

## 2018/19 Call for Proposals: Emerging Technologies

### Alberta Innovates Strategic Research Projects (SRP) Program

*Generating benefits for Alberta through priority-driven research and innovation*

**Proposal Submission Deadline: November 13, 2018 at 4:00 pm MST**

#### The Call

Emerging Technologies offer the promise of transformational solutions to challenges across Alberta's key sectors. Researchers at Campus Alberta Post-Secondary Institutions are invited to apply for up to \$750,000 in project funding (maximum \$250,000/year for three years). Approximately \$4M in funding is available for April 1, 2019 project starts (year 1 funding) for Proposals submitted to this Call.

This Call seeks Proposals for research projects that:

- a) Develop capacity in the **Emerging Technologies Priority Areas** (See **Table 1** below), or which additionally contribute to meeting [Alberta Research and Innovation Framework \(ARIF\) 2030 Innovation Targets](#). This includes projects which use Emerging Technologies to address industry/ end-user challenges.

Proposals must demonstrate that Projects will contribute to one or more SRP Program Desired Outcomes, namely:

- Enabling the development of Emerging Technologies (in and of themselves) or additionally in application to ARIF 2030 Innovation Targets and industry/end-user challenges;
- Encouraging the employment and retention of HQP in Alberta;
- Establishing new collaborations between Alberta Researchers and Industry partners, including Alberta technology-based small and medium enterprises ("SMEs");
- Catalyzing growth and diversification of Alberta's economy.

These contributions will also support [ARIF Desired Outcomes](#). (See **Table 2** below).

#### Dates & Deadlines

Call Launch: **October 4, 2018**

Proposal Submission Deadline: **November 13, 2018 at 4:00 pm**

MST Funding Decision notification: **February 2019**

#### Proposal Limits

Maximum funding request: **\$750,000** (Maximum \$250,000/year for three years)

Maximum project duration: **3 years**

*Lesser funding requests and shorter project durations welcomed.*

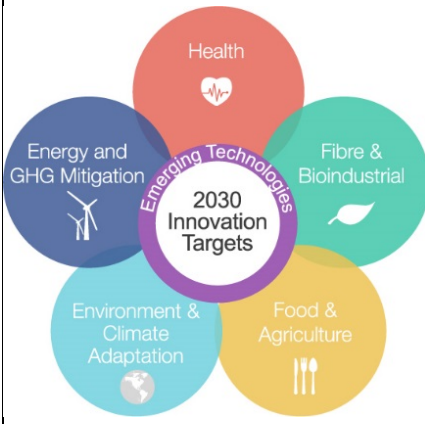
#### IMPORTANT: Before Applying

Researchers interested in applying should first review the Alberta Innovates Strategic Research Projects (SRP) [Program Guide](#) available at [albertainnovates.ca/SRP](http://albertainnovates.ca/SRP), which details the program and the requirements all SRP Proposals must meet.

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**\*\*\*Proposal Application Forms and Program Guide available on SRP program  
webpage at [albertainnovates.ca/SRP](http://albertainnovates.ca/SRP) \*\*\***

**Table 1.**

2018/19 Emerging Technologies Call (SRP Program): Strategic Priority Areas		
<b>Proposed projects must advance Emerging Technologies</b> in the natural sciences and engineering:		
Emerging Technology Priority Areas		
Area	Common Enabling Outcomes	Opportunity Areas (Not Exhaustive)
<b>Information and Communication Technologies (ICT)</b>	<ul style="list-style-type: none"> <li>• Infrastructure</li> <li>• People</li> <li>• Innovation environment</li> <li>• System linkages</li> </ul>	<ul style="list-style-type: none"> <li>• Data-enabled Innovation: Artificial intelligence, Machine Learning, Big Data and Data analytics, Quantum Technologies, Communication Technologies, Cloud computing, Augmented Reality/Virtual Reality</li> <li>• Digital Technology for Business Transformation: Visualization, Cryptocurrency, Cybersecurity, Geomatics, Geospatial technologies, Internet of Things (IoT)</li> <li>• Innovative Production and Distribution: Robotics, Autonomous transportation, advanced manufacturing technologies including 3-D printing &amp; fabrication</li> <li>• Virtual service delivery</li> <li>• Smart Grid and Smart communities</li> </ul>
<b>Nanotechnology</b>		<ul style="list-style-type: none"> <li>• Innovative Production and Distribution: Advanced Nano engineered materials, devices and systems</li> <li>• Atomic &amp; molecular systems, Quantum Technologies, Sensors and MEMS</li> </ul>
<b>'Omics</b>		<ul style="list-style-type: none"> <li>• Genomics, Proteomics, Metabolomics, Metagenomics, Glycomics, etc.</li> <li>• Bioinformatics</li> </ul>
<b>...in and of themselves, or which <u>additionally</u> contribute to</b> meeting 2030 Innovation Targets:		
<b>Alberta Research and Innovation Framework (ARIF) 2030 Innovation Target Priority Areas:</b>		
<div style="display: flex; align-items: flex-start;"> <div style="flex: 1;">  </div> <div style="flex: 2; padding-left: 20px;"> <p>The Government of Alberta has set Innovation Targets to inspire transformational solutions in priority areas including <b>Fibre &amp; Bioindustrial, Food &amp; Agriculture, Environment &amp; Climate Adaptation, Energy and Health.</b></p> <p><b>Proposals which contribute to meeting these 2030 Innovation Targets <u>by developing Emerging Technologies</u> can be funded under this program.</b></p> <p><b>Note:</b> Proposals for projects Alberta Innovates determines are solely or primarily focused on Greenhouse gas emission Reduction will generally not be considered for funding under this Call. Researchers conducting research to reduce Greenhouse gas emissions should apply to Alberta Innovates' <a href="#">Climate Change Innovation &amp; Technology Framework (CCITF) funding programs</a>.</p> <p>Applicants should thoroughly review the <a href="#">ARIF</a> to understand Alberta's Innovation Targets.</p> </div> </div>		

**\*\*\*Proposal Application Forms and Program Guide available on SRP program webpage at [albertainnovates.ca/SRP](http://albertainnovates.ca/SRP) \*\*\***

**Table 2.**

2018/19 Emerging Technologies Call (SRP Program): Desired Outcomes	
<b>Proposals must demonstrate projects will contribute to one or more <u>SRP Program Desired Outcomes</u>:</b>	
<b>SRP Program Desired Outcomes:</b>	
<ul style="list-style-type: none"> <li>➤ Enabling the development and application of Emerging Technologies to ARIF 2030 Innovation Targets and industry/end-user challenges;</li> <li>➤ Encouraging the employment and retention of HQP in Alberta;</li> <li>➤ Establishing new collaborations between Alberta Researchers and Industry partners, including Alberta technology-based small and medium enterprises (“SMEs”);</li> <li>➤ Catalyzing growth and diversification of Alberta’s economy</li> </ul>	
<b>These contributions, focused in Emerging Technologies and ARIF Innovation Target areas, also contribute to ARIF Desired Outcomes:</b>	
<ul style="list-style-type: none"> <li>➤ Economic diversification and job creation;</li> <li>➤ Environmental stewardship and climate leadership;</li> <li>➤ Effective resource management;</li> <li>➤ Health and wellness for Albertans</li> </ul>	

**Program contact information:**

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