

Research, Innovation and Impact



Strategic Research Plan • 2025-2030



LaurentianUniversity
Université **Laurentienne**



Aki Gaabijidebendaagwak

Ka ke ginwaamdanaa Aki Gaabijidebendaagwak Robinson Huron Naakinegewin ode 1850. Miinwa ginwaamdandaa Laurentian Chi-kinomaagegamik gewii teg maanpii gidaa kiimina Atikameksheng Anishinaabek debendaagwak miinwa Chi-odeno Sudbury miinwa gewii debendaagwak Wahnapiatae Anishinaabe kiing. Gichipiitenmananig Anishinaabek-ga nakiitaanaa weweni maanpii Laurentian Chi-kinomaagegamik Debwewin miinwa Minadaapnagewin Nakii Naadmageh Makwataagziiwin. Miigwech.

Land Acknowledgment

We would like to acknowledge the Robinson-Huron Treaty of 1850. We also further recognize that Laurentian University is located on the traditional lands of the Atikameksheng Anishinaabek and that the City of Greater Sudbury also includes the traditional lands of the Wahnapiatae First Nation. We extend our deepest respect to Indigenous peoples – as a sign of our continued relationship we will support Laurentian University’s Truth and Reconciliation Task Force Recommendations. Miigwech.

Reconnaissance du territoire

Nous désirons reconnaître le Traité Robinson-Huron de 1850. Il importe aussi de souligner que l’Université Laurentienne se trouve sur les terres traditionnelles des Atikameksheng Anishinaabek et que la Ville du Grand Sudbury comprend également celles de la Première Nation de Wahnapiatae. Nous tenons à exprimer notre profond respect à tous les peuples autochtones et, comme signe de notre relation suivie avec eux, appuierons les recommandations émises par le Groupe de travail sur la vérité et la réconciliation de l’Université Laurentienne. Miigwech.



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Message from the Vice-President, Research

Laurentian University has a proud history of research and scholarship that has had an impact locally, nationally, and internationally. Although our efforts over the last few years were set back by financial challenges and the COVID-19 pandemic, research activities are recovering thanks to the perseverance, passion, and resilience of faculty and staff members who continued to engage in scholarship, work with community and First Nations, Inuit, and Métis (FNIM – Indigenous) partners, and dedicate themselves to the training of students engaged in research, and innovation.

Research plays a vital role in developing talent, advancing knowledge, and addressing some of the most pressing challenges facing society. Sudbury and Laurentian University have led the way before with the restoration of land and water impacted by mining activities. Our faculty, staff, students, industry, government, community, and FNIM (Indigenous) partners – are well positioned to continue their leadership. Together, we are addressing climate change and adaptation through

environmental solutions, while also developing innovative methods to mine and recover critical minerals needed for the global energy transition. We also have leaders among us who are at the forefront of addressing social well-being, mental health and addictions, and housing challenges through their scholarship. Laurentian University also has a unique opportunity to partner with FNIM (Indigenous) communities to advance research by, for, and with FNIM (Indigenous) communities in our region, specifically as a steward of documents from the Robinson Huron Treaty settlement.

At Laurentian University, impactful research is taking place in the natural environments that surround us, in wet labs where many are working to advance discoveries in science, technology, engineering, mathematics, and medicine, and in the archives where historians and data scientists are collaborating to highlight the past to advance our future. Our researchers are also leading interdisciplinary teams in collaboration with industry and community partners to find solutions to questions raised by northern front-line workers in health care, social work, health and safety, resource management, education, and business, to name a few. Faculty members at Laurentian University also have a unique opportunity to work side by side with Francophone communities to advance primary scholarship produced in French across all disciplines addressing important areas of language, culture, health, wellness and social justice.

This plan has come together through extensive consultation with faculty, staff, students, community, industry and FNIM (Indigenous) partners. This diversity of voices was instrumental in guiding the development of *Research, Innovation and Impact*, Laurentian University's 5-year Strategic Research Plan. I would like to express my gratitude to all that participated and for the dedication, commitment, valuable insights, and time contributed by the members of the Strategic Research Plan Planning Committee.

This Strategic Research Plan ensures that every researcher, in every discipline, sees themselves reflected in our shared mission to create knowledge with purpose and impact. Together, we will continue to transform lives, strengthen communities, and lead with integrity.

Tammy Eger, PhD
Vice-President, Research



Purpose of the Strategic Research Plan 2025–2030

Laurentian University's Strategic Research Plan (SRP) sets an inspiring vision to elevate research excellence and innovation, reflecting our deep commitment to academic achievement, to transformative discovery, and to our unique role as a bilingual and tricultural leader in Northern Ontario. This plan establishes bold research priorities, encourages dynamic interdisciplinary collaboration, and champions initiatives with far-reaching impact on regional and global challenges. Laurentian University aspires to shape a brighter future through research that drives innovation and enriches communities, as a leader in interdisciplinary and collaborative research.

The Strategic Research Planning Process

The journey to develop Research, Innovation, and Impact – Laurentian University's SRP included an in-depth analysis of the institution's internal and external environments. We engaged key interest holders within Laurentian University and throughout our broader community and sectors to shape our plan.

Over a nine-month period, more than 300 individuals contributed their input and perspectives to the planning process through:

- a digital survey that attracted participation from current and past Laurentian University students, faculty, staff and partners
- two engagement forums with Laurentian University's community
- two Senate meetings
- six SRP Planning Committee meetings and/or working sessions
- two joint-committee meetings with the Ad Hoc Committee for the 2025-2030 Academic Plan
- 42 one-on-one interviews
- consultation with the Laurentian University Native Education Committee (LUNEC)
- 26 focus groups

This plan reflects the collaborative efforts, innovative thinking, and strategic insights of those dedicated to advancing Laurentian University's research excellence and positioning it as a leader in innovation.



Research at Laurentian University

Laurentian University is deeply rooted in Northern Ontario and has an unwavering dedication to addressing the needs of our region while advancing the training of undergraduate and graduate students. Guided by our tricultural mandate, we are committed to conducting research that is culturally relevant, inclusive, and impactful. Our work spans diverse fields, driven by the priorities of our communities and industry partners and supported by collaboration across disciplines, with an impact that extends beyond our region.

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Our Distinctive Research Strengths

- **Mining, Mineral Exploration, and Critical Minerals;**
- **Environmental Solutions;**
- **Health, Wellness, Health Equity and Social Justice;**
- **Interdisciplinarity;**
- **Culture, Language and Education.**

Laurentian University’s research strengths are rooted in the unique characteristics of our region, and our researchers excel across a wide range of fields.

These strengths are our launching point for addressing priorities such as climate adaptation, environmental solutions, sustainable resource development, health equity, social justice, reconciliation and the success of northern economies. By addressing pressing challenges and leveraging local assets, we create solutions with global relevance.



Mining, Mineral Exploration, and Critical Minerals



Laurentian University has been a leader in research, advancing mineral exploration and mining science and engineering for over 60 years. Given its location in one of the largest mining regions in the world, scientific advances made at Laurentian University are often exported around the world. Researchers at Laurentian University are advancing development of critical minerals deposits and innovative extraction methods to recover metals with environmentally sustainable technologies. Additionally, artificial intelligence is being leveraged to explore and mine datasets, reduce exploration risk, optimize equipment utilization and advance ground control innovations. With expertise in geoscience, mining, social sciences, humanities, business and FNIM (Indigenous) relations, Laurentian University is also positioned to be a leader in research, advancing social license to operate and benefit sharing agreements.



Environmental Solutions



Laurentian University researchers are primed to build on its legacy as a partner in the environmental reclamation of Sudbury to address climate adaptation and resilience strategies for Northern Ontario, clean water technologies, and interdisciplinary research advancing recovery of biodiversity and restoration of ecosystems. Laurentian University will also continue to contribute to research that addresses species at risk, and the effects of human stressors on wildlife, including the impacts of climate change and resource management on terrestrial and aquatic species and their environments.





Health, Wellness, Health Equity, and Social Justice



Laurentian University continues to build on its strong track record of northern, rural and remote health and health systems research. As leaders in rural and northern health, Francophone and FNIM (Indigenous) health, occupational health and safety, mental health and wellness, Laurentian University's faculty are advancing collaborative research aimed at improving access to health care, health services and the quality of life in northern communities. Researchers are developing community-based solutions to improve health and healthcare access, address mental health and addictions, advance minority health and health care, and tackle social determinants of health. Faculty members are leading cutting-edge research on the health workforce, digital, virtual and AI-driven health care, language concordant care, and on health system structures and processes. Through interdisciplinary collaboration and a strong community-focused approach, Laurentian University is at the forefront of addressing critical health systems, health equity and social justice challenges.



Interdisciplinarity



Laurentian University researchers have a long-standing history of leveraging the strength of interdisciplinary collaboration to address regional, national and global challenges. Faculty members work together to advance housing innovation tailored to the unique needs of northern Ontario, study the economies and industries that shape the region, and document its rich industrial and social histories. They also lead community research responding to health priorities and social issues, environmental challenges, economic diversification and the preservation of FNIM (Indigenous) knowledge and cultural heritage. Coupled with research expertise in science communication, this collaborative approach positions Laurentian University as a leader in driving multidimensional, meaningful and impactful research.



Culture, Language, and Education



As a bilingual university with a tricultural mandate, researchers are advancing scholarship on Francophone communities in minority context, treaties and revitalization of FNIM (Indigenous) languages. Faculty members are also leading research on factors that support newcomer immigration to Canada while others are engaged in advancing access to education through virtual reality, augmented reality and artificial intelligence tools.





Fostering a Thriving Research Culture

Our Strategic Research Plan is designed to create an environment where all researchers can thrive. It emphasizes the importance of fostering collaboration, providing resources, and celebrating achievements across the full spectrum of research endeavours:

- **Collaborative and Interdisciplinary Research:** We recognize that today's challenges require solutions that cross traditional boundaries. We actively promote partnerships across disciplines and sectors to foster creativity and innovation.
- **Tools for Success:** Laurentian University is committed to providing the support researchers need to achieve excellence, including access to funding opportunities, mentorship programs, and professional development.
- **Inclusive Research Practices:** Grounded in the principles of equity and reconciliation, we embed FNIM (Indigenous) perspectives, honour diverse ways of knowing, and ensure that all voices are valued in our research ecosystem.



SRP | Plan on a Page

Vision: Laurentian University's vision is to bring the power of Northern Ontario values, resilience, innovation, and First Nations, Inuit, and Métis (Indigenous) ways of knowing to the world. In alignment with the University's vision, we aspire to be a leader, educator and partner for research projects and innovative solutions that are regionally, nationally and globally significant.

Mission: Laurentian University's mission is to prepare the leaders of tomorrow through an inclusive, intellectually curious and connected bilingual and tricultural learning community. Recognizing this, we strive for excellence through discovery, research, and community collaboration. Our mission is to address societal challenges, develop impactful innovations, and mentor the next generation of research leaders.

Values: Community • Integrity • Student Success • Stewardship • Collaboration

Strategic Direction #1 ■ Energizing Our Academic and Research Mission

- Goal 1** Strengthen Research Leadership
- Goal 2** Foster Inclusive Research Practices
- Goal 3** Simplify Research Administration
- Goal 4** Support Access to Research Funding Opportunities and Promote Research Outputs
- Goal 5** Promote Open Science while Balancing Research Security

Strategic Direction #2 ■ Enhancing Our Student Experience

- Goal 6** Create Clear Research Pathways
- Goal 7** Build Capacity for Research
- Goal 8** Engage Students in Research Experiences

Strategic Direction #3 ■ Building Up the Communities We Serve

- Goal 9** Advance Interdisciplinary and Cross-Cultural Research
- Goal 10** Support Emerging Research Opportunities
- Goal 11** Build Strong Local and Global Research Collaborations
- Goal 12** Align Advancement with Strategic Research Priorities

Strategic Direction #4 ■ Valuing and Supporting Our People

- Goal 13** Showcase Research Excellence
- Goal 14** Develop Programs and Support for Equity-Deserving Groups
- Goal 15** Strengthen Research Skills and Professional Growth



Vision

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Mission

Laurentian University's mission is to prepare the leaders of tomorrow through an inclusive, intellectually curious and connected bilingual and tricultural learning community.

Recognizing this, we strive for research excellence through discovery, research, community collaboration, and education. Our mission is to address societal challenges, develop impactful innovations, and mentor the next generation of research leaders.



Values

Laurentian University's 2024-2029 Strategic Plan is guided by the following values that shape the University's culture, decision-making and accountability for results.

The Strategic Research Plan 2025-2030 will continue to uphold these values by fostering excellence, innovation, and impact in research while aligning with institutional priorities and community needs.



Community

We build long-lasting connections with each other through caring, understanding and goodwill.



Integrity

We are transparent, respectful, and accountable to each other, upholding the highest standards of ethics in research and scholarship.



Student Success

We focus our academic and research missions on supporting the development of our students into bold thinkers and confident leaders.



Stewardship

We value the land that sustains us, the knowledge that guides us, and the languages we use to convey our gratitude.



Collaboration

We share, listen, and work together as a community to develop solutions to real world challenges.



Guiding Principles

- **Equity, Diversity, Inclusion, and Accessibility (EDIA):** This commitment extends to respecting all individuals and incorporates Francophone and First Nations, Inuit, and Métis (Indigenous) perspectives, knowledge, and traditions into curricula, research, and institutional practices.
- **Empowerment:** Laurentian University champions its research community by providing the resources, trust and support needed to foster innovation, leadership and excellence.
- **Research Accountability:** Laurentian University is committed to upholding the highest standards for research administration, responsible conduct of research, and research security including compliance with all relevant tri-agency policies and guidelines.
- **Align with the Current Strategic Plan:** The SRP fosters research that supports the University's long-term vision, focusing on initiatives of regional and global significance.
- **Leverage Unique and Differentiating Strengths:** The SRP will enable Laurentian University's research strengths positioning the University as a leader in regionally-focused research.
- **Strengthen a Culture of Engagement:** The SRP emphasizes the need to reinvigorate and motivate a culture of enthusiasm around research and scholarship.
- **Integrate Knowledge Creation and Sharing:** The SRP focuses on making knowledge creation accessible, encouraging sharing among students, the community, and partners, creating a dynamic flow of knowledge.
- **Prioritize Community Impact and Partnerships:** The SRP focuses research on areas where Laurentian University drives excellence and contributes to socio-economic growth of Northern Ontario.
- **Support Institutional Financial Sustainability:** The SRP aims for financially sustainable investment in research infrastructure and operational services.

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Energizing Our Academic and Research Mission

Energize the university's research mission by building a more inclusive, community-engaged, and regionally inspired research environment.



Goal #1: Strengthen Research Leadership

Foster a robust research culture through strategic leadership development initiatives, including the revitalization of the Canada Research Chair program and the continuation of Laurentian University's Research Fellowship program.

- Reestablish Laurentian University's participation in the Canada Research Chairs (CRC) Program.
- Work with Laurentian University Advancement to raise funds to expand the current Laurentian University Fellowship program as measured by at least one new additional research fellowship a year.
- In collaboration with the Research Development and Creativity Council, continue to develop initiatives to enhance faculty participation in externally funded research initiatives as measured by the percentage of faculty applying for external research funding and total sponsored research income earned by Laurentian University annually.

Goal #2: Foster Inclusive Research Practices

Incorporate EDIA training into research practices.

- Continue to provide opportunities for faculty, staff and students engaged in research and innovation activities to advance their understanding of Indigenous Ways of Knowing, including data governance and sovereignty, as measured by increased participation in programs offered.
- Continue to provide opportunities for EDIA training through online modules, remote and in-person learning sessions to increase faculty and student participation in EDIA training.

Goal #3: Simplify Research Administration

Ensure excellence and efficiency in research administration by providing training sessions, improving procedures and implementing digital tools to streamline research processes.

- Continue to engage with University-led initiatives, including Laurentian University's Operational Transformation, to ensure that the research enterprise systems benefit and are enhanced by the broader transformation efforts underway at the University.
- Work with the Research Development and Creativity Council to continue to develop and promote a robust Data Management and Research Security policy.
- Develop and promote online, remote, and in-person training sessions on research administration including funding opportunities, budget management, grant writing, and post-award services with targeted opportunities for new faculty and new grant holders.



Goal #4: Support Access to Research Funding Opportunities and Promote Research Outputs

Support faculty to increase participation in existing, new and emerging funding opportunities and to increase the quantity and quality of research outputs.

- Enhance awareness of and connections between researchers and tri-agency programs, foundations, and other provincial, national and international funding opportunities as measured by an increase in the percentage of faculty applying for external research funding.
- Re-establish Laurentian University's participation in the Canada Foundation for Innovation (CFI) Program.
- Maintain internal research funding programs to support future applications for external funding with the goal of demonstrating increased external funding success post-receipt of internal seed funding.
- Establish a process to measure the quantity and quality of research outputs including peer-reviewed journals, creative works, case studies, exhibits and others according to disciplinary norms with the aim to show a growth in impact and output.

Goal #5: Promote Open Science while Balancing Research Security

Make research openly available by supporting the deposit of articles and datasets in research repositories and expand data stewardship to respect community ownership and cultural perspectives, particularly for FNIM (Indigenous) data.

- Establish resources to support research security and data management.
- Collaborate with the Library and Archives to support an increase in outputs in open science and enhance Laurentian University's research repositories.
- Collaborate with the Office of the Associate Vice-President, Indigenous and Academic Programs and the Chair of the Research Ethics Board to offer annual training on FNIM (Indigenous) data governance and sovereignty with the aim to increase annual participation of faculty, staff and students.

Enhancing Our Student Experience

Enhance the student experience by creating clear pathways for research involvement, increasing accessibility, and making research engaging for students.

Goal #6: Create Clear Research Pathways

Establish clear pathways to connect undergraduate and graduate students with research opportunities through recruitment activities, mentoring, conferences, community events, open-access publishing platforms, and other experiential learning opportunities.

- Develop a communication strategy that promotes mentorship opportunities, professional development workshops, and skill-building initiatives in collaboration with the Faculty of Graduate Studies to ensure students can engage with diverse research activities and faculty members.
- Enhance opportunities for undergraduate and graduate students to participate in Research Week, pitch competitions and other research and innovation showcase events.
- Work with Senate approved Research Centres and affiliated research entities (SNOLAB; MIRARCO; Health Sciences North Research Institute) to promote opportunities for students to engage in training as measured by increased student participation.

Goal #7: Build Capacity for Research

Build diverse pathways for students at all levels to engage in research activities by expanding recruitment, mentoring, and capacity-building opportunities, including targeted support to enhance the participation of FNIM (Indigenous) and Francophone students.

- Collaborate with the Faculty of Graduate Studies to strengthen graduate student recruitment and retention strategies as measured by sustained growth in graduate student numbers.
- Work with the Office of the Associate Vice-President, Academic and Indigenous programs to continue to develop new and build upon existing initiatives to promote opportunities for FNIM (Indigenous) students to engage in research activities as measured by increased participation.
- Work with the Office of the Associate Vice-President, Francophone Affairs to enhance opportunities for Francophone students to engage in research as measured by increased participation.



Goal #8: Engage Students in Research Experiences

Provide more opportunities for experiential learning, interpersonal skill development, and entrepreneurial training for undergraduate and graduate students, focused on research and innovation projects that address real-world issues, with better utilization of existing University and partner facilities to support these activities.

- Require training of highly qualified people to be a critical factor for all internally funded research grant competitions.
- Work with School Directors, Graduate Program Coordinators, and Directors of Senate approved Research Centres to develop a baseline metric to measure the percentage of students from each Faculty who are engaged in the research enterprise with the goal of increasing participation annually.
- Support faculty efforts to recruit and mentor students in research and innovation activities through targeted initiatives.

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Building Up the Communities We Serve

Advance interdisciplinary research, prioritizing regional impact, and foster collaborations that strengthen local and global networks, thereby addressing community-specific challenges.



Goal #9: Advance Interdisciplinary and Cross-Cultural Research

Strengthen collaborative relationships to support and undertake interdisciplinary research.

- Work in partnership with FNIM (Indigenous) scholars and support the Maamwizing Indigenous Research Institute, to engage in research with FNIM (Indigenous) communities.
- Confirm research affiliation agreements with Health Sciences North Research Institute, SNOLAB, MIRARCO, Northern Ontario School of Medicine University, Cambrian College, Collège Boréal and different levels of government and develop new formalized partnerships with other research entities to facilitate collaborative interdisciplinary research.
- Develop internal opportunities to encourage cross-departmental collaboration, supporting interdisciplinary research projects that leverage diverse expertise across the University.

Goal #10: Support Emerging Research Opportunities

Foster engagement in new and emerging research opportunities that enhance Laurentian University's reputation and contribution to research excellence.

- Establish a strategic approach for research opportunities that enables the University to be agile, nimble, and responsive to evolving needs of the community, industries and global challenges.
- Support the development of new affiliation agreements and Memorandums of Understanding (MOUs) with national and international postsecondary partners to enhance opportunities for student training and research collaborations with the goal of formalizing new partnerships.

Goal #11: Build Strong Local and Global Research Collaborations

Expand and strengthen regional, national and international research partnerships while embedding local FNIM (Indigenous), Francophone, and community perspectives.

- Provide workshops and networking opportunities for faculty to develop collaborations across disciplines and partnerships with community and industry partners to support research as measured by an increase in submitted research funding applications with partners.
- Expand international research partnerships in Francophone regions through targeted programs, initiatives, and investments that enhance collaboration with French-speaking countries.

Goal #12: Align Advancement with Strategic Research Priorities

Focus University Advancement efforts on addressing funding gaps to support Laurentian University's strategic priorities, engaging donors to showcase the University's commitment to research excellence, and aligning fundraising campaigns with Laurentian University's Strategic Research Plan objectives.

- Collaborate with University Advancement to expand the number of funded chairs and fellowships and enhance funding opportunities to support emerging research at Laurentian University.
- Work with University Advancement and the Faculty of Graduate Studies to increase the number of scholarships, bursaries and awards for graduate students.

4

Valuing and Supporting Our People

Promote research excellence, recognize under-represented groups, and advance professional development.



Goal #13: Showcase Research Excellence

Highlight notable research throughout Laurentian University, demonstrating its impact on Northern Ontario and beyond.

- Create a comprehensive communication plan to highlight and present Laurentian University's research excellence to both internal and external audiences, with the goal of producing an annual Research in Review Report.
- Work with the Research Development and Creativity Council to develop a plan to build on existing internal awards and develop new awards to celebrate research excellence.
- Formalize a process led by the Office of the Vice-President Research, in collaboration with the Office of the Provost and Vice-President Academic, to identify opportunities, to nominate faculty, staff and students engaged in the research enterprise for external awards, with the goal to submit at least four external nominations a year.

Goal #14: Develop Programs and Support for Equity-Deserving Groups

Recognize and support FNIM (Indigenous), Franco-phone, and early-career researchers through awards, mentorship, and collaborative opportunities.

- Expand the research Fellowship program to support members of equity-deserving groups.
- Work with the Associate Vice-President, Indigenous and Academic Programs and Associate Vice-President, Francophone Affairs to identify the resources FNIM (Indigenous) and Francophone students and faculty require to enhance their participation in research activities. Once identified, develop a clear plan to address these needs and measure the outcomes.

Goal #15: Strengthen Research Skills and Professional Growth

Provide professional development opportunities for students and researchers across their research careers.

- Further develop workshops, training, and resources to enhance skills in interdisciplinary collaboration, knowledge translation, science communication, and other topics as relevant, with success measured by increased participation.

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