



DAIRY PRODUCTION RESEARCH FUNDING PROGRAM GUIDELINES

November 2022

I. INTRODUCTION

Dairy Farmers of Canada (DFC) is a non-profit organization, funded by dairy farmers across Canada and representing Canada's 10,000 dairy farms. Our organization plays a leadership role on behalf of the industry in several important areas, including funding and support of research in dairy production and in human nutrition and health. DFC has a long-standing commitment (over 30 years) of investing in dairy research to drive innovation and ensure a sustainable future for the sector. The Dairy Production Research Funding Program (the "**Program**") advances knowledge in many fields and increases Canada's overall competitiveness.

DFC has adopted a peer-review system and a funding application process similar to those of major granting agencies (e.g., NSERC).

II. RESEARCH PRIORITIES

The objective of the Program is to foster innovation, increase farm efficiency and sustainability, and enhance animal health, care and welfare practices. Research projects submitted under the Program should aim to solve problems/issues that have a national perspective.

Please refer to the Appendix to view the research priorities targeted in the 2022 Call for Proposals.

III. ELIGIBILITY

Researchers from Canadian universities and from Agriculture and Agri-Food Canada research and development centres are eligible to apply to the Program. Non-Canadian researchers could be considered as co-investigators or collaborators.

The Principal Investigator (the "**Principal Investigator**") is responsible for the complete direction of the approved Project (the "**Project**") and other activities associated with its efficient execution. The role of the co-investigator(s) in the Project must be clearly defined. Students and trainees are normally not eligible to act as co-investigators. Postdoctoral fellows may act as co-investigators, but the payment of their salary will not be eligible under the Program in such a case.

A researcher cannot simultaneously have two projects under this Program for which he/she is the Principal Investigator. However, a Principal Investigator can be a co-investigator for no more than one additional project.

DFC encourages networking. Projects should, when possible, involve complementary teams of researchers from across Canada.

Commercial product research and development is not eligible.

IV. FUNDING PROGRAM ADMINISTRATION

For new proposals, the submission of a Letter of Intent (the "**Letter of Intent**") is the first step in the funding application process.

The Letter of Intent will first be reviewed by the Production Expert Scientific Advisory Committee, composed of researchers, technical experts and dairy farmers. DFC's [Canadian Dairy Research Council](#) will make the final decisions regarding the selection of Letters of Intent. Principal

Investigators whose Letters of Intent are considered to have scientific merit and significance for the dairy sector and correspond to the research priorities targeted in this Call for Proposals will be invited to submit a Funding Proposal (the “**Funding Proposal**”).

The Funding Proposals will be evaluated based on their scientific merit and feasibility, team expertise, training opportunities, knowledge translation and transfer, and realistic budget. The Funding Proposals will first be subjected to an independent external peer review process. Based on the external peer reviews, the Production Expert Scientific Advisory Committee will evaluate the Funding Proposals and make recommendations. DFC’s Canadian Dairy Research Council will make the final decisions regarding the Funding Proposals. Decisions will be communicated to the Principal Investigators at the end of June.

Approval of the Letter of Intent and/or the Funding Proposal does not guarantee Project funding per se. The approval is considered final upon signature of the Memorandum of Agreement (the “**Memorandum of Agreement**”) (section VI).

In certain instances, projects of interest to DFC, that fall outside the established timelines, may be considered.

V. FUNDING APPLICATION PROCESS

a) Letter of Intent

The Letter of Intent must be submitted on the Letter of Intent Form to dairyresearch@dfc-plc.ca by **January 9, 2023**. The Letter of Intent Form can be found on the [program web page](#) at dairyfarmersofcanada.ca.

Please note: The same Principal Investigator can submit more than one Letter of Intent. However, regardless of how many Letters of Intent are approved, only one Funding Proposal per Principal Investigator can be submitted for final review. Switching the names of the Principal Investigator and of the co-investigators is not appropriate and may exclude the Letter of Intent or the entire Funding Proposal from further consideration.

The PDF form provided for the Letter of Intent is self-explanatory and specifically designed to eliminate the need for additional supporting material to transmit relevant information (i.e., appendices or a cover letter). **Additional pages will be removed from the Letter of Intent Form.** Please comply with the space and format limitations of the Letter of Intent form. Do not use photo-reduced type. The **font is Arial and the size is 11 points**.

Letters of Intent submitted in French will be translated for English reviewers; the Principal Investigator and/or their team may not review the translation.

In the interests of improved coordination and funding efficiency, DFC reserves the right to share Letters of Intent with other research funders.

b) Funding Proposal

Upon approval of a Letter of Intent, DFC will provide a Funding Proposal Form to be completed and submitted to dairyresearch@dfc-plc.ca by **April 17, 2023**.

Major change(s) from the Letter of Intent will not be permitted unless they have been suggested by the Production Expert Scientific Advisory Committee. Making such changes could lead to the Funding Proposal not being reviewed.

Guidelines for completing Funding Proposals:

- Please comply with the space and format limitations of the Funding Proposal Form. Do not use photo-reduced type. The **font is Arial and the size is 11 points**.
- **The body of the Funding Proposal Form is self-contained and must not include additional pages and/or attachments other than tables and figures.**
- **CV for the Principal Investigator and co-investigators**
A complete curriculum vitae for the Principal Investigator and for each co-investigator, in the Canadian Common CV (CCV) format (NSERC) or on the DFC CV Form (available upon request), must be appended to the Funding Proposal.
- **Title of the Project**
The title should give a clear indication of the subject and scope of the proposed Project and reflect its main objective. The title may be modified upon mutual agreement between DFC and the Principal Investigator.
- **Project details**
In the Funding Proposal Form, detailed information is required: background information; experimental approach; significance of the proposed research; potential benefits and economic impact for the dairy sector; team expertise and training of highly qualified personnel; milestones; and knowledge translation and transfer activities. Please note that power and sample size calculations must be provided in the Funding Proposal Form.

In the interests of improved coordination and funding efficiency, DFC reserves the right to share Funding Proposals with other research funders.

c) Budget information

The funding provided under the Program is for 1 to 3 years. The amount requested from DFC can be up to \$50,000 per year and represent up to 50% of the total Project costs.

DFC's available envelope for this Call for Proposals is approximately \$400,000.

Detailed information about the financial requirements for the Project is to be provided as outlined below.

- **Personnel**

There are four categories of individuals who may be paid:

1. Research personnel whose skills are required to conduct the Project
2. Technicians who are formally classified as such by their research institutions
3. Graduate students (MSc and PhD)
4. Postdoctoral fellows (unless they are co-investigators)

Budget justification for personnel is to be included. DFC reserves the right to request further information regarding fringe benefits. Salaries for Principal Investigators and co-investigators are not eligible under the Program.

- **Major equipment**

DFC does not provide equipment funding. However, in special cases where equipment is shown to be essential to the Project, DFC may, at its entire discretion, contribute to the purchase of major equipment upon request in writing from the Research Institution (the "**Research Institution**") and/or Principal Investigator. Major equipment is considered a

single item for which the price exceeds \$10,000.

- **Material and supplies**

Expenditures include expendable materials, such as experimental animals and feed, chemicals, glassware, and supplies for existing equipment and routine maintenance of existing equipment. Expenditures in excess of \$500 per item are to be itemized.

- **Publications and publication costs**

Publication of research results in a reputable, peer-reviewed scientific journal is encouraged. Primary consideration should be given to reputable Canadian or international journals with extensive readership in Canada. Publication costs **should not** be included in the budget.

Note: The invoice from the journal for costs related to the publication of a manuscript should be sent to DFC for payment, to dairyresearch@dfc-plc.ca, no more than 18 months after the end of the Project (DFC does not usually pay for open-access publications). Subject to the provisions of the Memorandum of Agreement, a copy of manuscripts and/or abstracts which include DFC funded projects should be sent to dairyresearch@dfc-plc.ca, prior to their submission for publication or presentation.

- **Travel**

Travel to scientific meetings within Canada or meetings outside Canada, when pertinent, to present research results from the Project funded is encouraged. Travel costs may be either \$2,000 per annum or 10% of the amount requested from DFC, whichever is less.

- **Other expenses**

Computer costs related to data analyses and other routine expenses incurred as part of the Project funded are eligible. Expenditures in excess of \$500 per item are to be itemized.

- **Overhead charges or indirect costs**

DFC will pay no overhead/indirect costs for DFC funded projects to the Research Institution, the Principal Investigator and/or the co-investigator(s), as the case may be.

- **Unauthorized expenses**

Consultant fees are not eligible unless prior written approval is given by DFC.

d) Matching funding/other sources of funding

The funds that will be requested from other sources must be described in the Budget Section of the PDF form. **Principal Investigators must have verified with the funding agencies/partners if the Project complies with the research priorities and guidelines of the agency/partner.**

Principal Investigators must submit their projects to the funding agencies/partners for matching funds no later than 90 days after the receipt of the conditional approval of the Project by DFC.

VI. MEMORANDUM OF AGREEMENT

The funding is to be used entirely for specific activities supervised by the Principal Investigator. Prior to initiation of the Project, a Memorandum of Agreement (available to view upon request) is entered into by and between the Research Institution, the Principal Investigator, DFC and other funding partners.

The Memorandum of Agreement defines the rights and obligations of the Research Institution, the Principal Investigator, DFC and other funding partners, including without limitation:

- Principal Investigator and Research Institution's responsibilities in the conduct of the Project
- Financial responsibilities of the parties with respect to the Project
- Progress and final reports
- Publications
- Commercial use of the Project results
- Confidentiality

In accordance with the provisions of the Memorandum of Agreement, the Principal Investigator and the Research Institution may acquire intellectual property rights from the Project results, which rights are subject to a right of first offer and a right of first refusal in favour of DFC. In addition to its rights under the applicable Memorandum of Agreement, DFC has an expressed interest in any collaboration with the Research Institution for licensing of the technology and/or invention by the Research Institution office of technology transfer.

VII. ADDITIONAL INFORMATION

Failure to complete and submit the Letter of Intent or the Funding Proposal in the manner outlined in these guidelines may delay or preclude review by the Production Expert Scientific Advisory Committee for funding by DFC. Deviations from the above guidelines will be allowed only if approved by DFC.

All inquiries for additional information pertaining to any of the above points should be directed to dairyresearch@dfc-plc.ca.

APPENDIX

TARGETED RESEARCH PRIORITIES UNDER THE 2022 CALL FOR PROPOSALS



DAIRY FARM SUSTAINABILITY

- Design crop rotation systems and study complex forage mixtures adapted to the region and soil type, intercropping, interseeding, double cropping and cover crop practices to improve soil health, control weeds, optimize yields and maintain nutrient value throughout entire season.
- Improve forage quality, yield and resistance (drought, flooding, winter survival) through breeding and management practices (for cropping and conservation), such as increasing the nutritive value, extending productive longevity and reducing fall dormancy of alfalfa and increasing the yields of grasses (regrowth) during the summer.
- Optimize best management practices for manure, nutrients, and pesticides in various cropping systems.
- Identify strategies to mitigate GHG emissions (primarily from cows and manure management) that take into consideration the practicality, impact/effectiveness versus costs, using trans-disciplinary approaches (e.g., living labs or open innovation).
- Investigate synergies/trade-offs between climate change adaptation and GHG emissions mitigation strategies.
- Assess and demonstrate the short- and long-term benefits and impacts of increased biodiversity on dairy farms.
- Investigate the potential of strategies such as pasture lands, complex crop mixture, use of plants in intercropping or on uncropped land (riparian zone, wetland restoration, woodlots, etc.), and other initiatives (e.g., bat boxes) to promote plant and animal biodiversity and pollinating insects.



ANIMAL HEALTH, CARE AND WELFARE

- Explore actions that could be taken at the farm level to bring the Solids Non-Fat to Fat ratio (SNF/F) closer to the Canadian market needs.
- Develop targeted reproductive strategies that minimize interventions while maintaining/improving fertility.
- Design quick, accurate, consistent, cost-effective means for routine locomotion assessments on farm (using Artificial Intelligence and other automated means) and easily accessible data monitoring systems to improve early detection, treatment and pain management of lameness in individual dairy cows and younger dairy cattle.

Note: Economic impacts of new strategies, tools, practices, and technologies to be implemented on Canadian dairy farms must be assessed as part of the Project.