EGG FARMERS OF CANADA

LES PRODUCTEURS D'ŒUFS DU CANADA

Research Grant Program

Applicant Information Package

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1. EFC's Call for Letters of Intent process

Researchers are invited to complete and submit an online research application during Egg Farmers of Canada's (EFC) call for Letters of Intent (LOI). Following each call, submissions are evaluated by the Research Committee of EFC's Board of Directors. In early April, selected projects will be invited to submit a full proposal, to be completed within approximately three weeks. All applicants will be notified of the Committee's decision regarding their proposal.

2. How to apply for research funding

Researchers are invited to complete and submit a LOI through EFC's website (https://www.eggfarmers.ca/research/) during the call for LOIs. The online LOI form will only be accessible during EFC's call for LOIs. To be considered for funding, research projects must align with EFC's research priorities and have a practical application within the industry. Please note that the LOI application in progress can not be saved. A template is provided below for you to prepare your application.

3. Applicant eligibility

To be considered for funding, the principal investigator (PI) must work full-time at a Canadian institution or organization. There are no specifications or requirements regarding the faculty or academic status of the PI. The PI, co-investigators and/or collaborators for each research project will be evaluated holistically to assess the strength of the research team and the expertise each member brings to the project.

4. What type of research does EFC fund?

EFC funds research at universities across the country to address the issues and opportunities that matter to the egg industry (learn more in EFC's Research Grant Program fact sheet). EFC's current research priorities can be found here.

5. Funding requirements: minimum and maximum limits

Currently, there is no minimum or maximum limit to the amount of funds a PI can request for a research project. Total amount of funds requested is taken into consideration along with other important criteria, including alignment of the project with EFC's research priorities and their practical application to the industry and consumers. EFC reserves the right to fund all projects in part. Project proposals with other funding sources will be given priority consideration.

6. Submitting more than one project

There is no limitation to the number of LOIs a researcher can submit. Researchers are welcome to submit applications for multiple projects that align with EFC's research priorities at the same time and for projects that overlap with an existing project. When overlapping with previous funded projects exists, researchers must explain how is the new proposal different and unique.

7. Duration of project

EFC understands that sound research takes time. There is no limitation to the length or duration of a project funded through EFC's research program. Past projects have ranged from one to as many as four years. Regardless of length, timeliness is considered at the evaluation phase, and clear milestones and deadlines must be outlined for each project.

8. Overhead costs

EFC funds research with the intention that industry funds be placed for the maximum effect to the research project. As such, EFC aims to fund research with zero EFC funding dollars being used to cover overhead costs.

Overhead requests will be considered on a case-by-case basis. Applicants are encouraged to leverage funding from other sources to cover overhead costs. Efforts to secure overhead coverage from other funding sources must be clearly demonstrated.

Egg Farmers of Canada Research Priorities

Egg Farmers of Canada (EFC) is dedicated to supporting researchers and industry experts who conduct proactive research across a range of priorities. EFC's 2026 Research Priorities include:

1. Environment and Sustainability

Environment and sustainability research aims to ensure the long-term viability of egg farm operations in Canada. Example research areas include genetics, reducing the carbon footprint of egg farms, green technologies, precision agriculture, circular economy, efficiencies in egg production and alternative uses for manure and other waste streams. Some specific questions to consider under this research priority area are:

- What are the key areas where egg farming can gain environmental efficiencies and improvements while still ensuring eggs remain affordable for Canadians?
- What opportunities are there for circular economy and what could increase the number of these opportunities? (e.g. waste valorization and economic analyses, such as economic analysis of the process and use of laying hen manure as fertilizer pellets)
- Solar panels are one example of a green technology that could be adopted on Canadian egg farms. What other green energy sources/green technologies could be utilized on egg farms?
- What are viable waste streams from human food production that could be included in laying hen rations, and how could hen rations be optimized?
- What opportunities are there in Canada for sustainable production and/or processing of alternative feedstuffs and ingredients (e.g. waste streams from other food industries)?
- What practices or processes might support EFC's goal of working towards net-zero greenhouse gas emissions by 2050?

2. End of flock management

End of flock management research aims to improve the care of animals at the end of their production cycle. Example research areas include handling, catching and loading of pullets and end-of-lay hens, improving the removal of end-of-lay hens from alternative housing systems, uses for end-of-lay hens, transportation, composting, disposal and depopulation methods (emergency and planned).

3. Innovative uses of eggs

Innovative uses of eggs research aims to find alternative uses of eggs outside of the table and processing markets. Example research areas include using eggs and/or egg components for the biomedical, functional food, nutraceutical, health, cosmetic and pharmaceutical industries, among others.

4. Animal care science

Animal care science research aims to improve on-farm practices to better animal welfare. Example research areas include feather pecking, air quality, euthanasia and other production management practices that relate to hen care and welfare. Other example areas can be found under research priority “Research gaps identified by the Code of Practice for the Care and Handling of Pullets and Laying Hens”.

5. Food safety

Food safety research aims to ensure that eggs continue to be safe and produced according to the highest possible standards. Example research areas include development of vaccinations, biosecurity practices and pest control.

6. Human nutrition and health

Human nutrition and health research aims to explore the health benefits of egg consumption. Example research areas include adding health-promoting nutrients to eggs to improve human health (e.g. omega 3 fatty acids), and the role of eggs in preventing or reducing the risk of diseases.

7. Bird nutrition and health

Bird nutrition research aims to understand the nutritional needs of laying hens, while bird health research aims to understand, prevent and treat illnesses (e.g. *Escherichia coli* infections, infectious bronchitis virus, focal duodenal necrosis, avian influenza, etc.) and injuries in laying hens. Example research areas include exploring the impact of new diets, ingredients, supplements and different feeding methods on hen health, sustainable feed, alternatives to antimicrobials, vaccinations, health treatment options, biosecurity practices, gut health and bone health.

8. Public policy and economics

Public policy and economics research aims to better understand agricultural policies such as supply management, and explores the economic impact of supply management and sustainable egg farming. Example research areas include current opportunities and challenges for the Canadian egg industry, the effect of agricultural policies on rural communities and/or Canada’s food systems, the effects of supply management on the adoption of sustainable farming practices, and how the adoption of sustainable practices can have a positive impact on farm operating costs.

9. Research gaps identified by the Code of Practice for the Care and Handling of Pullets and Laying Hens

Research gaps have been identified for laying hens and pullets during the development of the 2017 *Code of Practice for the Care and Handling of Pullets and Laying Hens.* A list of these gaps can be found here.

Furthermore, during the Five Year Code review in 2022, more areas of welfare research were identified. These areas include:

- Perching - what constitutes an acceptable perch? Perch requirements for pullets
- Maximum number of tiers / levels in an aviary and distance to litter
- Nesting - enclosure to provide privacy and shading, and nest curtain length

Egg Farmers of Canada Letters of Intent questions

To prepare principal investigators applying to EFC's call for LOI, the questions included in the form can be found below. EFC will only accept LOI's submitted through the online template, which can be found **here.** Please be aware the online application cannot be saved while working on it.

1. Project title
2. Please identify which EFC research priority this project aligns with
    - Environment and sustainability
    - End of flock management
    - Innovative uses of eggs
    - Animal care science
    - Food safety
    - Human nutrition and health
    - Bird nutrition and health
    - Public policy and economics
    - Research gaps identified by the Code of Practice
3. Name
4. Salutation
5. Position
6. Institution or organization
7. Mailing address
8. Telephone
9. Email
10. List principal investigator's relevant experience as it relates to this study (*1,500 characters includes spaces)*
11. Are there other collaborator(s)?
12. Please list all names, titles, organization or university and role of collaborator(s)
13. List collaborator's expertise as it relates to this research area (*1,500 characters)*
14. Start date *All applicants are notified of EFC's funding decision in August of each year. Please consider other funding application timelines (e.g. NSERC) when determining project start date. ** Please be as accurate as possible. The start date of the project is considered when making the funding decision
15. End date
16. Project summary (*2,000 characters)*
17. List of keywords *(Maximum of five)*
18. Project's main and specific objective(s) (*1,500 characters, please use point form)*
19. Hypotheses (*1,500 characters*)
20. Methodology (*2,500 characters)*
21. Significance of this project to your organization (*1,500 characters)*
22. Significance of this project to the egg industry (*1,500 characters)*
23. Plans for knowledge and technology transfer (*1,500 characters)*
24. Is this project a continuation of previously-funded EFC research? If yes, please indicate which project.
25. Was the follow-up study a request by the EFC Research Committee? If yes, explain how this study meets the Committee's request.

26. Are you aware of any overlap with EFC previously funded research? If yes, please explain how your proposal is novel and unique (Please review EFC Research Summary issues available here.)
27. Total funding request from EFC
28. Does your funding request include overhead? (Please see applicant information package for information on EFC Overhead Policy)
29. Do you have other sources of funding?
30. If yes, please list other sources of funding, indicate if the funding is being provided in cash or in kind, and if the funding has been confirmed or is pending. *Other sources of funding are considered an asset.*
31. Describe any product that might result from this project (if applicable).
32. Who is expected to have ownership of the intellectual property rights in the research created as part of the project?
33. Have any rights of first refusal relating to the output of the research, including the potential commercialization of such research or the ability to register intellectual property rights (such as patents), been granted or are intended to be granted to third parties? If so, over what part of the project?
34. If funded, all researchers and institutions are expected to negotiate with EFC the right of first refusal with respect to the intellectual property arising from the project, in priority to other parties, including the right to commercialize the research and/or obtain the ability to register intellectual property rights (such as patents) or obtain a licence with respect to such intellectual property rights, on the terms set out in Appendix A. Please indicate if the researcher or institution foresees any obstacles agreeing to Appendix A.

Appendix A – Intellectual Property Ownership and Right of First Refusal

1. Ownership of Intellectual Property Rights; Representations and Grant of License

a. Any Background Intellectual Property owned by EFC, Research Institution or Researcher remains the exclusive property of such Party.

b. Research Institution covenants, represents and warrants that: (i) Research Institution has secured or will secure the rights, or has the right to use, all of the Background Intellectual Property required to carry out the Project and grant the rights set out in this Agreement; (ii) any Foreground Intellectual Property resulting from the Project will be owned by Research Institution, except as otherwise disclosed to EFC prior to the Effective Date; and (iii) Research Institution has or will secure all consents and waivers of moral rights from third parties, including the Researcher, to grant the licenses and rights set out in this Agreement;

c. Research Institution covenants, represents and warrants that: (i) the objectives of the Project and the Project will not be materially modified without the approval of EFC; and (ii) the EFC funding will only be used for the purposes of the Project.

d. Research Institution hereby grants EFC a perpetual, non-exclusive, world-wide, royalty-free license to translate, reproduce or publish, but not to modify, the whole or part of any report or other documents submitted by Research Institution or the Researcher under this Agreement, and to include such material in any report or other document relating to the Project that may be prepared, reproduced or published by or for EFC, but may not charge any fees in connection with any such translation, reproduction or publication.

2. Commercialization of Foreground Intellectual Property and Right of First Refusal

a. Before any licensing or other form of commercial exploitation of the Foreground Intellectual Property is made by Research Institution or Researcher, Research Institution must provide EFC, in writing, on an ongoing basis during the course of the Project and upon completion of the Project, information as to the scope of the Foreground Intellectual Property.

b. Research Institution will provide EFC written notice of any application of Foreground Intellectual Property that, in Research Institution's reasonable opinion, is commercially viable (each, a "**Notice of Application**") during the Term and continuing after the termination or expiry of the Agreement (the "**ROFR Period**").

c. Research Institution hereby grants to EFC or, if designated as the negotiating entity by EFC, ALT, a right of first refusal in the Foreground-Intellectual Property during the ROFR Period as follows:

(i) EFC or ALT will have a first right to negotiate with Research Institution and the Researcher, for a period of 120 days (or such other period agreed upon by the Parties) after the date that EFC receives a Notice of Application (the "**Negotiation Period**"), for an exclusive or non-exclusive license to enable EFC or ALT to commercially exploit the Project Intellectual Property and, if applicable, grant a sub-licence to an EFC or ALT sub-licensee;

(ii) EFC or ALT and Research Institution will negotiate in good faith the provisions of such license agreement or an IP transfer agreement during the Negotiation Period; and

(iii) if EFC or ALT and Research Institution fail to agree on the terms of a license agreement or IP transfer agreement, Research Institution may commercialize the Foreground

Intellectual Property itself or grant a license of or transfer the Foreground Intellectual Property to a third party to commercialize the Foreground Intellectual Property, without having to account further to EFC or ALT, as applicable, but only if, where the Foreground Intellectual Property is licensed or assigned to a third party, the terms offered to the third party when considered as a whole in the circumstances of the offer, are not materially more advantageous to the third party than the terms offered to EFC or ALT, as applicable.

d. EFC may, with the consent of Research Institution (not to be unreasonably withheld, conditioned or delayed), assign the rights in this Section, including the right of first refusal, to one or more of EFC's members or partners or any other third parties for purposes of the commercial exploitation of the Foreground Intellectual Property.

e. EFC acknowledges that Research Institution may have a mandate to disseminate knowledge and make new knowledge available for research and teaching purposes. On the other hand, EFC has a legitimate interest in publications funded by it in whole or in part.

f. Research Institution will provide EFC notice of any proposed publication related to the Project at least 30 days before submission to publication or disclosure. EFC may object to the publication (such as on the grounds that the publication must be amended to delete Confidential Information of EFC). EFC may also require Research Institution to delay publication or disclosure in order to ensure that any patent or other IP application for the applicable Foreground Intellectual Property in which EFC or ALT has an interest is not prejudiced. Research Institution will, in any event, retain the right to have academic theses and other academic material reviewed and defended in accordance with its stablished procedures.