



Program Guide

2017 - 2018 Agri-Technology Commercialization Centre's (ATCC) AIR Program

Accelerating Innovative Research

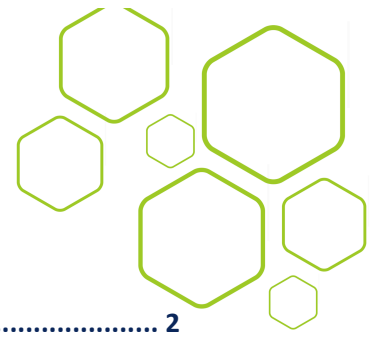
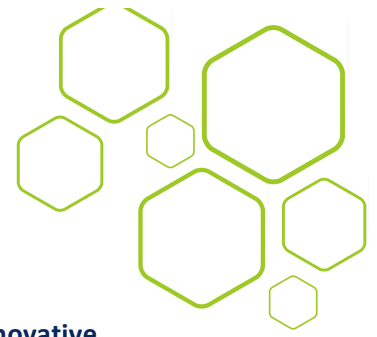


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Overview

What is the Agri-Technology Commercialization Centre's (ATCC) Accelerating Innovative Research Program?

The Agri-Tech Commercialization Centre (ATCC) *Accelerating Innovative Research (AIR) Program* is a funding program created to increase private sector adoption and commercialization of innovative research developed by Ontario universities and colleges, and industry for the agriculture and agri-food sectors.

The Program is supported by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and the ATCC.

Need

Many innovators in Ontario are working hard to support the discovery and creation of new products and technologies as solutions to problems in the agriculture and agri-food sectors.

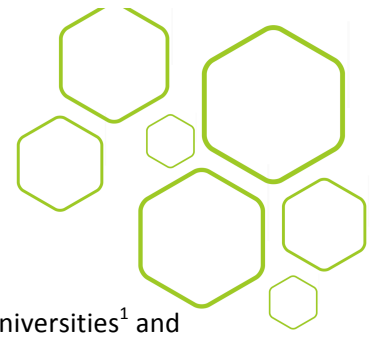
Once these innovative products or technologies are created, extensive support is required to enable commercial adoption. This includes support for commercialization activities such as later-stage research & development, product and process development or enhancement, prototyping, validation or demonstration, regulatory & legal strategy, and business modelling - all of which must occur in order to identify appropriate customers.

Financial support for these activities is imperative, and is often more impactful if it is accompanied by mentorship related to business planning and network development.

The ATCC is an internationally recognized cluster of agricultural innovation resources, dedicated to enhancing the research, development and commercialization of ground breaking technologies that advance Canada's leadership position in global markets.

ATCC's AIR Program, delivered by Bioenterprise Corporation, supports these activities to enable commercialization of research-based innovations coming out of Ontario. These efforts aim to enhance competitiveness and the leadership position of Ontario in the agriculture and agri-food sectors.

The AIR Program provides targeted financial support to innovators to mitigate risk associated with early-stage agri-tech innovation.



Program Summary

The ATCC AIR Program provides Innovation Grants to innovators from Ontario's universities¹ and colleges as well as industry organizations, to fill knowledge, technical, business or entrepreneurial gaps in order to accelerate adoption of new technologies by the agriculture and agri-food industries. It funds the identification of risks and opportunities of very early stage technologies to help innovators determine if their developments are aligned with needs of the sector.

ATCC's AIR Innovation Grants 2017-18: up to \$50,000 for five month projects

Eligibility Criteria

Proposals may support any agri-technologies on the applied research spectrum and at any stage of the commercialization process, provided they fit the eligibility criteria, principles and objectives outlined below.

- **Project addresses OMAFRA research theme priorities and the innovation objectives of the ATCC**
- Proposals should be for projects with a five month timeline
- Proposals may request between \$30,000 and \$50,000 total
- Two tranches of funding will be provided – one at the beginning of the project and one at project completion, upon submission of a successful report.
- All monies **must be spent prior to 28 February 2018** in pursuit of OMAFRA objectives and results must be reported in a Project Completion Report.
- Applicants may submit more than one proposal if multiple technologies exist

Successfully completed projects should be generating results to advance the commercialization of the technology and greatly increase the probability of attracting follow-on funding for further technology development and industry adoption.

Proposals may focus on improving one or more critical aspects of a technology or the business model needed for its delivery/use by customers. Alternatively, a proposal may focus on removing product-related technical bottlenecks that have stifled commercial viability and the value of the product to customers.

As well, proposals may work on developing any number of entrepreneurial or business building tools necessary to enable third parties to consider launching a business for the purpose of marketing the new technology.

¹ **RESTRICTIONS APPLY:** Innovators working at the University of Guelph and/or Humber College are not eligible to apply to this program. The Gryphon's LAAIR Program provides similar support to innovators working at these two institutions. Program details can be found at http://www.uoguelph.ca/omafra_partnership/research/en/themespriorities/Gryphon-s-LAAIR-Program-Info.asp.

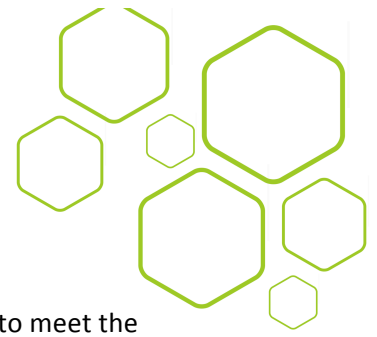


Budget requirements should match the proposed deliverables; therefore, some proposals may require less than the maximum allowable \$50,000. In all cases, outcomes must be justified and commensurate with the level of funding requested and have clearly stated deliverables and timelines.

Eligible Project Types

The following list includes, but is not limited to, eligible activities for AIR Program proposals:

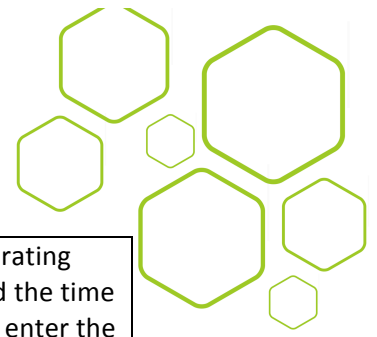
- Beta-testing, early-stage technologies before transferring to industry;
- Field testing prototypes/devices that have never been used outside the lab;
- Evaluating a significant advancement to an existing product, process or service;
- Customer discovery research to determine industry needs and to identify optimal industry partners;
- Comprehensive market analysis and competitive landscape assessment;
- Enabling pilot plant demonstrations or supporting the scale up of industrial processes in development;
- Evaluation and testing of late stage technologies to support a regulatory approval submission;
- Exploring and advancing the certification of a product or process by a reputable association;
- Testing or improvement of a potentially disruptive technology;
- Improving an unproven technology considered too risky to attract funding from other agencies;
- Demonstrating Proof of Relevancy using a prototype made within the cost constraints determined by the market;
- Developing a new product for animals or agriculture based on existing technology for humans or non-agricultural purposes;
- Generating data (proof of concept) from a novel technology to support filling a patent application;
- Creating an outreach program to increase industry's awareness of the technical merit and value proposition of a new technology;
- Creating and utilizing an academic-industry research centre at an industry partner's site to co-develop and implement process improvements directly applicable to industry;
- Determining the technical merit, feasibility, and commercial potential of a technology, which could involve demonstrating proof of concept in the lab or proof of relevancy in the field.



Program Principles and Objectives

To be eligible for support through the ATCC’s AIR Program, proposals must strive to meet the following principles and objectives.

Principles and Objectives
<p>A: Project supports <i>transformative innovation</i></p> <ol style="list-style-type: none"> 1. Proposal must build on an existing research project or recently developed technology that has the potential to provide transformative innovation to society. It is required that the applicant is able to demonstrate past experience and expertise in the research field specific to the proposal; 2. Proposal should aim to advance a process, product, technology, or service that has the potential to significantly improve agriculture and agri-food sector competitiveness; 3. Proposal should greatly improve probability of accelerating the adoption or commercialization of the technology by industry.
<p>B. Project addresses a <i>critical knowledge gap or barrier to the development, adoption, or commercialization of a technology</i></p> <ol style="list-style-type: none"> 1. Proposal must identify the critical gap or barrier that is preventing the development, adoption, or commercialization of the technology; 2. Research efforts must focus on reducing barriers or filling knowledge gaps that are impeding the adoption of a technology by industry; 3. Proposal should demonstrate that the barriers identified are the most important roadblocks that need to be addressed at this time. For example, there may be several less important barriers that will need to be removed before a technology is successfully adopted, but these can be delayed and very likely removed in the future.
<p>C. Project demonstrates or validates <i>market pull</i></p> <ol style="list-style-type: none"> 1. Proposal must identify and quantify a clear commercial need for the technology or solution by industry; <p style="text-align: center;">– OR –</p> <p>Proposal must describe the need to conduct market research to determine/examine/evaluate the opportunity for a new technology within a new or emerging market or its disruptive potential within an existing market;</p> 2. For ‘early stage’ technologies, the proposal may assess market receptivity, market scope/size, end-user need/interest, and/or identification of marketing agents/developers/partners or investors for the technology; 3. For late stage technologies with existing fully engaged industry partners



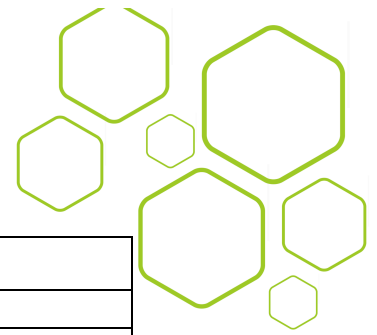
providing cash or in-kind support, proposals will likely focus on generating more detailed investigations of near-term market opportunities, and the time to cash flow, as well as methods to overcome immediate barriers to enter the market.

D. Project addresses OMAFRA research theme priorities and the innovation objectives of the ATCC

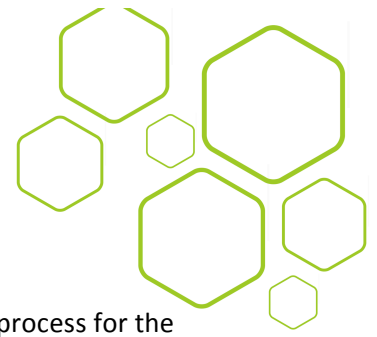
1. Technologies must be applicable to the agriculture or agri-food sector and fit within the OMAFRA (ARIO) research theme priorities as described on the OMAFRA website, here:
<http://www.omafra.gov.on.ca/english/research/oran/oranindex.htm>
2. Proposal must support the innovation objectives of the ATCC to support research, development and commercialization of ground breaking technologies and create and attract profitable businesses that advance Canada’s leadership position in global markets;
3. Proposal must support a technology that can realize substantial gains beyond the project timelines but within a horizon of no greater than six years, to match expectations of the ATCC founding organizations – Bioenterprise Corporation, Soy 20/20, and Ontario Agri-Food Technologies;
4. Proposals may target any point along the agri-food value chain, including but not limited to, consumer needs; supplier/distributor/retailer markets; post-farm gate handling, marketing or processing; on-farm production systems; and physical or service inputs at any level.

E. Lead Applicant has an appropriate and experienced team assembled

1. The Lead Applicant must have research expertise pertinent to the technology in need of advancement;
2. The project team must be well-defined and comprised of individuals that currently have the expertise needed to advance the technology;
3. Applicants are encouraged to include in their team, individuals who can provide expertise and guidance on technology adoption or commercialization options (for example: Regional Accelerator staff, Tech Transfer Office staff, knowledge mobilization managers, Bioenterprise Corporation Analysts/Mentors/Partners, industry scientists and industrial business development professionals etc.). Often, these individuals can assist with entrepreneurship, business development, business management, IP protection, and other desired skills or training needed to support the proposal should it be funded;
4. Due to the short project duration of five months, funding graduate student stipends is not a good fit. However, alternative HQP training opportunities (for example: interns, PDFs, limited-term employment contracts) may be feasible and are encouraged.



F. Lead Applicant must be eligible
<ol style="list-style-type: none">1. Lead Applicants (Principal Investigator) applying to the Academic Stream of the ATCC AIR Program must be University faculty (Assistant Professor, Associate Professor, or Professor), College Professors or eligible Adjunct (Adjunct Eligibility Criteria), must be eligible to hold Tri-Council grants, and must be able to demonstrate an appropriate level of expertise related to the development of the technology or reference past progress of the underlying research program upon which the technology is based.2. Lead Applicants and companies applying to the Industry Stream must be incorporated entities located within Ontario.



Application Process

Bioenterprise is working in collaboration with OMAFRA on the application intake process for the ATCC AIR Program. Interested innovators are asked to complete an “on-line application” using OMAFRA’s Research Management System (RMS). For more information on how to use RMS & how to apply, please visit <http://www.omafra.gov.on.ca/english/research/rms/rms.html>.

Application Details

- Applicants must create an RMS account prior to submission;
 - **Option 1** is for those with Research Offices that need to approve submissions in advance. If an institution has never applied to OMAFRA program, administrators will need to create Research Office accounts. Details on this process can be found here:
https://omafra.smartsimple.ca/files/424623/f94771/omafra_researcher_reg.html?cat=2109;
 - **Option 2** is for those without a Research Office, so any industry applicants. Details on this process can be found here:
https://omafra.smartsimple.ca/files/424623/f94771/omafra_researcher_reg.html?cat=2099;
- Applicants must submit their Commercialization Project Summary (CPS) using the OMAFRA RMS;
- URL: https://omafra.smartsimple.ca/s_Login.jsp
- Please contact RMS Admin at RMS@ontario.ca if you do not have access to the RMS system. The CPS focuses on the “What, Why, Who, When, Where, and How” pertaining to the project and technology.

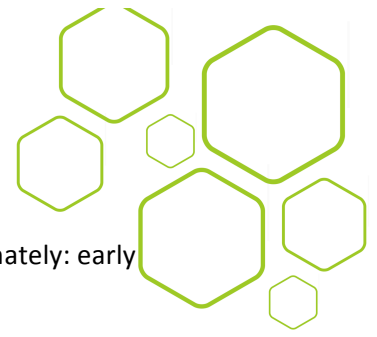
Proposals are due by 4:30 PM on September 18, 2017

Program Oversight

The Advisory Council for the ATCC’s AIR Program comprises representatives from OMAFRA Research & Innovation Branch; Bioenterprise Corporation; Soy 20/20; Ontario Agri-Food Technologies (OAFT); Livestock Research and Innovation Corporation (LRIC); Regional Accelerators; related agriculture and food industry associations, and; the Agricultural Research Institute of Ontario.

Review Process

Written proposals for Innovation Grants will be reviewed and scored by a review committee of academic and industry managers with experience evaluating applied research for commercialization. Decisions to fund up to \$30,000 will be based on this written proposal alone. Decisions to fund up to \$50,000 will be based on this written proposal as well as an in-person pitch presentation, scheduled to occur the week of **September 25-29, 2017**. Firm date and time to be confirmed.



Final decisions and award letters will be communicated to applicants by approximately: early October 2017.

Proposal Evaluation & Selection Criteria

All written proposals will be assessed on how well they address the following questions:

- Does the innovation project fit appropriately within the scope of the OMAFRA Priorities and the objectives of ATCC? (*Where does it fit?*)
- How well is the barrier or gap defined and understood? (*What is the problem?*)
- How clear is the plan to develop the technology and accelerate commercialization?
- How will the gap or barrier be reduced or removed? (*Do what? How?*)
- How valuable is the potential innovation to society once the barrier is removed? What is the economic impact of the project? (Jobs created, increased revenue etc.) (*Why?*)
- What is the current demand and how is it supported with data or demonstrated?
- What realistic benefits will the project deliver once completed as planned? Who will benefit in Ontario and beyond? (*What benefits? Who benefits? Who cares?*)
- Who is on the team and what expertise can they apply to the proposal? Who from industry is contributing and what is their role? (*Who is involved?*)
- How clear, logical, realistic, relevant and well defined are the proposed objectives and milestones? (*Clarity of communication plan. How? When?*)

Scoring Template for Proposals

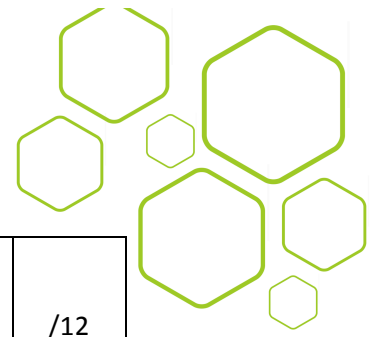
Proposals will be evaluated on their potential commercial impact or degree to which they move a technology closer to commercialization and adoption. While all proposals must be based on excellent technology, it is the probability of adoption and the opportunity to create real commercial value that is being evaluated.

See the following page for the Scoring Criteria.

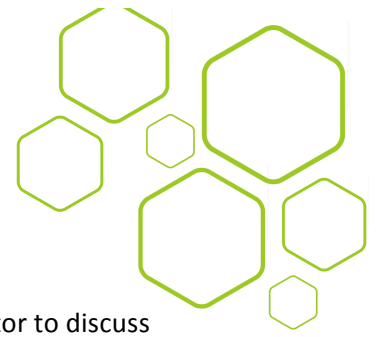


Evaluation of Innovation Grant Proposals to the ATCC's AIR Program

Criterion	Score
<p>ELIGIBILITY:</p> <p>Is the Lead Applicant and/or project leader an Ontario-based innovator, university faculty, college professor, researcher, or eligible adjunct, with a well-defined and appropriate team assembled that has demonstrated or cited adequate experience and understanding of the project's field of research or industry?</p> <p>(NO is a Rejection)</p>	<p>Yes - No</p>
<p>SCOPE:</p> <p>Does the innovation project fit appropriately within the scope of the OMAFRA (ARIO) Priorities and the innovation objectives of ATCC?</p> <p>(NO is a Rejection)</p>	<p>Yes - No</p>
<p>INTELLECTUAL PROPERTY:</p> <p>Is it anticipated that the project may result in protectable intellectual property (for example: inventions, plant varieties, software, cell lines, copyright)?</p> <p>(Yes – 4; No – 0)</p>	<p>/4</p>
<p>POTENTIAL BENEFITS:</p> <p>If successful, will the project likely bring significant benefits to Ontario's agriculture and agri-food sectors?</p> <p>(Excellent – 16; Above Average – 12; Adequate – 8; Substandard – 4)</p>	<p>/16</p>
<p>PROJECT PLAN:</p> <p>Is the innovation and its planned development, adoption or commercialization path clearly articulated?</p> <p>(Excellent – 16; Above Average – 12; Adequate – 8; Substandard – 4)</p>	<p>/16</p>
<p>OBJECTIVES/TIMELINES:</p> <p>Are the explicit project objectives tightly defined and timelines well defined with definitive, step-wise project milestones?</p> <p>(Excellent – 16; Above Average – 12; Adequate – 8; Substandard – 4)</p>	<p>/16</p>
<p>GAP/BARRIER:</p> <p>Is the barrier or gap to innovation clearly identified along with how this project expects to resolve the bottleneck?</p> <p>(Excellent – 20; Above Average – 15; Adequate – 10; Substandard – 5)</p>	<p>/20</p>



ROI/BUDGET: Is the scale of the budget request appropriate for the proposed project work and is there a reasonable expectation of a good to excellent return on investment? (Excellent – 12; Above Average – 9; Adequate – 6; Substandard – 3)	/12
OVERALL: What is the overall quality of the proposal? (Excellent – 16; Above Average – 12; Adequate – 8; Substandard – 4)	/16
COMMENTS:	
TOTAL POSSIBLE SCORE	/116



Program Contacts

Prospective applicants are strongly encouraged to contact the Program Coordinator to discuss the potential fit of your proposal. Additional details of the program can be found on the Bioenterprise website (<http://www.bioenterprise.ca>).

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