

Athabasca University Summary of Strategic Research Plan (2018–2022)

This Strategic Research Plan (2018–2022) follows from the Athabasca University *Imagine: Transforming Lives, Transforming Communities* Institutional Strategic Plan and flows into the university's integrated planning framework. The Strategic Research Plan (SRP) sets the direction for Athabasca University's (AU) investments in research, scholarship and creativity for a five-year term.¹ It serves as a guide for the development of the infrastructure and services required to nurture research excellence, foster research performance comparable to that of other research-intensive universities in Canada, and enrich the social, environmental and economic value and relevance of research conducted by its faculty, students, and staff.

Major Objectives of the Strategic Research Plan

The SRP supports intellectual inquiry and advocates building a sustainable ecosystem that promotes excellence in research, education, and training in four strategic directions.

- *Moving beyond OPEN by bridging open and inclusion*: We are known for open scholarship, data, and scholarly achievement. Learners impact their communities through research.
- Moving beyond PLACE by transforming communities through belonging and relationships: We uphold a reputation for balanced disciplinary and interdisciplinary research that optimizes social, economic, and environmental impact on communities.
- Moving beyond the NOW by supporting transformation and incremental change through agility and adaptability: We advance adaptable and innovative research areas of excellence that optimize social, economic, and environmental impact.
- *Moving beyond the NORM by adopting innovative ideas and taking calculated risks:* We promote scholarly activity, dissemination, and impact reflecting our comprehensive research university status

Priority Areas of Research Excellence

Athabasca University's existing research strengths can be grouped into four broad themes:

Environmental and societal dynamics of sustainability encompasses research related to the complex social, economic and ecological dimensions of sustainability, including but not limited to conserving and restoring ecosystems; environmental governance, justice and ethics; food and water security; geophysical and biological change; green technology; social innovation; and urban design and architecture. Of primary concern is research about environmental and societal dynamics of sustainability that supports decision-making, cultivates sustainable futures within the Athabasca River Basin and beyond, and honors Indigenous communities, cultures, and ways of knowing. Particular areas of existing and emerging expertise include climate change; environmental ethics and governance; management of the cumulative effects of land and water

¹ For complete SRP, see: http://research.athabascau.ca/documents/strategic-research-plan-2018-2022.pdf

use over time; sustainability transition; and watershed and fish health.

Disruptive pedagogies advance pedagogical theory and practice by calling into question traditional views of education and training, including commonly held assumptions about how people learn and how learning can be nurtured and measured. This theme embraces a diverse spectrum of topics, including but not limited to best practices in the design and delivery of open, digital, distributed, and blended learning across educational settings and learners' lifespans, with a particular emphasis on the measurement of learning outcomes and the use of non-traditional means to credential learning. It also addresses emerging technologies (e.g., artificial intelligence; augmented reality; immersive learning; gaming; learning analytics; robotics; virtual reality) and their potential for personalizing individual's learning experiences, based on their specific learning styles and needs.

Society, culture, health and well-being addresses questions related to the human experience, be it individual or collective, past, present or future. Related areas of research include ancient civilizations; arts and humanities; civil society; culture; economy; entrepreneurship and innovation; ethics; financial regulation; gender identity and expression; globalization; governance and social justice; health, wellness and well-being of individuals and communities; organizational change; religion; and sustainable community development, among others. Of particular significance is the preservation of Indigenous knowledge, language and culture and the co-creation of paths to reconciliation.

Digital futures embody the design, application and impact of digital technology on society and the potential of open data and open science to advance knowledge and address social, economic, and environmental concerns. Existing and emerging areas of expertise include, but are not limited to, bioacoustics; bioinformatics; crowdsourcing and crowdfunding; digital humanities; digital accessibility and inclusivity; data security and evolving definitions of privacy in the face of the increasingly pervasive use of digital technology, big data, data mining, and data analytics in everyday life.

Assessment of Progress in Meeting Objectives

Central to the strategic priorities and goals laid out in our SRP is the adoption of a robust suite of metrics to track and report research outputs and impacts. Examples of potential measures of the outcomes and impact of AU's strategic research goals are included below.

Beyond OPEN: Reputation for open scholarship, data, and scholarly achievements.

- Number of publications in reputable open access journals.
- Number of research initiatives incorporating citizen science.
- Use of social media to mobilize knowledge.
- Adoption of a plan for the digital preservation of research data and research outputs.

Beyond OPEN: Researchers, including learners, impact their community through research.

• Number of research collaborations and partnerships with rural, remote, and northern communities, with Indigenous Peoples, and with industry, government, and public and private sector organizations.

Ū

- Leveraged research revenue.
- Quantitative and qualitative reports of impact on communities.

Beyond PLACE: Reputation for balanced disciplinary and interdisciplinary research that optimizes social, economic, and environmental impact on communities.

- Progress in meeting equity, diversity, and inclusion targets.
- Proportion of researchers engaged in disciplinary and multidisciplinary research.
- Number of research chairs and institutes and area(s) of focus.

Beyond the NORM: Reputation for scholarly activity, dissemination, and impact reflecting our comprehensive research university status.

- Research revenue from Tri-Agency, industry and community sources.
- Number of peer-reviewed publications, presentations, and resulting citations.
- Number of students hired as research assistants, integration of postdoctoral fellows.
- Number of researchers engaged in dissemination to non-academic audiences.

Beyond NOW: Adaptable and innovative research areas of excellence that optimize social, economic and environmental impact.

- Number of sponsored research projects related to each of the four identified themes.
- Number of research awards acquired by academic and student researchers.

Distribution of Canada Research Chairs

The delineation of research priorities has given AU the opportunity to strategically attract and retain leading-edge researchers who are internationally recognized and whose interests complement those already at the institution. The following includes a breakdown of AU's Canada Research Chairs allocations, which dovetails with a larger cadre of chairs at AU funded by Commonwealth of Learning, UNESCO, and the Campus Alberta Innovates Program.

Area of Research Focus	Tier	Granting Pool
Health Promotion and Chronic Disease	2	SSHRC-CIHR – Appointed June 2013;
Management (Faculty of Health		renewed June 2018
Disciplines)		
Community, Identity and Digital Media	2	SSHRC – Appointed May 2017
(Faculty of Humanities and Social		
Sciences)		
Digital Disruptions and Organizational	2	SSHRC – Appointed September 2018
Transformation (Faculty of Business)		
Hydrological Sustainability (Faculty of	2	NSERC – Appointed January 2018
Science and Technology)		
Critical Digital Pedagogy (Faculty of	2	SSHRC – Nomination submitted
Humanities and Social Sciences)		November 2020

EDI Representation

Athabasca University is committed to using our Canada Research Chair program to drive

U

representation for equity seeking groups including: women, persons with disabilities, Indigenous peoples, visible minorities, and members of LGBTQIA2S+ communities. This is reflected in our recent efforts across the institution to advance EDI beyond targets and towards a community-ethic where such considerations are part of our culture. This work has been supported internally by executive leadership and a robust EDI Committee guiding awareness and implantation of best-practices as well as externally by consultants assisting in environmental scans, institutional analyses, and implementation strategies.

While our Canada Research Chair program is still in its early years and only recently passing the threshold for the development and implementation of an EDI Action Plan, AU will endeavor to attain balanced representation from equity seeking groups over time. We are presently finalizing a revision of our Canada Research Chair Action Plan in collaboration with our internal committees and an external equity consultant group. The work of this plan is led by the Associate Vice-President Research, the AU EDI Committee, and our Canada Research Chair Committee, which has broad representation of under-represented groups. Under their oversight, recommendations, monitoring, and leadership, our Canada Research Chair program will prioritize EDI in all future hires until balanced representation is achieved. We are already moving in this direction with the nomination currently under consideration.

Placement of Canada Research Chairs

Athabasca University currently has five Canada Research Chair allocations, one of which is in the nomination process. Chair appointments have been the result of a blend of recruiting leading scholars from Canada and abroad to AU and retaining strategies to ensure our program recognizes and cultivates excellence within the organization. Athabasca University currently has all of its chairs as Tier 2 allocations. With our program growing in success, our strategy has been to invest widely across disciplines to both launch individual researchers in becoming international leaders in their fields and leverage this broad bench strength to elevate the research profile of the institution. In the future we anticipate growing our program to include Tier 1 allocations for established scholars.

Strategic Alignment of Chairs and Research Priority Areas

The four priority areas of research excellence above are designed to both extend AU's historic areas of research strength as well as cultivate new ones. The deployment of our Canada Research Chair program enhances and extends both developments. To summarize this integration, the following includes a brief profile of current or under consideration chairs.

- *Health Promotion and Chronic Disease Management, Tier 2:* Dr. Jeff Vallance is exploring the role that physical activity programs can play in improving the health of cancer survivors and the negative impact of sedentary behaviour. This program relates to our priority area of "society, culture, health, and well-being."
- *Community, Identity and Digital Media, Tier 2:* Dr. Vallee's interdisciplinary research focuses on innovation in sound-based technologies and how new local and global research communities can be built around these innovations. This research program relates to the themes of "environmental and societal dynamics" and "society, culture, health, and well-being."

- *Digital Disruptions and Organizational Transformation, Tier 2:* Dr. Cox's research focuses on the digital economy and will investigate a range of disruptive technologies, including crowdfunding, video games and digital piracy, with a view to examining their impact upon organizations. This research program relates directly to key aspects of our "society, culture, health, and well-being" and "digital futures" priority areas.
- *Hydrological Sustainability, Tier 2:* As a field hydrologist, Dr. Ketcheson studies the movement of water between forests, wetlands and streams in northern Alberta. The research program enhances AU's research leadership around the "environmental and societal dynamics" and "society, culture, health, and well-being."
- *Critical Digital Pedagogy, Tier 2:* This nomination is currently under consideration. We anticipate that the research program would add significant leadership and strength to the primary area of "disruptive pedagogies" and "digital futures," with secondary impact also on the theme of "society, culture, health, and well-being."

Support for Research Development and Dissemination

Success rates of AU researchers in securing competitive, external research grants and awards have increased steadily in the past five years. In addition to external sources of funding, internal research grants are also available to support, pilot projects, involvement of student research assistants, and defraying dissemination costs for conference travel or open access fees. The AU Research Centre assists researchers in all aspects of research development, ethics approvals, industry partnerships, and the application and management of research funds. For our Canada Research Chair nominations that also submit CFI applications at the time of application, the Research Centre provides support in both the pre- and post-award management to ensure that funds received are dedicated to the stated infrastructure needs outlined in the program of study.

Research Network and Partnership Reach

Athabasca University encourages and supports inter-institutional and inter-sectoral collaborations provincially, nationally and internationally. To date, AU researchers have engaged in initiatives with private sector partners, regional and national academic institutions, industry, and private sector partners. Some of these endeavors have involved researchers from, for example, Asia, Australia, the Commonwealth, European Union, and the United States. Athabasca University is also a participant in the multi-institutional initiatives to create high performance computing/computer grids and digital technologies in the social sciences and humanities. As a result, researchers in these fields have had the opportunity to be involved in multi-institutional and multi-disciplinary funded research.

SRP Planning and Approval Process

The development and proposal of the SRP were vetted through university governance structures, concluding with presentation to General Faculties Council. Final approval rests with the AU Board of Governors. A similar process will be followed in the upcoming renewal of our SRP. We thank our campus community for contributing to the strategic research planning process.