UNIVERSITY of GUELPH

OFFICE of RESEARCH

AGRI-FOOD PARTNERSHIP

Ontario Agri-Food Innovation Alliance

Gryphon's LAAIR Program Guide

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ONTARIO AGRI-FOOD INNOVATION ALLIANCE GRYPHON'S LAAIR PROGRAM OVERVIEW

This guidance document focuses on program details and the application process for the Gryphon's LAAIR (Leading to the Accelerated Adoption of Innovative Research) Market Validation and Product Development Grants.

Purpose

The Market Validation Grant aims to support market research to accurately determine the market potential of new research results that appear to have commercial benefits for the Ontario agri-food industry. The Product Development Grant aims to support the creation and optimization of a Minimum Viable Product (MVP) which has strong potential to be commercialized and benefit the Ontario Agri-food industry.

Vision

Gryphon's LAAIR (GLAAIR) Grants were created by the Ontario Agri-Food Innovation Alliance to provide financial support to U of G researchers who have identified an opportunity to accelerate the adoption of new commercially viable technologies developed from previous applied research projects. The goal of these grants is to increase the number of U of G driven technologies adopted for use by the Ontario agri-food industry and to make the Ontario agri-food industry more locally and globally competitive.

Guiding Principles

- **Develop new technologies (products & solutions) to make the Ontario agri-food sector more competitive**
- **Use market-based evidence to determine the commercial value of agri-food research and new technologies, now and in the future**
- **Remove barriers preventing the adoption of new technologies with commercial potential**

Background

Improvement of the Ontario agri-food sector depends on continuous research support that enables new technologies to mature into products that have an economic impact in the marketplace. Market Validation Grants provide support for technologies immediately after the applied-research stage, but before completing any market research. Understanding "product-market fit" is crucial when launching a new product, process, or service and these grants are designed to enable U of G researchers to assess the market potential of an existing, well-developed U of G technology. The knowledge derived from a completed Market Validation project will better position a new technology to secure follow-on funding, such as a Product Development Grant, to advance a technology even closer to market launch or transfer to industry. Product Development Grants

provide support after a significant amount of applied research has been completed and the market need for your new technology has been validated. The Product Development funding is used to help remove the current barriers that prevent industry from using or adopting your product.

Market Validation Grants

Market Validation projects conduct primary research, often called Customer Discovery, that reveals the wants and needs of stakeholders from all levels of industry, government, supply chain controllers, and end-users. This involves testing an early-stage concept with potential customers and end-users. This first conceptual product is often called a Minimum Viable Product (MVP). MVPs require support from the time of discovery, often called Technology Readiness Level 1 (TRL 1, see below), to full maturity (TRL 9), when they are launched into the marketplace. The MVP assessment should be supported with objective data gathered from trusted primary and secondary sources that allow the research team to quantify and catalogue market size, customer demographics, regulatory requirements, costing outlook, competitive landscape, and the time and resources required to launch a first product.

Applications should clearly describe the approach, activities, and tools to be used to perform the Market Validation project. Applicants should develop a project plan which aims to answer these key questions:

1. **Does a significant problem (unmet need) exist in the agri-food market that is worth developing a practical commercial solution?**
2. **What do customers want and, more importantly, need to solve their problem?**
3. **What resources would the research team need to develop a commercial solution (e.g., minimum viable product) that customers are willing to pay for, to solve their problem?**

The most important output from a Market Validation project is customer-generated evidence that confirms the problem your technology solves; the market size, the stakeholders, payees, customers, competitors, and the barriers you must overcome to get your technology to market. A successfully completed Market Validation project will greatly improve the probability that your technology gets to market to solve real customer's problems.

Product Development Grants

Product Development Grants are designed to enable U of G researchers to take proven applied research results, often called new technologies, and develop them into a focused, useable, and practical products that can be tested, improved, and shared with potential customers for feedback and eventual commercialization. A key goal of Product Development funding is to help UofG researchers build and demonstrate their MVP to end-users (customers and industry partners), to obtain feedback for further optimization. Interacting with end-users will enable researchers and entrepreneurs to obtain objective data from the market that will dramatically increase the probability of launching a successful MVP.

The application should clearly describe the approach, activities, and tools to be used to execute your project plan and, if needed, explain why these activities are better than those not chosen.

Upon completing your Product Development project, you should be in an excellent position to create a launch plan for your MVP or have an industry partner willing to take over the responsibility to bring your MVP to market.

Key Goals

- **Accurately and objectively understand how to prepare a technology to be adopted by industry and the barriers that must be removed or managed to do so**
- **Advance the Technology Readiness Level (TRL) of technologies with commercial potential**
- **Understand why industry is willing or not willing to commit to adopting/developing your technology**
- **Better understand industry's needs and the challenges to bring new products and services to the agri-food market in Ontario**
- **Provide current and substantiated evidence of end-user needs, market size and demand, and viable product features; all of which can be used to secure follow-on funding for future product development of your technology**
- **To motivate researchers to "get out of the building" (off academic campus) so you can understand how well your technology fits the real needs of the commercial market**
- **Change, adapt and optimize your MVP to better meet the needs of industry and end users**
- **Generate data and reports that can be used to secure additional follow-on investment from industry or investors to create/launch a commercially viable MVP**

Technology Readiness Level

Please refer to the following scale (developed and used by many governments, funders, investors, and NASA) to determine the current Technology Readiness Level (TRL) of any commercially feasible product, process, or technology according to the definitions below:

TRL-1 Basic principles of concept are observed and reported: Scientific research begins to be translated into applied research and development. Activities might include paper studies of a technology's basic properties.

TRL-2 Technology concept and/or application formulated: Invention begins. Once basic principles are observed, practical applications can be invented. Activities are limited to analytic studies.

TRL-3 Analytical and experimental critical function and/or proof of concept: Active research and development is initiated. This includes analytical studies and/or laboratory studies. Activities might include components that are not yet integrated or representative.

TRL-4 Component and/or validation in a laboratory environment: Basic technological components are integrated to establish that they will work together. Activities include integration of "ad hoc" hardware in the laboratory.

TRL-5 Component and/or validation in a simulated environment: The basic technological components are integrated for testing in a simulated environment. Activities include laboratory integration of components.

TRL-6 System/subsystem model or prototype demonstration in a simulated environment: A model or prototype that represents a near desired configuration. Activities include testing in a simulated operational environment or laboratory.

TRL-7 Prototype ready for demonstration in an appropriate operational environment: Prototype at planned operational level and is ready for demonstration in an operational environment. Activities include prototype field testing.

TRL-8 Actual technology completed and qualified through tests and demonstrations: Technology has been proven to work in its final form and under expected conditions. Activities include developmental testing and evaluation of whether it will meet operational requirements.

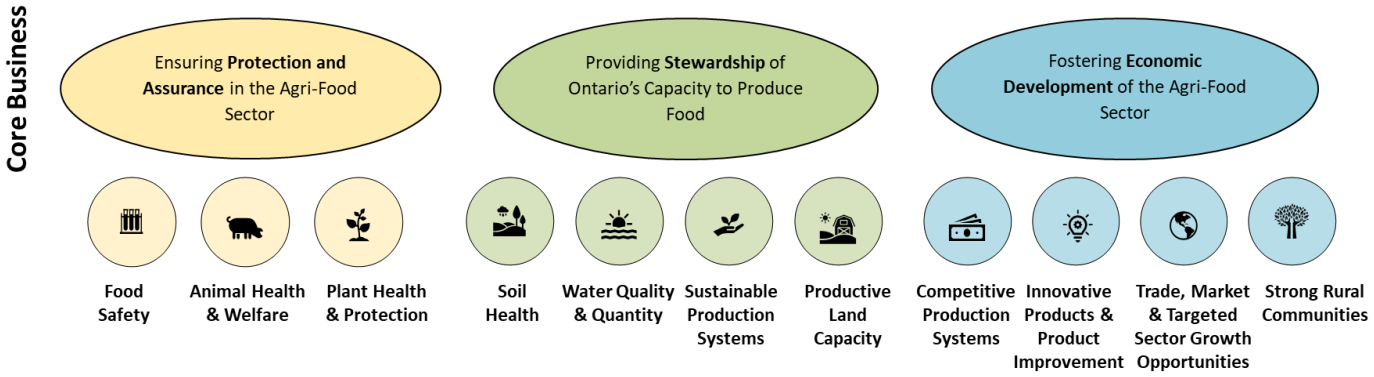
TRL-9 Actual technology proven through successful deployment in an operational setting: Actual application of the technology in its final form and under real-life conditions, such as those encountered in operational tests and evaluations. Activities include using the innovation under operational conditions.

Timelines for 2021-22 Gryphon's LAAIR Programming

- **Program launch: Tuesday, September 28, 2021**
- **Full proposal submissions deadline: Wednesday, December 1, 2021 at 1:00 pm**
- **Anticipated award notification: late February 2022**
- **Projects start on or after May 2, 2022**

Research Priorities

Each year the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) undertakes a research priority setting process. Research priorities for the Alliance Research Program are aligned within the Ministry's core businesses and objectives: Protection and Assurance, Stewardship, and Economic Development as illustrated in the following image.



Each of these research priorities has a set of goals and research focus areas, in addition to five cross-cutting focus areas. Gryphon's LAAIR projects supported by the Funding Program DO NOT need to address a specific research question but must relate to one of the eleven identified priorities and must demonstrate a high likelihood of contributing to the health, sustainability, and/or competitiveness of Ontario's agri-food sectors and/or rural communities.

Further information about OMAFRA's research priorities is available on the Priority-Driven Programs Support World-Class Research and Training webpage on the Alliance website.

Ontario Agri-Food Research Centres

Through the unique partnership between the University of Guelph and OMAFRA, crop and livestock research centres located throughout Ontario drive research support for the agri-food industry. The centres are owned by the Government of Ontario through its agency, the Agricultural Research Institute of Ontario, and managed by the University of Guelph through the Ontario Agri-Food Innovation Alliance. Centre access is obtained through an application to one of the Alliance Research Programs, most commonly Tier I or Tier II.

Available Funding

To meet established objectives, the Gryphon's LAAIR Funding Program invites project applications to one of two funding streams. Please note the new maximum project duration and budget limit in the Research Funding stream:

1. **Gryphon's LAAIR Market Validation Grants**

   Maximum project duration: 1 year (12 months) | Budget Limit: $20,000

   Market Validation projects conduct primary research, often called Customer Discovery, that reveals the wants and needs of stakeholders from all levels of industry, government, supply chain controllers, and end-users.

Applications should clearly describe the approach, activities, and tools to be used to perform the Market Validation project.

2. **Gryphon's LAAIR Product Development Grants**

   Maximum project duration: 3 years (36 months) | Budget Limit: $100,000

   Product Development Grants are designed to enable U of G researchers to take proven applied research results, often called new technologies, and develop them into a focused, useable, and practical products that can be tested, improved, and shared with potential customers for feedback and eventual commercialization.

   The application should clearly describe the approach, activities, and tools to be used to execute your project plan and, if needed, explain why these activities are better than those not chosen.

Please note: a project may only be submitted to ONE funding stream; applicants may not seek funding from both funding streams for the same project.

Proposal Review Process

All proposals will be reviewed by external peer reviewers, as well as a review committee consisting of subject matter experts from academia, government, and industry. Proposals will be reviewed against established criteria including:

- **Fit with priorities. Projects must demonstrate how the project addresses a specific research question;**
- **Strength of the project lead(s) and research team;**
- **Benefits to client groups and contribution to Ontario's agri-food sector and rural communities. End users should be engaged early on wherever possible;**
- **Quality and clarity of the experimental design;**
- **Deliverables that are clear, tangible, measurable and achievable;**
- **Strength of the Knowledge Translation and Transfer (KTT) plan;**
- **Value for money; and**
- **Evidence of involvement of relevant partners through leverage and partnerships.**

The scorecard used by the review committees is provided in the appendix to this program guide.

Review committees will make funding recommendations to the Ontario Agri-Food Innovation Alliance Research Program Management Committee. Final funding decisions are at the discretion of OMAFRA.

Equity, Diversity, and Inclusion

The University of Guelph is committed to the principles of equity, diversity and inclusion (EDI). All applicants to Alliance funding programs are encouraged to review the EDI Resource Document for Researchers developed by the U of G Office of Research Services.

A general question about EDI is included in the proposal.

HOW TO APPLY

Single Stage Call

The Ontario Agri-Food Innovation Alliance awards Gryphon's LAAIR funding via a competitive, single-stage application process.

Gryphon's LAAIR Market Validation and Gryphon's LAAIR Product Development project applications are different; lead applicants will be required to select the appropriate application in the RMS.

An expert panel of researchers, government analysts and industry partners reviews submitted project proposals based on project merit, quality, value for money, and contribution to Ontario's agri-food and/or rural sector. A single panel may review both Market Validation and Product Development applications, but each stream is evaluated using a distinct scorecard.

A KTT research expert will complete a technical review of KTT Research applications for consideration by the review panel in advance of scoring.

Online Application System - Research Management System (RMS)

All Alliance programming is administered in the RMS. Log in to the RMS through the OMAFRA RMS Login webpage. Please contact rescoord@uoguelph.ca if you experience any difficulties logging in. If you have not previously registered in the RMS select "Register" on the OMAFRA RMS Login webpage (new URL as of October 2019). If you have already registered in the new RMS (you have applied to a program in RMS since October 2019 or submitted a report in RMS since January 2020), simply log in using the OMAFRA RMS Login webpage. If you have previously applied to a program in the RMS but have not applied or completed any reporting since October 2019, you will need to create a new password. Faculty contact records were migrated from the previous RMS system, but for security reasons passwords were not. Please follow these steps:

1. **Select the "Forgot Password" option on the home screen of the RMS login page. Enter your uoguelph.ca email address when prompted.**

2. **You will receive an e-mail to your uoguelph.ca email address containing a link to reset your password. Enter a new password at the prompts. Note: Faculty existing within the previous RMS system must follow the "Forgot Password" option to be properly affiliated with their previous projects that have been migrated to the new RMS. It should not take longer than an hour to receive the e-mail for your password reset. Occasionally these e-mails can go to the spam folder.**

To open an application, select the applicable Gryphon's LAAIR Program and click on "Determine Eligibility'. Confirm your eligibility to apply for funding to access an application.

> ***For the best experience we suggest using the latest version of Chrome, Firefox, or Safari. Internet Explorer is not supported by the RMS platform provider.***

Lead Applicants and Co-Applicants

The Lead Applicant is the primary award holder and is accountable for project management and compliance with any reporting requirements, including management of project funding and financial reporting.

A Co-Applicant (optional) is a researcher that plays an important and ongoing role in the development and implementation of the project. Co-applicants are identified and invited from the Invitations tab in RMS. There can only be one Co-applicant. Co-Applicants have the same editing capabilities on applications and reports as the Lead Applicant.

University of Guelph faculty members (UGFA Unit 1 or 2) are eligible to be the Lead Applicant and/or a Co-applicant on any Ontario Agri-Food Innovation Alliance Research Program project. Retired faculty members holding Professor Emeritus status are eligible to be the Lead Applicant or a Co-Applicant, as long as they are eligible to hold research funding at the University of Guelph. Adjunct faculty members may also apply as a Lead Applicant or Co-Applicant if all of the following conditions are met:

- **They are eligible to hold research funding at the University of Guelph. This status is verified by the Chair/Director and Dean through the approval of the OR-5 form;**
- **They are not employed by or have a financial interest in any of the collaborating organizations or co-funders; and**
- **Their adjunct position permits them to engage in research-related activities that are not under the direction of another individual.**

Non-faculty team members are not eligible to be either a Lead or Co-applicant.

> ***Prior to a new proposal being reviewed in any Alliance Research Program, the Lead Applicant and the Co-Applicant must be in "good standing" for all existing projects***

> ***under the Alliance Research Programs, including being fully compliant with all reporting requirements.***

The Lead Applicant and the Co-Applicant will have 30 days from the submission deadline to complete any outstanding compliance requirements, including reporting. If the Lead Applicant or Co-Applicant remain non-compliant 30 days past the submission deadline, the submitted proposal will be withdrawn from the review process and declined. Likewise, prior to being awarded any new project(s) under the Alliance, Lead Applicants and Co-Applicants must be fully compliant with all reporting requirements for existing Alliance projects at the time of award.

GRYPHON'S LAAIR FULL PROPOSAL APPLICATION

Support for Applicants

The following supports are available to assist researchers in the application process:

- **This program guide**
- **Instructions and tool tips (denoted by) in the RMS application template**
- **If you have questions related to the funding program, please contact the GLAAIR Program Coordinator David Hobson at dhobson@uoguelph.ca**
- **If you experience technical difficulties or need support with the RMS application template, please contact our Research Program Coordinators at rescoord@uoguelph.ca**

Optional Compliance Check. Office of Research, Agri-Food Partnership staff are offering to complete a compliance check of proposals in advance of the submission deadline. The compliance check does not assess overall quality or scientific merit, but will review the proposal for issues that are not caught during the system validation checks in the RMS, including issues identified by reviewers (e.g. congruence between team/HQP tables and the budget, eligibility of budget items etc.). Please email rescoord@uoguelph.ca on or before November 17, 2021 if you want program staff to complete a compliance check of your proposal. The proposal should be at or near completion.

If you experience technical difficulties or need support with the RMS application template, please contact our Research Programs Coordinators at rescoord@uoguelph.ca.

Gryphon's LAAIR Application Template

The Gryphon's LAAIR application consists of several sections that are navigated via tabs across the top of the on-line application in the RMS. All tabs must be completed. A validation process will take place upon submission to ensure all mandatory fields are complete. The majority of the application instructions are provided in the RMS, but some additional guidance is provided below.

Research Priority Selection

Select the Research Priority and Research Focus Area that your project will address from the drop-down lists in the RMS. Researchers are also encouraged to describe how their project addresses one or more of the Ministry's three core business areas (Protection and Assurance, Stewardship, Economic Development).

Research Team and Invitation process

Team members and Highly Qualified Personnel are identified in their respective tables in the Team tab in the RMS. The research team member invitation process is described in the application template and in the tip sheets (accessible under the 'Help' icon on the RMS home page). Co-applicants, Delegates (described below), and all Collaborators should confirm their participation in the project and be registered in the RMS by the proposal submission date. Confirmed Collaborators will have read-only access to the proposal; Co-Applicants and Delegates (both optional) will have the ability to edit the proposal.

A Delegate (optional – limit of one) is an individual whose only role is to assist the Lead Applicant in the creation and editing of the application and progress reports (for awarded projects). A Delegate must be from U of G. A Delegate, while not formally a team member, is identified and invited from the team member tab in the RMS. Delegates that play an active role in the research project must also be identified and invited as a Collaborator or identified in the HQP table in the RMS (this is important for Alliance programs performance indicator reporting).

There is no limitation placed on the balance of the team composition, but all team members should play an active role as collaborators in the implementation of the project (advisory, researcher or knowledge broker). The team may include individuals from:

- **U of G (researchers and other support staff e.g. technicians);**
- **Other University or research institutions in Canada or globally;**
- **Private businesses;**
- **Industry / commodity organizations;**
- **Non-governmental organizations; and**
- **Provincial, federal, or municipal government departments (e.g., OMAFRA staff).**

Students and Post-Docs should not be included as members of the Research Team. Please see the Highly Qualified Personnel section below.

The project team composition should ensure that research expertise from all relevant disciplines and broad perspectives are brought to bear on the research objective(s) to be addressed. Where applicable, team members responsible for KTT should be identified in the team table.

A new Funding Source field captures the funding source for team members to help support the evaluation of the budget. This field applies primarily for team members working at the U of G who are funded as part of the project, other Alliance/OMAFRA funding, or from partner funds (e.g. Research Technicians, Research Associates, etc.). Select one of the following for each team member as appropriate:

- **This project (in whole/in part) – for team members who will be supported directly with project funds. At least a portion of their salaries need to be identified in the "Request From Program" table in the budget.**
- **Another OMAFRA program – for Research Technicians etc. who are supported through other funding from the Alliance (e.g. base funded Technician) or OMAFRA programs. This is not to be used for OMAFRA staff whose salaries should not appear in the budget, as they are paid regardless of project funding.**
- **Other funding source – for team members supported under this project through partner funds. These expenses, and the relevant co-funder(s), need to be identified in either the "Cash from Partners" (if funds are coming into the University) or "In-kind Support from Partners" tables in the budget.**
- **N/A - for all other team members (U of G faculty, OMAFRA staff, collaborating researchers etc.). Their salaries should not appear in the budget, as they are paid regardless of project funding.**

The FTE (full-time equivalent) you report in the team member table should reflect the total average annual time that each individual will contribute to the project. An FTE of 1.0 is a full-time commitment to the project (e.g. 35 hours per week) and an FTE of 0.1 is equivalent to 3.5 hours per week (for a 35-hour week). Documenting FTE contributions are important to support Alliance programs performance indicator reporting.

The involvement of all team members (including their estimated actual FTE contributions to the project) will be reported on in annual and final reports.

Highly Qualified Personnel (HQP)

> ***The training and development of Highly Qualified Personnel (HQP) is an important objective of the Alliance and an Agreement performance indicator. Effort should be made wherever possible to engage HQP in Alliance-funded research projects.***

HQP are students (typically either undergraduate, graduate, or diploma) or post-doctoral fellows receiving training through the proposed research, regardless of funding source. These HQP are captured separately from team members in the RMS. Please provide details on all HQP that will be

involved in the project, regardless of their stipend funding source. Highly Qualified Personnel do not need to be invited. Proposals can move forward without specific persons identified as HQP if the positions are not yet filled. If specific people are not identified, use "TBD" as a placeholder for the first and last name within the HQP table and complete all other fields except for e-mail address. Similarly to the Team Member table, identify the HQP Funding Source as either 'This project (in whole/in part)', 'HQP Scholarship Program', or 'Another funding source'.

> ***Ensure that all personnel that will be supported through the project, either through program or partner funds, are clearly identified in the budget.***

Supporting Documentation

Supporting documentation should be in PDF format in order to be appended to the proposal and may include:

- **Team Member Supporting Documentation**
  - **CV's of the Lead Applicant and Co-Applicant (mandatory)**
- **Proposal Details Supporting Documentation**
  - **References for your Literature Review (mandatory)**
  - **Relevant articles demonstrating industry needs**
  - **One-page diagram which illustrates the methods described in the proposal**
- **Other Supporting Documentation**
  - **Letters of support. Note: Letters of support from OMAFRA are not admissible**
  - **Confirmation of leveraged funding (if additional funding is listed as confirmed, a letter of confirmation is required before the project can be Awarded)**
  - **Award letters to be leveraged with this proposal**

Additional information, included in the supporting documentation fields, beyond what is listed here, will NOT be assessed as part of your proposal.

OR-5 Form

An OR-5 Form is no longer required to be uploaded to the application. OR-5 fields are completed on-line by the applicant on the OR-5 tab of the application within the RMS. Department and College approval will be obtained electronically following proposal submission. No further action, beyond completing the OR-5 fields, is required from the applicants.

Be sure to identify if there are external sources of cash funding, use of ARIO research centres, and declare any financial interest in any project partners on the OR-5 Form.

THE RMS BUDGET GUIDELINES

Budget Limits

There are two types of grant applications under the GLAAIR program; Market Validation and Product Development. A total of $325,000 will be allocated to successful proposals across the Market Validation and Product Development Grants.

Market Validation projects have a maximum of $20,000 and duration no more than 12 months, but projects may be extended with appropriate justification.

Product Development projects have a maximum of $100,000 and duration no more than three years, but projects may be extended with appropriate justification.

Granted funds must be utilized according to the projected budget and must be used for Ontario Agri-Food Innovation Alliance eligible and approved expenses.

Eligible and Ineligible Expenses

The following provides a guideline of direct project expenses that are eligible under the Alliance Funding Programs. It is not an exhaustive list. Please contact rescoord@uoguelph.ca with any questions regarding eligibility of budget items (either as direct project expenses or as matching contributions).

Eligible project expenses (can also be provided by funding partners):

- **Salaries of scientific or technical staff employed on a contract basis or hired specifically for the purposes of this project (including those at U of G if not funded by the Alliance). Value should be based on their FTE contribution to the project;**
- **Graduate student stipends;**
- **Goods and services necessary for the project (e.g. supplies, disposables, sampling, lab testing, etc.);**
- **Equipment purchases (generally not exceeding $10,000 per item). Alliance funding is limited and not intended for significant equipment purchases with a useful lifespan beyond the duration of the project. However, a larger equipment purchase (exceeding $10,000) that is fundamental to the research project may be eligible with a strong rationale. The review committees will consider these purchases on a case by case basis. Please contact rescoord@uoguelph.ca if you have any questions about equipment purchases.**
- **Equipment leases/rentals (should be identified as 'Operating – Other' in the budget);**
- **KTT and technology transfer related costs such as the organization of workshops (venue, meals etc.) and communication materials;**
- **Publication costs (e.g. page charges for academic journals);**

- **Travel necessary to carry out the project (e.g. to research stations and field plots); and**
- **Travel to conferences where project information is being presented.**

Ineligible project expenses:

- **The salary of the Lead Applicant or Co-Applicant;**
- **OMAFRA staff time or resources;**
- **Salaries of permanent staff whose compensation is not specifically dependent on on-going research project funding; and**
- **Support for meetings/events that would occur regardless of project funding.**

Ontario Agri-Food Research Centre Use and Access Fees

U of G faculty have access to a number of Ontario Agri-Food Research Centres at highly subsidized (92%) rates. If you intend to use a research centre(s), please ensure this is identified in the 'General' Tab and the 'OR-5' tab under the Resource Use section in the RMS. This will create a section on the Budget tab where you identify the specific research centre services you require. Full instructions are available in the RMS application.

Visit the Alliance Research Centre Fees webpage for a complete list of Research Centre and Research Centre Access Fees.

Third party (non-OMAFRA) funding is required to cover the non-subsidized portion (8%) of the fee.

Leverage / Partner Funding

Funding partners are individuals or organizations that contribute cash and/or in-kind support to the project. These partners are captured under the 'Other Sources of Project Funding' section within the RMS.

> ***All cash leverage from partners must come through the Office of Research Services and have a separate OR-5 associated with it.***

In-kind contributions are non-cash contributions providing a direct, tangible benefit to the project. The donated asset or contribution must be essential to the project's success and if not donated, would need to be purchased and paid for from approved project funds. In-kind contributions must be in lieu of eligible project expenses only.

All cash and in-kind contributions must be fully explained in the RMS budget Justification text boxes. The value of the in-kind assets or services donated must reflect fair market value for the time period it is donated. The eligibility and value of in-kind contributions will be assessed by the review committee.

The Alliance Gryphon's LAAIR grants do not have prescribed matching or partner funding requirements. This approach recognizes that this program funds a broad diversity of research that spans the continuum from discovery research through to applied and pre-commercialization research, as well as policy and 'public good' research that is less likely to attract third party investment.

Furthermore, there are significant differences in the ability of different end users to financially support research projects (e.g. smaller vs. larger industry groups).

OMAFRA wants to understand how their investment is used to leverage research capacity and other supports, as leverage is a key performance indicator for Alliance Programs. So, while Alliance projects do not *require* matching funding, funding partners show industry and end user pull/support for a project, which helps build a strong rationale for the research. Effort should be made to secure partner support wherever possible.

> ***When documenting your leveraged funding in the RMS, funding partners may have both an Organization and Funding Program (for example NSERC Discovery has the Organization 'NSERC' and Funding Program 'Discovery'). Please ensure you correctly identify these as independent entries (for example do not input the Organization as 'NSERC Discovery').***

Review committees will take into account the level and nature of partner support that could reasonably be expected for particular types of projects. All partner support, whether cash or in-kind, needs to be fully documented/justified and considered essential to directly carry out the work of the project.

Funding partners can include:

- **U of G (Lead Applicant organization) cash support only (e.g. scholarships, start-up funds etc.)**
- **Federal (including tri-council), provincial (including non-Alliance OMAFRA funding), or municipal governments;**
- **Other universities/ research Institutions;**
- **Business and Industry;**
- **Non-governmental organizations; and**
- **Individual donors, private foundations.**

Ineligible partner cash and in-kind:

- **In-kind support from OMAFRA (time, resources, supplies, materials, etc.);**
- **In-kind support from U of G including use or provision of existing supplies, materials, and equipment belonging to the Lead Applicant, Co-Applicant, or U of G collaborators;**
- **Salaries for individuals that are 'regular, base-funded' positions within the applying or donating organization (e.g. government scientists). These individuals, if involved in the project, should be identified on the 'Project Team Members' table and invited to participate in the project;**

- **Other Alliance funding, including graduate student stipends awarded under the HQP Scholarship Program (however these HQP must still be identified the HQP table); and**
- **Alliance-funded Technician time (however Alliance-funded Technicians must be identified on the team member table to support performance indicator reporting – and their funding source should be identified as "Another OMAFRA Program").**

> ***If your project is dependent on leveraged cash from external sources (any non-U of G, non-Alliance cash support), please ensure you select "Yes" on this field in the OR-5 tab in the RMS.***

Overhead/Indirect Costs

Request from Program: Indirect Costs for Alliance-funded research are integrated into the overall OMAFRA-U of G Agreement. No indirect costs are identified at the project level. The overhead percentage identified in the budget tab should remain at 0%.

Cash from Partners: Indirect costs must be included at the applicable rate on partner cash contributions from government and industry sponsors when those contributions leverage OMAFRA funding. Identify these costs in the 'Operating-Other' category in the 'Cash from Partners' expenditure table and describe them in the budget justification text box. More information is available through the Office of Research webpage about Indirect Costs of Research at the University of Guelph.

Indirect costs levied by a collaborating institution receiving transfers of Alliance project funds are eligible up to 25% and must be included in the budget under 'Operating-Other' in the 'Funds Requested from Program' expenditure table and described in the budget justification text box (see Collaborative Research Agreement section below).

Building a Project Budget

An Excel version of the budget template is available on the Gryphon's LAAIR program webpage as an OPTIONAL tool to draft and plan your budget. This is for planning purposes only. DO NOT upload this Excel budget to your application. You are required to complete and submit the budget outline provided in the application in the RMS.

1. **Amount Requested from the Program – identify the funding requested from the Alliance KTT Program for this proposal does not exceed the maximum amount available for the funding stream.**
2. **Other Sources of Project Funding – identifies the cash and in-kind support from partners. This table will appear after indicating 'Yes' for 'Are there any other sources of project funds?' Click**

'ADD Funding Source' and provide the details requested for each funding partner supporting the project.

3. **Expenditures of Project Funds - There are three tables to be completed in the Budget tab (will appear in a pop-up window):**
   - **Request from Program;**
   - **Cash from Partners (appears if you have indicated there are other sources of funding for the project); and**
   - **In-kind Support from Partners (appears if you have indicated there are other sources of funding for the project).**

The use of research stations requires cash support from partners to cover the portion of station access fees that is not subsidized by OMAFRA.

Use of program and partner funds should be allocated across budget categories and fiscal years. Each row in the budget corresponds to a U of G fiscal year (May 1 – April 30) that the project will take place. E.g., A 3-year project beginning October 1st would require 4 budget periods (fiscal years) – the first and last periods covering 6 months only.

> ***Use of project funds must be fully explained/justified in the text boxes provided. Your justifications are critical for reviewers to determine whether your expenses are eligible, commensurate with the nature of your proposed research, and are valued appropriately. Insufficient justification can create uncertainty in the likelihood of project success during panel review; as such, researchers are highly encouraged to fully explain proposed expenditures.***

Budget for Collaborating Researchers

Sub-Awards (for U of G Collaborating Researchers)
If required for the project, a sub-award, with a separate FRS account number, can be set up upon request to allow for a collaborating U of G faculty member to manage a distinct portion of the project budget. Otherwise, U of G Researchers are expected to manage their project spending collaboratively within a single FRS account.

- **A separate budget worksheet which provides the details of the sub-award must be uploaded with the proposal. The budget worksheet is available on the Gryphon's LAAIR program webpage.**
- **In addition, a *Letter of Agreement for Internal Transfer of Funds* will be required at the time of award.**

- **It is the Lead Applicant's responsibility to report on all project activities, including the work of collaborating team members, regardless of the presence of a sub-award or a Collaborating Research Agreement.**

Collaborative Research Agreements (for non-U of G Collaborating Researchers)
Alliance project funding awarded for an approved project can be transferred to another organization for use by a team member via a Collaborative Research Agreement (CRA). Typically, CRAs are greater than $10,000 per year and require the completion of a legal agreement between the University of Guelph and the collaborating institution. It is expected that CRAs will not encompass more than 50% of the Amount Requested from the Program. Although CRAs are created post-award, they must be identified at the proposal stage with the following budgetary information:

- **If a CRA is required, a separate budget worksheet which provides the details of the budget for the CRA must be uploaded with the proposal. The budget worksheet is available on the Gryphon's LAAIR program webpage.**
- **Any overhead/indirect costs levied by the receiving institution on such fund transfers of OMAFRA-U of G project support must be included in the amount identified and budgeted for transfer, as there is no other mechanism by which such indirect expenses can be paid. The maximum overhead rate allowed will be 25%.**

> ***It is the Lead Applicant's responsibility to report on all project activities, including the work of collaborating team members.***

Intellectual Property (IP) and Non-Disclosure Agreements (NDA)

Under the Intellectual Property tab identify if any background (pre-existing) IP will be used in the project, particularly if it requires a confidentiality or material transfer agreement. Also indicate whether any foreground (new/arising) IP is expected or anticipated to be developed from the project and identify how it will be managed. Please reach out to the Research Innovation Office if you have any questions about IP ownership or management for Alliance funded projects.

If there is any data or other information that is coming into the project or will be generated during the project that will or may be confidential and require an NDA please clearly describe it, including implications for data sharing and dissemination of results (see below).

Access by the Ministry to Records, Data and Third-Party Agreements

Please be aware that OMAFRA may require access to records, data, or agreements that the University has entered into with third parties which relate to your project. If you have any concerns

about sharing data, records or the third-party information related to this project, please contact a Research Program Coordinator by e-mail at rescoord@uoguelph.ca.

APPLICATION CHECKLIST AND POST AWARD PROCESSES

Full Proposal Checklist

- ☐ Read the current OMAFRA Research Priorities document. Please be sure to read the entire Appendix as some topic areas are not intuitively located within the document.
- ☐ Attend the Gryphon's LAAIR Program Virtual Town Hall (October 18, 2021 from 2:00 pm to 3:00 pm. You can join the meeting using this MS Teams link).
- ☐ Develop project concept.
- ☐ Assemble project team that includes your research capacity, advisors, stakeholders (including OMAFRA staff if applicable), and technicians. Team members must be confirmed through an invitation process. HQP are identified in a separate table.
- ☐ Connect with the GLAAIR Program Coordinator, College Research Manager, Alliance Research Program Coordinators and Alliance Knowledge Mobilization staff (kttadmin@uoguelph.ca) for support in preparing a strong proposal.
    - The GLAAIR Program Coordinator for the Alliance is: David Hobson (dhobson@uoguelph.ca).
- ☐ Develop the proposal by completing all tabs in the RMS. Ensure the proposal is complete, well-written and clearly demonstrates how it addresses a specific research question in the priority document.
- ☐ Append all required documents (e.g., Lead Applicant and Co-Applicant CVs, Value Assessment Plan if applicable) and other supporting documentation as described above.
- ☐ You can access a PDF version of your proposal any time using the View Application button within the project record. Note, if your proposal is under review, the project record is not editable, but the View Application button is present on the dashboard under the Current Applications>Under Review table.
- ☐ Submit your Full Proposal in the RMS by the submission deadline (November 30 at 1:00 PM).

Full Proposal Decision Notification and Award Phase

- Researchers will be notified of the outcome of the review and approval process via the RMS.
- If applications are "Conditionally Approved", applicants must address any conditions in the offer described in the notification email through the RMS. All leveraged funding must be confirmed with a letter of support prior to final approval.
- A Data Management Plan will be a condition of funding for all approved projects (see below).
- Award Agreements are issued for projects once the response to conditions of funding have been addressed and approved by reviewers. Execution of Award Agreements will occur by an

online 'DocuSign' process. The Lead Applicant and the Department Chair will receive notification via email that there is an Agreement to sign.

- FRS account numbers are accessible on the Award Agreement and on the General tab in the RMS.

Data Management Plans

The Ontario Agri-Food Innovation Alliance is committed to fostering sound data management practices to facilitate new agri-food and rural research. As of 2020, researchers awarded funding through the Alliance research program must complete a U of G library-endorsed Data Management Plan (DMP) as a condition of award for their approved project(s). A DMP summarizes how data generated over the course of a research project will be stored, shared and maintained. It can help improve the effectiveness and efficiency of a research project as well as help prepare data for preservation and sharing. Visit the Data Management Plans webpage for more details on how to complete a DMP.

> *Data Management Plans will be a condition of funding for projects funded in 2021. All DMPs must be reviewed by the U of G Library (lib.research@uoguelph.ca) prior to submission to the Alliance.*

Post-Award Reporting

- Annual Progress reports are due 30 days after the anniversary of the project start date (with budget reporting for each fiscal period) and must include reporting on all KTT activities related to the project and a financial update on any sub-award and/or CRA agreements.
- Annual reports will be reviewed and approved if acceptable or revisions may be requested. Funding for the following year of the project will only be released once the report has been approved.
- Final reports are due 60 days following the conclusion of the project. They are critical to the success of the Alliance. Some of the summary fields will be published publicly.
- Reports are reviewed and approved on completeness and merit by Alliance staff and OMAFRA Research Analysts.
- Any changes to the start and end dates, objectives, deliverables or budget in an awarded project, must be requested and approved by OMAFRA through the amendment request process.
- If you have questions about the amendment or reporting process, please contact rescoord@uoguelph.ca

> ***Alliance program staff should be notified of any issues affecting project progress as soon as they are identified. Project extensions should be requested at least three months prior to the project end date.***

Non-Compliance with the Terms of the Award Agreement

If there is a failure to comply with the terms of the Award Agreement, including reporting requirements, or if there are substantial unresolved issues related to project progress, the Alliance has the right to withhold funds and/or the right to terminate the project.

ACKNOWLEDGING ALLIANCE RESEARCH FUNDING

Recipients of funding must acknowledge Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) support in all public communications products, including news releases, web copy, magazine stories, public-facing reports, interviews, journal articles, conference posters and oral presentations. Visit the Alliance website for more details on acknowledging OMAFRA Funding.

APPEAL PROCESS

To ensure the transparency and rigour of the processes involved in the review and selection of Full Proposals, the Ontario Agri-Food Innovation Alliance Research Program has established a policy to guide the appeals process.

The primary purpose of the appeal is to correct errors, omissions or mistakes made by the review committees during the review of the Full Proposal. These errors are rare, however, in order to maintain fairness and equity to all applicants, the Program does permit appeals under the specific circumstances outlined below.

Appeals are heard only where the researcher demonstrates that an error of fact or process, or inadvertent omission of information has been made by the review committees. A researcher who has had a Full Proposal rejected, or an active project terminated prior to its normal end date, may request a review or appeal of the specific process used in the evaluation or assessment of the proposal or project. All researchers are entitled to receive a written communication indicating the decision regarding the approval or decline of the funding for their Full Proposal or active project, which will include the rationale behind that decision.

A written request for a review/appeal must be submitted within 30 calendar days from the date of the documented notification of decision and must include written evidence of error in the evaluation or assessment process. The request for appeal should be addressed to the Associate Vice-President, Research (Agri-Food Partnership) (AVPR).

The AVPR will determine if sufficient evidence exists for a formal appeal. Once a determination has been made to proceed with an appeal hearing, the AVPR will, in collaboration with the other co-chair of the Research Program Management Committee, convene a meeting of an appropriate Appeal Committee as per the following:

1. **The AVPR will Chair the Appeal Committee.**
2. **The Appeal Committee may consist of one or more of the Research Program Directors (RPDs) and up to two (2) OMAFRA representatives as appropriate. This committee will not include the Research Program Director(s) of the priority area(s) where the project fits.**
3. **All relevant written materials generated concerning the project in question, prior to the date of the request for review, will be supplied to the Appeal Committee at least five (5) business days in advance of the meeting.**
4. **The RPD of the relevant priority area will present an oral report to the Appeal Committee summarizing the process followed and actions taken pertaining to the decision in question. The RPD will then be excused from the balance of the appeal proceedings.**
5. **The Appeal Committee will then receive evidence from the researcher concerning the project in question, specifically addressing the errors or omissions which have been alleged to have occurred.**

The Appeal Committee will then determine, by consensus, a recommendation on the Appeal which will be presented to the Executive Committee for a final, binding decision on the matter. A written decision communicating the Executive Committee's decision will be presented to both the researcher and the Research Program Director. No further appeals will be permitted within either the University or OMAFRA systems.

APPENDIX 1: ADDITIONAL MARKET VALIDATION PROGRAM INFORMATION

A. Tips for Creating a Winning Market Validation Proposal

The following questions are the most common knowledge gaps experienced by academics and other entrepreneurs wanting to develop technologies into commercial products. Your work plan should clearly indicate how you plan to obtain objective, relevant, and customer-validated data to answer the following key questions:

- **What problem(s) does the customer want/need to solve?**
- **How big is the problem; where does it occur; and how often?**
- **Who is currently looking for a solution to the problem and what are they willing to pay to solve it?**
- **How does your technology (i.e., solution) address the customer-identified problems and who will pay for the solution? Likewise, where does your technology fall short of satisfying customer needs?**
- **Why hasn't this problem been solved already?**
- **What barriers exist now (or in the foreseeable future) that obstruct the use or implementation of your technology to solve the problem? How can you overcome the barriers?**
- **How is your technology (i.e., solution) different than existing solutions and why will someone choose your solution over another?**

B. Helpful Hints

- **To help clarify and communicate the expected benefits delivered by your technology, it is highly recommended that you review the YouTube video on the Value Proposition Canvas. This video may help you create a well-articulated explanation of how the fully commercialized technology will eventually help industry and/or end-users.**
- **Researchers who need advice on what tools and resources exist to help them gather customer and consumer insight are encouraged to contact the Research Innovation Office for direction.**
- **A portion (20%, or up to $5K) of the funds may be used to hire professional services or be used as leverage for additional grants (such as I2I) related to market validation or commercialization of early-stage technologies.**

C. Examples of Potential Projects

- **Focus groups with customers and suppliers**
- **Demonstration trials to obtain customer feedback**

- **Trade show attendance and networking among end users to build relationships and identify new customers or market segments**
- **Product development surveys**
- **Interviews with customers and suppliers**
- **Producing materials and information necessary to conduct concept testing with customers**

D. Market Validation Grant Evaluation Criteria

Project proposals will be scored on the merit of supporting the following factors using a five-point scale: Poor or absent (1); Below Average (2); Average (3); Above Average (4); Excellent (5)

Criteria	Weight %
Market Problem Solved by the MVP **How well do the researchers understand the industry or consumer problem that needs to be solved?**	**10**
Industry's role in the project **What is the degree of involvement of industry partners, stakeholders, and end-users in the execution of this market research project?**	**15**
Benefits to Ontario **What is the potential impact and benefit of the MVP to the Ontario Agri-food industry, ecosystem, and consumers?**	**10**
Research Team **How relevant is the experience and capability of the project team, collaborators, and service providers?**	**5**
Work Plan **What is the quality, clarity, feasibility, and appropriateness of the work plan?**	**15**
Cost Effectiveness **How valuable are the benefits (expected deliverables) relative to the cost?**	**5**
Technology Readiness Level **What is the suitability of the project considering the current TRL of the MVP?**	**5**
Competitive Advantage **What is the probability of creating a sustainable competitive advantage?**	**5**
Future Development and Adoption **What is the probability that industry will support (invest, adopt, or participate in) future product development upon completion of this market research project?**	**20**
Communication **What is the overall quality, clarity, and professionalism of the written proposal and especially the Executive Summary?**	**10**

Criteria	Weight %
Total	100

APPENDIX 2: ADDITIONAL PRODUCT DEVELOPMENT PROGRAM INFORMATION

A. Tips for Creating a Winning Product Development Proposal

- **Proposals must identify and quantify a clear commercial need for the MVP or technology. If the need is not well supported, then you are not ready to apply for a Product Development Grant.**
- **It is very important that you thoroughly understand the Value Proposition of your MVP. To help you clarify and communicate these benefits we recommend you review the YouTube video on the Value Proposition Canvas. This video may help you create a well-articulated explanation of how the fully commercialized technology will eventually help industry and/or end-users.**
- **Proposals to develop early-stage technologies (TLR 2-4) should focus on building a first prototype, testing it under field conditions (proof of relevancy) or completing pilot studies with the prototype to determine the product market fit of your first MVP.**
- **Proposals to develop later-stage technologies (TLR 4-6) should be focusing on interacting heavily with industry partners and end-users to improve your MVP to a level that is commercially desired and can be evaluated in the field. Later-stage MVPs should have a higher probability of getting to market due to the previous completed research to de-risk the MVP or technology.**
- **Project efforts must focus on reducing barriers or filling knowledge gaps that are impeding the adoption of the MVP by industry; If customers strongly desire your MVP, then why are they not buying or using it? Find and eliminate those barriers.**
- **Proposals should clearly define the specific barriers you plan to remove, and which barriers are the most important roadblocks that need to be removed at this time in the maturity of your MVP. The most obstructive barriers should be removed first. For example, there may be several less important barriers that can be easily removed in the future but unless a major barrier is removed (such efficacy level, risk vs reward ratio, return on investment, cost of implementation, regulatory approval etc.), customers will not even consider trying or adopting the MVP.**
- **Proposals must build on an existing research project, past research or a recently developed technology that has significant potential to become a commercial product. You should be able to demonstrate your past experience and expertise in the research field specific to your proposal.**
- **The MVP can be a process, product, platform technology, service, or management practice (method) that has the potential to significantly improve the competitiveness of the Ontario agri-food sector.**

- **Budget requirements should match the intended deliverables for the project. Requesting more funds dictates the delivery of greater value of the outputs, therefore many proposals may require less than the maximum allowable $100K. Budget according to your current need. In all cases, the project outputs must be justified and commensurate with the level of funding requested and have clearly stated deliverables and follow a set of date specific milestones events. Funding for larger proposals (over $35K) will be delivered in tranches linked to the achievement of your milestones.**

B. Examples of Potential Projects

The following are a few examples of eligible Product Development projects, but many more exist:

- **Beta-testing an early-stage technology before transferring it to industry;**
- **Preliminary or full clinical trials of new drugs or vaccines;**
- **Field testing prototypes/devices that have never been used outside the lab;**
- **Evaluating a significant advancement to an existing product, process or service;**
- **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;**
- **Develop a new product for animals or agriculture based on technology for humans or non-agricultural purposes;**
- **Generate more data (proof of concept) from a novel technology to support filling a stronger patent application;**
- **Conduct customer discovery with a prototype to increase industry's awareness of the technical merit and value proposition of a new technology;**
- **Create an academic-industry research centre at an industry partner's site to co-develop and implement process improvements directly applicable to industry; and**
- **Determine the technical merit, feasibility, and commercial potential of a technology by conducting public demonstrations (field trials) for key stakeholders.**

C. Product Development Grant Evaluation Criteria

Project proposals will be scored on the merit of supporting the following factors using a five-point scale: Poor or absent (1); Below Average (2); Average (3); Above Average (4); Excellent (5)

Criteria	Weight %
Market Problem Solved by the MVP How well do the researchers understand the industry or consumer problem that needs to be solved?	10
Validated market demand What is the quality of the data used to demonstrate a clear market demand for the MVP and the probability that a market opportunity exists for the MVP? And what is the degree of industry involvement in the project?	15
Benefits to Ontario What is the potential impact and benefit of the MVP to the Ontario Agri-food industry, ecosystem, and consumers? How well will the MVP make the Ontario Agri-food industry more competitive and resilient?	10
Research Team How relevant is the experience and capability of the project team, collaborators, and service providers? What is the quality of the training experience provided to the HQP on the team?	5
Work Plan What is the quality, clarity, feasibility, and appropriateness of the work plan? What is the probability the work plan will be executed on time and budget and advance commercialization?	15
Cost Effectiveness How valuable are the benefits (expected deliverables) relative to the cost? What level of support has been secured from an industry partner?	10
Technology Readiness Level What is the suitability of the project considering the current TRL of the MVP? How likely is the project to significantly advance the TRL?	5
Competitive Intellectual Property What is the probability of creating a sustainable competitive advantage?	5
Future Development and Adoption What is the probability that industry will support (invest, adopt, or participate in) future product development upon completion of this project?	20

Criteria	Weight %
Communication What is the overall quality, clarity, and professionalism of the written proposal and especially the Executive Summary?	5
Total	100