trout and daphnia. ATRC is accredited to ISO17025 by the Canadian Association for Laboratory Accreditation (CALA) (see www.cala.ca directory for a list of tests). Contact:

Dr. Michael Rennie, Academic Director
Tel. (807) 346-7979
Email: mrennie@lakeheadu.ca

Biotechnology Laboratory for Enzymes and Bioproducts (BLEB)

BLEB focuses on applied biotechnological analytical services in bioproduct analysis, biodegradation studies, enzyme assay, microbiology and aspects of molecular biology. Contact:

Dr. Wensheng Qin, Director
Tel: (807) 343-8467
Email biotechnologylab@gmail.com

<http://lucas.lakeheadu.ca/bleb/>

Biomass Utilization Research Laboratory (BURL)

BURL offers access to the unique pulping research facilities in the Chemical Engineering Department at Lakehead University. The lab contains similar equipment located at pulp and paper mills, as well as equipment that is able to recreate the pulping process. Though the facility is highly involved in research, its facilities are excellent for sampling and testing. Contact:

Dr. Pedram Fatehi, Director
Tel. (807) 343-8697
Email: pfatehi@lakeheadu.ca

Lakehead University Molecular Archaeochemistry and Residue Services (LUMARS)

LUMARS research and services involve genetics method development. Emphasis on biological remains that have proved challenging to recover biomolecules from using conventional methods. LUMARS Services involve design and development of methods to retrieve macromolecules of interest from degraded remains. This has applications in numerous fields - principally archaeology, forensic and medical science. Contact:

Dr. Tamara Varney, Director
Tel: 807-343-8204
Email: tamara.varney@lakeheadu.ca
<http://lucas.lakeheadu.ca/lugen/>

Lakehead University Geospatial Data Centre (LUGDC)

LUGDC offers services associated with geospatial data mapping. LUGDC has equipment consisting of a large area scanner, GPS units, GPS digital cameras, large format scanner and tablets with GIS software in the Geography Department. The heart of the Geospatial Data Centre is a geospatial server and a growing collection of regional, national and international spatial data. Services include: map creation, data acquisition, spatial analysis, and image analysis, Contact:

Dr. Robert Stewart, Director
Tel: 807-343-8430
Email: rob.stewart@lakeheadu.ca
<http://lucas.lakeheadu.ca/lugdc>

Lakehead University Environmental Laboratory (LUEL)

LUEL offers multi-parameters testing of soils, sediments, biological tissues, vegetation, waters, and specific chemicals. The laboratory focuses on developing analytical methods to fit specific requirements. The laboratory provides hands-on training of undergraduate and graduate students. LUEL is also accredited to ISO17025 by the Canadian Association for Laboratory Accreditation (CALA) for many water tests, and mercury, methylmercury and metals in biological samples (see <http://www.caladirectory.ca/> for a list of tests). Contact:

Dr. Amanda Diochon, Director
Tel. (807) 343-8444
Email: adiochon@lakeheadu.ca

Lakehead University Fire Testing and Research Laboratory (LUFTRL)

LUFTRL offers unique fire testing services to association standards and industry requirements as well as custom testing for research and development. Available services include but not limited to, evaluation of fire resistance of construction materials, products and building components and/or assemblies, and development of testing protocols to assess the fire resistance of non-standardized products. In addition, LUFTRL offers consultancy services to industry clients and engineering firms in the field of structural fire engineering through conducting required fire resistance tests and/or developing computer models; as well as technical advice on the compliance of materials with regulatory requirements and conformity assessment services to demonstrate compliance with local, provincial and/or national and international codes and standards for fire safety applications. Contact:

Dr. Sam Salem, Founder and Director
Tel: (807) 343-8011
E-mail: <http://lucas.lakeheadu.ca/luftrl>

Lakehead University Instrumentation Laboratory (LUIL)

The Lakehead University Instrumentation Laboratory is a multi-purpose, centralized facility which serves researchers and students from three faculties, providing access to spectrometers, electron and laser microscopes, and analyzers needed for modern research and training of Canada's future scientists. The Laboratory manages some of the University's most advanced research equipment, much of which is unique to the region. The LUIL provides extensive, hands-on training programs in the use of SEM/EDS, NMR, CONFOCAL, FTIR, ICP, and XRD systems to students before they begin their research projects. The facility is supported and used by regional resource and health care industries as well as government agencies for multi-party projects in the fields of mineral exploration, process control, cancer diagnosis, and bio-remediation. Contact:

Dr. Francis Appoh, Director, Analytical Testing Services
LUCAS/LUIL/PDNA
Email: fappoh@lakeheadu.ca
Phone: (807) 343-8294/343-8853

Lakehead University Materials Characterization Services (LUMCS)

LUMCS provides chemistry and materials science consulting, plus a full range of chemical analysis and computation services. Contacts:

Dr. Stephen Kinrade, Co-Director
Tel. (807) 343-8683
Email: stephen.kinrade@lakeheadu.ca

Dr. Robert Mawhinney, Co-Director
Tel. (807) 343-8245
Email: rcm@lakeheadu.ca

Lakehead University Mineralogical and Experimental Laboratory (LUMINX)

LUMINX is designed to serve as a bridge between the minerals industry and university researchers by providing advanced mineralogical and geochemical services that are not routinely available from commercial firms:

- Quantitative or qualitative phase and chemical composition analysis of solids
- Mineralogical/petrographic assessment of geological samples
- Fluid inclusion microthermometry
- Characterization of gold- and platinum group-bearing phases, sulphides, and diamond indicator minerals
- Analysis of high-tech and industrial minerals, and mineral synthesis
- Compositional analysis of natural and synthetic glasses
- Solubility testing of natural and synthetic materials

Contact:

Dr. Andrew Conly, Director
Tel. (807) 343-8463
Email: andrew.conly@lakeheadu.ca

Lakehead University Wood Science Testing Facility (LUWSTF)

The LUWSTF offers state-of-the-art testing for the mechanical properties of wood and wood products. The lab can also do hot press runs for composite research as well as large ovens for physical property research projects. A new Bomb Calorimeter was purchased and the lab now conducts BTU testing for several industries. Wood identification is also conducted in the labs for various clients as are other consultancy projects. Currently the facilities are undergoing a major capacity building exercise with new state-of-the-art testing and scale manufacturing equipment as well as staffing increases and postgraduate student number increases. The LUWSTF has also begun a portable wood processing technologies program to aid communities in becoming involved in the value-added forest sector and to promote small scale manufacturing of value-added products. To this end the LUWSTF has recently purchased a Wood Mizer Portable Bandsaw mill and also purchased a portable twin edger and kiln. There is also a new area being studied within forestry and also in collaboration with the Green Energy Lab in Chemical Engineering where bio-products utilizing wood waste are being studied. This includes bio-fuels, bio-energy and also bio-chemicals; for example, one project is looking at wood waste to produce bio-resins to use in the laminate industry.

Contact: Dr. Mathew Leitch, Director
Tel. (807) 343-8659
Email: mathew.leitch@lakeheadu.ca

Lakehead University Agricultural Research Station (LUARS)

LUARS, a facility with 36 acres well laid out plot ranges, at 5790 Little Norway Road off Hwy 61, has a strong and unique expertise in on-station and on-farm research, especially in the areas of crop, soil and nutrient management and has decades of experience behind it. LUARS could be an asset to the other LUCAS Labs and would welcome collaborative research with all. In addition to LU researchers, students and Post Doctorate Fellows, our clients could include industry (seed, fertilizer, pesticide, procurement and processing), other universities, and Farmers' and Government organizations.

LUARS has strengths in small plot research in the following fields:

- Screening of high yielding, better quality and disease resistant varieties.
- Evaluation of new fertilizers/blends of fertilizers and agro-chemical products including root inoculants, growth hormones and pesticides.
- Identifying potential new/and alternate crops and cropping systems for higher and sustained agricultural production suitable for NWO; leading to development of small-scale industries. For example, a stone grinding flour mill and a canola crushing plant for edible oil in the past.
- Developing new agronomic practices for improving productivity.
- Medium to long term testing for increasing soil and crop productivity and cutting down costs.

Contact: Dr. Tarlok Singh Sahota, Director
Tel. (807) 475-8404/343-8114
Email: tssahota@lakeheadu.ca

Paleo-DNA Laboratory (PDNA)

The PDNA Laboratory is one of the top ancient DNA research laboratories in the world. The laboratory is specifically designed to accommodate low-copy number, degraded, or ancient samples and vigorously control contamination. This laboratory provides academic support to faculty and students of Lakehead University as well as extension services to the public in the form of paternity testing, universal genetic identification, canine DNA testing, and ancient DNA analysis. The PDNA Laboratory is also a leader in human mitochondrial DNA research and was one of the first Canadian laboratories to develop mitochondrial DNA analysis techniques. They were also the first laboratory to offer a DNA training course emphasizing mitochondrial DNA analysis. The PDNA Laboratory as part of its commitment to the community, the Lab and Lakehead University's Faculty of Education is keen to expand the relationship it has with science teachers in the Thunder Bay area. To this end, the Lab has set up a range of measures

to expand contact with teachers and their students, with the aim of improving the teaching and learning of science in the fields in which we have expertise. Contacts:

Dr. Francis Appoh
Director, Analytical Testing Services LUCAS/LUIL/PDNA
Email fappoh@lakeheadu.ca
Phone: (807) 343-8294/343-8853,

Stephen Fratpietro, Technical Manager
Tel. (807) 343-8892
Email: swfratpi@lakeheadu.ca



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