

Strategic Research Plan Summary

Algoma's Strategic Research Plan was approved by Senate October 2, 2015
The Strategic Research Plan Summary was prepared in April, 2017

Objectives of the Strategic Research Plan

The primary objectives of Algoma University's Strategic Research Plan are:

- to contribute to the restoration of self-determination, health, language and culture of First Nation communities and peoples by encouraging inclusive research collaborations and multidisciplinary approaches;
- to strengthen research skills of our primarily undergraduate student population through the example and mentorship of excellence-based faculty researchers;
- to improve and increase research and high impact publication opportunities for our undergraduate students to enhance their employability and capacity to innovate;
- to enrich the faculty research experience through adjunct professorships, research clusters involving outside experts, and institutional policies designed to facilitate and expedite research activities;
- to grow our percentage of Tri-Council funded faculty and thereby our allotment of Canada Research Chairs such that each cluster integrates the expertise of at least one CRC to maximize its research productivity and impact;
- to leverage the regional abundance of environmental resources, regional expertise, and local culture, fine arts and music traditions to expand our research capacity;
- to accelerate economic development and entrepreneurship within our region, and advance the national 'innovation ecosystem', through commercialization of research, where feasible; and
- to cultivate strategic partnerships with Anishinaabe (First Nations, Metis, Inuit) leaders, community organizations, not for profits and the private sector to support applied research with regional economic benefits/impact.

Research Themes

Theme 1: Anishinaabe and Indigenous Communities

The University is physically located on the site of the former Shingwauk Indian Residential School. Our location on this site has led to the adoption of a special mission, entrenched in the University Charter, for teaching and research of significance to Anishinaabe people (First Nations, Metis and Inuit). The University and its partners are committed to enriching faculty teaching and research and developing and disseminating knowledge in core areas of relevance to Anishinaabe communities and to all Canadians, including: health and wellness; traditional knowledge; Anishinaabe methodologies; decolonization;

archival studies; epistemologies and pedagogy; history and philosophy; culture, language, literature, music, and visual arts; governance and law; and land use.

The University has committed fiscal and human resources to the study of Residential Schools, with a particular focus on healing and reconciliation. In its Declaration of Partnership with the Children of Shingwauk Alumni Association, AU pledges “to use the site as a vehicle for education about residential schools” and “to make the history and legacy of Residential Schools and the promotion of the Sharing, Healing and Learning Vision a central, identifying characteristic of Algoma University.”

Since 1979, the university has operated the Shingwauk Residential Schools Centre, a research, education, archive, and community service initiative with a research mandate related to the history and legacy of Indian Residential Schools and their wider colonial and international contexts. In 2010, the Centre became the repository for the Aboriginal Healing Foundation’s project and research records, making Algoma University a destination for research on community-based healing initiatives.

The University seeks to attract and leverage new funding to position AU as a Centre of Excellence for research into the impact of Indian Residential Schools, and ways of reconciliation and healing for survivors. In this work, AU partners with the Children of Shingwauk Alumni Association and with Shingwauk Kinooamaage Gamig, an Aboriginal Institute Consortium member located adjacent to our campus.

Theme 2: Cultures and Creativity

Situated in the District of Algoma, a place of inspiration for the Group of Seven and artists such as Glenn Gould, and a traditional meeting place for Anishinaabe peoples, Algoma University researchers build upon the rich history and cultures inspired by the area and work to connect the local community with international cultural networks. Faculty in this cluster undertake inquiries to illuminate developments in language, culture, and modes of representation that inform our contemporary world.

Algoma University faculty have demonstrated research expertise in diverse areas including: literature, philosophy, and the histories of peoples and ideas; Anishinaabe ways of knowing and language; theories and practices of studio art production and exhibition; music composition, recording, and performance; advancing business processes through organizational culture and workforce diversity.

Research in this cluster includes collaboration and partnerships across disciplines and within the regional community, involving institutions like the Algoma Conservatory of Music, the Art Gallery of Algoma and local museums. Access to the rich archives of Algoma University and the Shingwauk Residential Schools Centre provides faculty, visiting scholars, and student researchers with a distinct research experience based in the local Algoma region that has broader implications for Canadian and global cultures.

The University seeks to create and leverage multidisciplinary partnerships between faculty who undertake research focussed on traditional arts, music, and culture and researchers working on the

Residential schools archive project to stimulate new research into the cultural impacts of the residential schools program.

Theme 3: Life and the Environment

Algoma University is located in an environmentally significant area. Situated at the confluence of the upper three Great Lakes, it is less than an hour from the boreal forest biome, and offers immediate access to vast aquatic and terrestrial habitats. The University has taken advantage of the proximity of federal and provincial government laboratories to build a research cluster in the study of the natural environment and life sciences.

Algoma University's research strengths under this theme include: molecular genetics; ecosystem services, competition and biodiversity; soil and plant-microbial interactions; plant biology and biochemistry; ecology and behavioural biology, avian biology; invasive species and spatial analysis; and aquatic and fisheries biology. Research efforts in the cluster intersect with strengths across other research clusters in the areas of 'human interactions with the environment' and 'human well being in northern Ontario'. Collaborative projects involve faculty in the departments of Psychology, Biology, Geography and Computer Science.

External grant funding has allowed AU to acquire infrastructure for state-of-the-art biochemistry, molecular biology and microbiology laboratories, plant growth facilities and an animal care centre. MOAs established with the Ontario Forest Research Institute and the Great Lakes Forestry Centre, both of which are located within walking distance of the university main campus, provide additional opportunities for use of infrastructure that is not available at the University. There is also emerging collaboration with the researchers at Lake Superior State University in Sault Ste. Marie, Michigan. Research within this cluster involves collaborations with other academic institutions nationally and internationally and partnerships with local industrial partners.

The University seeks to increase the number of international partnerships, international post doctoral fellows, Research Chairs and private sector partnerships in this theme, and to encourage participation in multidisciplinary projects involving Anishinaabe partners and university researchers.

Theme 4: Socio-economic Issues of Northern, Rural, and Remote Areas

Canadians living outside Northern Ontario often identify northern, rural, and remote communities as 'peripheral'. Both geographically and economically, many northern communities have experienced economic decline over the past few decades. Researchers in this cluster are motivated to understand structural impediments to growth and development in rural and remote areas, and also to propose responsible and holistic solutions to these economic and social challenges.

The nature of research in this cluster is inherently multidisciplinary, and an array of research methodologies and partnerships are needed to appropriately investigate relevant research questions. Rural and remote communities and northern regions are 'idiosyncratic', partly as a result of prolonged isolation. Research into the causes and consequences of poor or limited infrastructure or over-reliance on the natural environment (e.g., mining, forestry, eco-tourism, and pulp and paper production) is of immense value in understanding northern society and local culture and in proposing solutions to economic downturn.

The action-oriented research common to this cluster, often done in consultation with community partners, stakeholders, and Anishinaabe peoples, examines local policy and planning while considering global trends and transformations. Recent research undertaken by AU faculty has looked at pollution, single-industry communities, public transportation, tourism, health, food security and the role of health informatics in public health. The NORDIK institute of Algoma University (Northern Ontario Research, Development, Ideas and Knowledge), incorporated in 2007, has been charged with 'solving practical issues that are important to municipalities, First Nations and community organizations in Northern Ontario.'

The University encourages partnering with Anishinaabe community researchers to address preservation of culture and traditional lands, and to examine ways of turning northern challenges into northern strengths.

Assessment of the Plan

The Research Advisory Committee monitors the Strategic Research Plan by assessing the achievement of program development goals within the four research themes. Benchmarks include: the number of students in the fourth year of Algoma's Honours programs, the number of students involved with faculty and partnership research, the number of Canada Research Chairs, the growth in external funding for research, the increase in highly-trained-personnel trained by AU faculty with externally funded grants, the increase in number and quality of faculty and student research publications, and the successful outcomes of partnership agreements

The Research Advisory Committee and Senate approve allocation of Canada Research Chairs to the four research theme areas. Shingwauk Kinooomaage Gamig, an affiliated institution, is involved in decisions regarding hires in areas related to Anishinaabe (First Nations, Metis and Inuit) research.

Algoma University has and continues to make every effort to recruit qualified women for CRCs. All CRC positions are broadly advertised, and the most qualified women candidates are included in the "short list".

Algoma University provides support to new and existing faculty through start-up grants, teaching release time, student research positions, and annual travel and research funding to all faculty.