

## **PROGRAM GUIDE:** 2018-19

Accelerating Food Innovation in Alberta:  
Applied Research, Product or  
Technology Development

- Focus on Protein and By-Product Utilization

## 1.0 PROGRAM OVERVIEW

### 1.1 Purpose

The “2018-19 Accelerating Food Innovation in Alberta – Applied Research, Product or Technology Development – Focus on Protein and By-Product Utilization” is designed to provide funding for applied research, product or technology development leading to the following:

- New or improved **plant or livestock based protein** food ingredients or bioactives, products, beverages, supplemented foods, and/or natural health products (NHP's)/nutraceuticals;
- Complete utilization/maximization of value of **by-product components** (e.g. starch, fibre, oil, sugar), and/or
- **New food processing technologies** to provide innovative new product solutions.

Projects should add value to Alberta livestock and crop commodities, respond to domestic and/or international consumer demand (especially the increased demand for protein), address challenges facing the industry, and provide a competitive solution.

The objective of this program is to support Alberta’s manufacturers in their efforts to increase revenues from value-added ingredient, food, beverage, and natural health products production thereby contributing to a competitive and prosperous agri-food sector, providing economic growth and diversification opportunities for Alberta’s economy; and increasing jobs and employment in both rural and urban communities.

This program contributes to Alberta Research and Innovation Framework (ARIF) outcomes and builds on Alberta’s natural strengths in agriculture, Alberta’s academic excellence, and the entrepreneurial spirit of Alberta companies. Investments are designed to result in globally competitive, innovative new products or technology for entry into high yielding domestic and export markets or replacement of existing imports. Projects could also take advantage of reformulation opportunities.

### 1.2 Alberta Innovates Mandate

Alberta Innovates (AI) is a provincial Crown corporation investing in research, innovation and entrepreneurship to drive economic growth and diversity. AI programs harness the potential of emerging technologies to create new industries and strengthen existing ones, move Alberta to a lower-carbon future, promote responsible use of land and water, and enhance Albertans’ health and well-being. Collaboration is at the heart of AI’s initiatives—bringing together bright minds and great ideas to drive innovation. AI supports a broad range of research and innovation activity—from discovery to use. For more information about AI, please visit <http://albertainnovates.ca/>.

Smart Agriculture and Food innovation is a strategic priority for Alberta Innovates Bio Sector.

### 1.3 Background

It is expected that the world will need to feed another 350 million more people within the next five years, and over ten billion people to feed by 2050.

Protein ingredients development and manufacturing is being recognized as an economic opportunity for Alberta and Western Canada. The federal government also recognises this opportunity and has named Protein Industries Canada as one of the five successful supercluster proposals. Investments in research and innovation in proteins are also consistent with the Plant Protein Alliance of Alberta, Canada's Agri-Food Economic Strategy Table report, the ARIF Value Added Food Innovation Target, and Alberta Agriculture's Science, Research and Innovation Framework objective on economic development and competitiveness.

The significant demand for high value livestock and plant based protein, both domestically and internationally is well recognized, particularly among the emerging middle class in Asia and other developing countries. Global consumer demand for safe, healthy, nutritious food products which have verifiable ethical and sustainability attributes is experiencing unprecedented growth. There is an opportunity for Alberta's SME (Small and Medium Enterprises) to enter into this market.

In addition to the demand for protein, it is recognized that by-product utilization (fibre, starch, sugars, etc.) is also critically important to manufacturer profitability and sustainability. Applied research and product development will encourage utilization of the entire plant or agricultural input.

This funding program supports Alberta's vibrant agri-food industry, which produces a variety of crops and livestock products that can be further processed into value added ingredients, foods, beverages, or NHP's. An increase in value-added food processing will boost Alberta's economy. In 2017, the Agri-food sector generated \$28.5 Billion in revenue for Alberta, with \$14.1 Billion from primary agriculture (4.5% higher than 2016) and \$14.4 Billion from Food and Beverage Manufacturing sales (8.4% higher than 2016). Food and Beverage accounts for 20.3 percent of the province's total manufactured goods (\$70.94 Billion) and employs 23,000 persons, 52,100 are employed on Alberta's farms and ranches for a total of 75,100 employed in the agri-food industry. This is the seventh consecutive annual gain. Food and beverage production adds value to agricultural commodities, stimulates local economies and creates jobs.

Alberta's agri-food industry has the potential to further contribute to Alberta's economy by harnessing Alberta's research capacity, by commercializing inventions and improving products, processes and services. Competitiveness and profitability of the sector is highly reliant on continued innovation, to allow for differentiation in the market place, and to keep pace with consumer trends and regulatory changes.

## 1.4 Areas of Interest

Applied Research, product or technology development:

- New or improved **plant or livestock protein** based food ingredients or bioactives, products, beverages, supplemented foods, and/or natural health products (NHP's)/nutraceuticals;
- Complete utilization/maximization of value of **by-product components** (e.g. starch, fibre, oil, sugar), and/or
- **New food processing technologies** and their application in developing innovative protein and by-product ingredients.

**Additional guidelines:**

- Projects can include both company specific research as well as development of industry wide solutions.
- Preference will be given to those product development or new technology projects demonstrating the highest potential for commercial success.
- Applied research projects must clearly articulate a proposed path to market. Co-funding from either a company or industry organization is essential.
- All applications need to clearly articulate the proposed economic, social or environmental benefits to Albertans.
- Proposals must clearly describe how their proposed products or technology are unique and can be differentiated from other products or technologies on the market.
- The company applicant or partner must indicate how they will independently or with a partner commit to and have the capability/resources to commercialize the newly created product within **two years of the research project completion date**.

## 1.5 Who May Apply

- The main applicant can be from within a company, an academic institution-and/or provincial or federal research centres. A qualified researcher must be an integral part of the team.
- The project must have company participation. The company must be a ingredient, food, beverage or NHP business that is a legal entity (sole proprietorship, partnership, limited company, or cooperative) registered in Alberta or Canada, with offices in Alberta.

## 1.6 Project Funding and Duration

- Funding available: A maximum of \$100,000 will be allotted to any one project. AI recognizes the potential for a range of funding needs depending on the goals of the project. Applicants are encouraged to include additional funding partners as appropriate. AI may be able to assist with identifying potential partners.
- The project must have a company applicant or partner who is able to provide a minimum cash contribution of **25 per cent of the total cash value** of the project. Examples of funding requirements include:

- If the total cash value of the project is \$100,000, AI's portion will be \$75,000 and the industry partner will be required to contribute the remaining \$25,000 in cash.
- If the project requires the maximum eligible amount of \$100,000, then the industry partner will be required to provide \$33,333 for a total project cash value of \$133,333.
- The 25 per cent cash contribution must be for activities that are within scope of the Program. The intent of the Program is to ensure that proposals are demand or industry challenge driven and that the resulting product or technology will be globally competitive.
- Project Duration: the proposed work must be completed within 36 months.

## 1.7 Eligible Program Activities and Expenses

Category	Eligible Activities
<b>Work associated with Applied Research, Product or Technology Development</b>	<ul style="list-style-type: none"> <li>• Product design, formulation, development, prototyping and optimization</li> <li>• Development of new food processing technologies</li> <li>• Product evaluation such as consumer sensory testing/acceptance (taste, odor, texture, appearance)</li> <li>• Support for pilot and preliminary scale-up problem solving</li> </ul>
<b>Out of Scope</b>	<b>The following activities are <u>Not Eligible</u> for funding</b>
<b><u>NOT ELIGIBLE</u></b>	<ul style="list-style-type: none"> <li>• Intellectual property protection</li> <li>• Business development including listing fees, marketing or sales activities</li> <li>• Commercialization of product, branding activities</li> <li>• Feasibility studies</li> <li>• Market access or market development</li> <li>• Case studies, clinical studies, or clinical trials</li> </ul>
Category	Eligible Expenses
<b>Personnel – Project team</b>	<ul style="list-style-type: none"> <li>• Additional manpower specifically required to deliver project outcomes, at industry standard annual salary rates</li> </ul> <p><b>NOTE: Salaries of permanent employees of an institution or company are not eligible.</b></p>
<b>Travel</b>	<ul style="list-style-type: none"> <li>• Travel to project sites</li> <li>• Travel to present or discuss the project with stakeholders</li> <li>• Travel for information dissemination purposes to key stakeholders</li> </ul> <p><b>NOTE: Travel for marketing and sales purposes are not eligible.</b></p>
<b>Capital Assets/Equipment</b>	<ul style="list-style-type: none"> <li>• Equipment directly required for the project, as specified in the program guideline documents, not to exceed 15 per cent of the overall project costs</li> </ul>

<b>Supplies</b>	<ul style="list-style-type: none"> <li>• Cost of supplies directly required for the project</li> <li>• Reasonable material costs</li> </ul>
<b>Communication, Dissemination, Linkage</b>	<ul style="list-style-type: none"> <li>• Cost of communicating with commercialization partners, funders, etc.</li> <li>• Costs associated with dissemination of knowledge to other potential users</li> <li>• Cost of scientific publication if appropriate</li> </ul> <p><b>NOTE: Costs of advertising, marketing and sales is not eligible.</b></p>
<b>Other</b>	<ul style="list-style-type: none"> <li>• Incremental administrative expenses, directly required to achieve project outcomes are eligible</li> <li>• Facility Fees</li> </ul> <p><b>NOTE: Indirect overhead is not an allowable expense.</b></p>

## 1.8 Process and Timelines

Applicants to the program must submit a **full proposal**. Each proposal must be submitted online at <https://www.fundingconsortium.gov.ab.ca/ai/account>.

Applicants who need assistance are welcome to email or call the Program Manager identified on the last page of this document. AI is willing to assist potential applicants in exploring ideas, identifying potential project research team members and answering questions associated with eligible expenses, appropriate leveraging, etc. Scientific peer review and confidential business reviews will be conducted on all submitted proposals.

<b>Food Innovation Program Timetable</b>	
<b>Date</b>	<b>Item</b>
October 31, 2018	Call announced.
December 5, 2018 2:00 p.m. MDT	Deadline for Full Proposal. Late submissions will not be accepted. Applications submitted through the on-line system.
January 16, 2019	Applicants are notified of funding decisions.
March 1, 2019	Grant agreements must be completed. Projects may commence once grant agreement is in place.

## 2.0 Guidelines for Submissions

### 2.1 Reporting of Funding Sources

Transparency is critical to the success of any application. Evidence must be provided of the project team's ability to carry out the project. The business partner or applicant will need to supply, **in confidence, their most recent financial statements for the company**.

Detailed information must be provided in the application form on other sources of financial support including those applied for or otherwise contacted for assistance. AI will require written confirmation from contributors of their investment in the project in the full proposal. Letters of support will be accepted.

Confirmation of financial support will be required once applicants are notified that their full proposal has been successful and the offer letter has been accepted. Agreements/contracts for the project will not be executed until confirmation of all funds contributing to delivery of the project are available. Upon completion of the project, the applicant will be required to provide evidence that the contributions were provided.

## 2.2 Progress Reports and Financial Reporting

AI will require the applicant to submit **detailed interim progress reports and financial reports** as per the schedule contained in the grant agreement for delivery of the project. The financial report must provide evidence that the 25 per cent cash contribution from the industry applicant or partner is available. **A confidential and non-confidential final report** will be required within three months of completion of the project. Ten per cent of the total grant will be withheld until the final reports (confidential and non-confidential) have been-submitted and approved by AI.

**The applicant must also commit to submitting annual updates to AI for five years after the project has been completed**, detailing the success of the commercialized product(s), including revenues and resulting increase in jobs that are a direct result of the research funded by AI. These updates will be kept confidential and information provided will be combined with that of other funded projects to develop an aggregated performance measurement. Specific company financial information will be kept confidential.

## 2.3 Intellectual Property Principles

Intellectual property developed by the applicant or co-applicant must be managed by the applicant or co-applicant with a view toward commercial success. The proposal should clearly identify any intellectual property agreements between the co-applicant and applicant.

## 2.4 Confidentiality

Subject to its legal obligations under the Freedom of Information and Privacy Act (FOIP) and applicable privacy laws, AI will maintain the confidentiality of the material submitted. Your information may be shared with external reviewers on a confidential basis. We will ask your permission before sharing your application with funders outside of AI.

Personal information is collected pursuant to Section 33(c) of the Freedom of Information and Protection of Privacy Act as it relates directly to and is necessary for the 2018-19 the Accelerating Food Innovation in Alberta program. Should you have any questions about the collection of this information, you may contact Elizabeth Muir, Director, Value Added (780) 450-5557.

## 2.5 Evaluation Criteria

Applications will be selected based upon alignment with the program objectives and the quality of the proposal (research excellence, business acumen, company participation, potential for commercial success). Those projects that can demonstrate the greatest contribution to Alberta's economy, social and/or environmental benefits are most likely to be funded.

Any proposal that:

- Is not received on time as per published timelines
- Is not complete as per the on-line form
- Is not submitted by a qualified researcher or eligible company or
- Is not consistent with the Areas of Interest as outlined in 1.4 of this document

will not be evaluated. The applicant will be informed of the reason for administrative elimination from this Program. Proposals meeting all of the above mandatory administrative criteria will then be evaluated and prioritized using the following:

No.	Full Proposal Evaluation Criteria	Max Score
<b>A</b>	<b>Project Details:</b>	
	1. Background (including a complete literature review)	10
	2. Objectives, Deliverables and Anticipated Outcomes	15
	3. Project Risks/Mitigation Strategies	5
	4. Project Methodology and Milestones	15
	5. Knowledge, Innovation and Uniqueness	5
<b>B</b>	<b>Project Benefits</b> (Including economic, social or environmental)	15
<b>C</b>	<b>Pathway to Commercialization</b>	20
<b>D</b>	<b>Project Team</b>	5
<b>F</b>	<b>Project Budget</b>	10
	<b>TOTAL SCORE</b>	<b>100%</b>

**For more information, please contact the Program Manager:**

**Program Manager:**

**Ms. Elizabeth Muir, Director, Value Added**  
 Smart Agriculture and Food Innovation  
 Alberta Innovates  
 250 Karl Clark Road  
 Edmonton, Alberta T6N 1E4  
[Elizabeth.muir@albertainnovates.ca](mailto:Elizabeth.muir@albertainnovates.ca)  
 Tel: 780-450-5557

**Alternate Contact:**

**Dr. Cornelia Kreplin, Executive Director**  
 Smart Agriculture and Food Innovation  
 Alberta Innovates  
 250 Karl Clark Road  
 Edmonton, Alberta T6N 1E4  
[Cornelia.kreplin@albertainnovates.ca](mailto:Cornelia.kreplin@albertainnovates.ca)  
 Tel: 780-450-5563