





Dairy Health, Efficiency & Resource Dynamics (HERD) Initiative Request for Applications

Match is Optional for This Funding Opportunity

Application Due: June 25, 2025, by 5pm ET

Award Notification: Fall 2025

Anticipated Project Start Date: Spring 2026

The Dairy Health, Efficiency & Resource Dynamics (HERD) Initiative announces a request for applications (RFA) and invites applications for innovative research to enhance animal health, ensure the economic viability of the U.S. dairy industry and improve environmental outcomes.

The Dairy HERD Initiative is a partnership between FFAR, Dairy Management Inc. (DMI) and Zoetis to advance research that will enable U.S. Dairy and allied industry to better understand and use innovations to support improved animal health/management and welfare, economic viability and environmental outcomes. Recent reports suggest that improving the health of dairy cows in the U.S. could substantially improve the environmental outcomes associated with dairy production. Yet very little research has attempted to quantify the environmental impacts of improved animal health in dairy or to understand the tradeoffs and intersections with other aspects of livestock production, including the role of caretakers and economic aspects of herd management. The Dairy HERD Initiative aims to support research to advance our understanding of the interrelationships among dairy health/management and welfare, economics and the environment.

I. Application Requirements:

Research Areas Supported

Dairy HERD will consider applications addressing one or more of the following objectives:

- Economics analyses related to potential reductions in the prevalence of animal health conditions in the context of the associated environmental outcomes; for example, performing cost-benefit analyses that consider the benefits of improved animal health and productivity, reduced costs of treatment and changes in replacement rate, in the context of financial incentive programs that could yield returns on investment.
- Develop or improve decision-support tools and/or models through an enhanced understanding of feedback loops and trade-offs amongst animal health and herd management, economics and environmental outcomes; *for example, by developing*

- conceptual, statistical or predictive models that advance whole-farm models or decision-support tools to inform evidence-based decision-making to improve animal health and environmental outputs. Integration into tools/models that have the potential for large-scale implementation by the dairy industry are strongly encouraged.
- Examine and quantify the impact of dairy cow and heifer health on environmental outcomes; for example, quantify, through empirical studies, the effects of prevalent health challenges such as lameness, mastitis and/or metritis, on environmental outcomes. Research results should be reported in widely accepted metrics such as total tons of emissions per cow per day or kg CO2-equivalents per kg fat and protein corrected milk (FPCM) using AR6 GWP100 metrics.

Dairy HERD will <u>not</u> consider applications addressing:

- Research that seeks to increase milk production or to reduce environmental impacts only by increasing milk production efficiency;
- Research that requires the use of grant funds to install equipment on one or more farms; and
- Research that is not relevant to U.S. dairy production systems.

All research must be conducted in accordance with standard research compliance requirements, such approval from the relevant Institutional Animal Care and Use Committee (IACUC) or similar. If human subjects are involved, the research team should be trained in culturally appropriate methods to reach the target population and must have Institutional Review Board (IRB), or similar approval for the project.

Additional Guidance to Applicants:

The objective of Dairy HERD is to advance research that will enable U.S. dairy and stakeholders to design and use innovations supporting animal health and management, economic viability and improved environmental outcomes. Dairy HERD recognizes that cross-disciplinary collaborative teams that leverage the strength and expertise of diverse scientific fields may be needed to examine the complex relationships among dairy health and management, economics and the environment.

Applicants are strongly encouraged to address the following elements in submitted applications:

- A literature review that outlines the current state of the science and novelty of the proposed research;
- Multi-disciplinary collaborations;
- Informed by interaction with the industry;
- Explanation of how the proposed approach will contribute to addressing knowledge gaps;
- Potential for results to be implemented at a scale into diverse dairy production systems in the U.S.;
- Explanation of potential challenges and/or barriers to adoption of results;
- Relevance to a wide range of U.S. dairy production systems.

The Dairy HERD Initiative reserves the right to advance to peer-review only the highest caliber proposals that address existing knowledge gaps and demonstrate application to a wide range of U.S. dairy productions systems.

II. Eligibility

Dairy HERD welcomes applications from all domestic and international higher education institutions, nonprofit and for-profit organizations and government-affiliated research agencies.

Any individual(s) with the skills, knowledge, and resources necessary to perform the proposed research as Program Director(s)/Principal Investigator(s) may apply through their home institution or organization.

III. Funding Availability and Award Information

A total of US \$1.3 million is available for this funding opportunity. Requests of \$500,000 up to \$1,000,000 per project will be considered. Projects up to 2 years in length are eligible for funding.

The matching funds for this opportunity have already been secured, but additional matching funds are encouraged. Successful applications will receive annual disbursements contingent upon meeting reporting requirements, if applicable (see Post Award Management below). Dairy HERD reserves the right to request modifications to the workplan, methodology and scope of proposed work that may affect the total award amount.

Key budget considerations are noted below, and additional budgetary guidelines can be found on FFAR's <u>website</u>. Applicants are encouraged to contact <u>FFAR's Grants Team</u> to discuss any concerns.

Funding Restrictions:

- A maximum of 10% of the total award may be used for <u>indirect costs</u>.
- Reasonable budgets work in favor of the applicant. Budgets that are not commensurate with proposed work or poorly justified likely will negatively affect the overall evaluation of the application.

Intellectual Property:

 Applicants are expected to review and abide by the Data-Sharing and Intellectual Property rules laid out in Addendum A.

IV. Application

As previously noted, all applicants must submit their application through FFAR's online Grant Management System, which requires completing each section before advancing to the next. To facilitate the preparation of your online application submission, you can download the narrative questions <a href="https://example.com/here/exa

Application Components

Required components

- Organization Information
- Principal Investigator (name, affiliation, contact information)
- Key Project Personnel name(s), affiliation, expertise, project role
- Project Title (up to 50 words)
- Project Timeline
 - Proposed project start date
 - o Proposed project duration (in calendar months)
- Geographic Location of Research
- Project Abstract (up to 250 words)
- Goals and Objectives (up to 500 words)
- Project Milestones by Year, Linked to Objectives (up to 500 words per year described)
- Project Description and Approach, Including Methodology and Methods (*up to 2500 words*)
- Anticipated Outcomes or Outputs, Including Potential Impacts to U.S. Dairy (up to 500 words)
- Plans for Stakeholder Engagement (up to 500 words)
- Data Management Plan (up to 500 words)
- Barriers to Adoption of the Research Outcome(s) and Proposed Mitigation Strategies (*up to 500 words*)
- Project Suitability (up to 250 words)
- Proposed Budget
 - o Total Dairy HERD funding request
 - Total proposed budget
 - o Total existing matching contributions, if applicable
 - Budget narrative: Provide a brief overview of the budget by task or objective, in parallel to the approach outlined in the project's description. Address costs related to personnel, equipment and facilities, and analytics. (up to 500 words)
 - o Budget justification by year (up to 500 words)

Required Attachments: Failure to provide these attachments will result in the application's disqualification.

- Supporting figures, tables, graphics, or equations, which will not count towards total word limit.
- References Cited, which will not count toward total word limit.
- Budget Form
- P.I. and Key Personnel Biosketch: five-page limit per individual listed as P.I. or key personnel in the project
- Project timeline (by year)
- Current and Pending Support

Optional Attachments:

- Additional Key Personnel
- Match Letters
- Letters of Support

V. How to Apply

Applications must be submitted by the deadline date through FFAR's online application Grant Management System. Applications submitted outside of this System will not be considered.

To start a new application or if you are a new user, please click here. If you are a new user, register for an account by clicking the "Create Account" button located under the email address field on the left side of the home page. Once you log in, you may begin working on your application. Please be sure to save your work often by clicking on "Save and Finish Later." To access a saved application, please do so through your Grant Management Account.

Only applications submitted by the deadline through FFAR's Grant Management System will be accepted and considered eligible for evaluation. To be fair to all our applicants, FFAR will not grant extensions to applicants who missed the deadlines posted in the <u>Key Dates</u> section.

VI. Additional Information

Review Process

All applications undergo an internal review by the Dairy HERD Selection Committee, comprised of one individual representative from FFAR, DMI and Zoetis, to assess if the project is relevant to the RFA and that the application demonstrates the potential to meet the evaluation criteria. Those applications deemed to have significant potential for advancing Dairy HERD's objective will undergo a peer-review process. Each submission that advances to peer-review will be assigned to an external technical review panel of at least three subject matter experts. Once peer-reviewed, the Dairy HERD Selection Committee will make final selection decisions based on the external peer reviews and a comparative evaluation of how well submissions meet Dairy HERD's objective. Dairy HERD will only fund applications unanimously selected for funding by all Selection Committee members.

All external reviewers must agree and adhere to the terms outlined in FFAR's <u>Conflict of Interest Policy</u> and <u>Non-Disclosure Agreement</u>. The Dairy HERD Selection Committee will make reasonable efforts to ensure that applications are not assigned to reviewers with a real or apparent conflict with the applicant, institution or project personnel. Reviewers with a conflict of interest will be recused from evaluating or participating in the related discussions. Each stage of the review will be conducted confidentially, and as such, the Dairy HERD Selection Committee will be responsible for protecting the confidentiality of the contents of the applications.

VII. Evaluation Criteria

All applications will be screened for relevance, accuracy, completeness and compliance with the Dairy HERD guidelines stated in this RFA. Pre-applications must demonstrate the potential to meet the evaluation criteria. Full applications then will be evaluated on the following criteria:

Novelty, Innovation and Originality (30%)

- Does the proposed project innovatively address a challenge related to Dairy HERD's objective?
- Does the application challenge an existing paradigm(s) in food and agriculture science?

Technical Merit and Feasibility (40%)

- Does the application clearly outline the goals, objectives and a workplan to evaluate explicitly stated hypotheses?
- Does the application include appropriately thorough and feasible methods?
- Does the application present a tractable timeline and budget?
- Does the application outline potential barriers to adoption and a mitigation plan?
- Is the research team qualified and leverage multiple disciplinary approaches to advance Dairy HERD's objective?

Anticipated Outcomes and Outputs (30%)

- Does the application adequately describe the potential impact and applied relevance of the research to U.S. dairy?
- How significant, i.e., transformative, are the potential outcomes of the project?
- Are the potential outcomes outlined?
- Does the application present a plan for disseminating the project outcomes?
- Does the application include an adequate data management plan with a commitment to public access?

VIII. Award Administration

<u>Selection Notice</u>: Following the application review process, the PI and the authorized organization representative listed on the project will be officially notified by email of the status of the application. If an application is selected for funding, Dairy HERD reserves the right to request additional or clarifying information for any reason deemed necessary.

<u>Intent to Fund Notification</u>: Dairy HERD (through FFAR) will notify applicants of their awards by email. The notice will not constitute an award or obligate funding from Dairy HERD until there is a fully executed Grant Agreement. Dairy HERD encourages applicants to review a sample Grant Agreement before applying to ensure they know the terms under which grants are offered.

<u>Requirement to Demonstrate Matching Funds</u>: Matching funds are OPTIONAL for this funding opportunity. If the applicant provides matching funds, the applicant agrees to identify and certify matching funds annually before disbursement of award funds. The match share is intended to supplement, not supplant existing funding for the PI.

The applicant will abide by FFAR's <u>Matching Funds Guidelines</u> to meet FFAR's matching requirements.

IX. Post-award Management

<u>Grant Period</u>: Upon receipt of the Grant Agreement, the grantee should confirm the project's start and end dates. Once signed, the start date cannot be changed. Grantees may use Dairy HERD funds only on project expenditures on or after the Grant Agreement is fully executed or with prior approval of Pre-Award expenditure. Charging expenditures to the grant before the fully executed date is strictly prohibited. Likewise, grantees may not use Dairy HERD funds after the end date except to pay allowable project costs committed on or before that date.

<u>Annual Reporting Requirements</u>: The grantee must provide annual scientific and financial progress reports. The report should include activities conducted under the grant, highlighting project accomplishments and an account of all expenditure to date.

<u>Final Report Requirements</u>: Within 90 days of completing the project, the grantee shall provide a final project report. This report should address the project objectives outlined in the original grant application, describe any modifications to the project objectives and scope, describe the final project accomplishments and include a final project accounting of all grant funds.

<u>Scientific Integrity</u>: Dairy HERD strives to advance knowledge and the application of science to address challenges related to dairy management. Dairy HERD's ability to pursue its objective depends on the integrity of the funded science projects. All Dairy HERD grants must be conducted with the highest standards of scientific integrity.

X. Application Assistance

For questions related to the online submission system, please contact FFAR's Grant Management team at grants@foundationfar.org.

For questions related to the Dairy Health, Efficiency & Resource Dynamics (HERD) Initiative, please email Dr. Tim Kurt at tim.kurt@dairy.org.

We only accept scientific or programmatic grant inquiries by email. We strive to respond to inquiries within two business days, but our response time depends on the volume of questions received and the complexity of the questions asked. Please note that we do not monitor this mailbox on evenings, weekends or on federal holidays.

Dairy HERD ADDENDUM A

This addendum is provided to share rules about Data-Sharing and Intellectual Property set forth in the Program Agreement governing Dairy HERD that are pertinent to potential awardees.

Definitions

Capitalized terms used in this Agreement not otherwise defined herein shall have the meanings set forth below:

- I. "Affiliates" means with respect to a Party, any person or entity controlling, controlled by, or under common control with that Party. For the purpose of this definition of "Affiliate," "control" meaning in this context the direct or indirect ownership of more than fifty percent (50%) (or such lesser percentage which is the maximum allowed to be owned by a foreign entity in a particular jurisdiction) of the voting stock/shares of a company, or the power to nominate more than fifty (50%) of the directors, managers, or individuals exercising authority in the governance of such entity.
- II. "Confidential Information" means any and all information disclosed or submitted orally, in writing or in other tangible form under confidentiality to one Party (the "Receiving Party") by any other Party (the "Disclosing Party"), that is reasonably understood to be confidential under the facts and circumstances of disclosure or is designated as confidential by the Disclosing Party, shall hereinafter be referred to as the "Confidential Information" of the Disclosing Party. For clarity, all information disclosed by one Participant to another Participant that is related to a Project (including any disclosure of a Participant's Background IP) shall be deemed Confidential Information of the Disclosing Party. Each Receiving Party shall receive and maintain the Disclosing Party's Confidential Information in confidence and shall not disclose any of Disclosing Party's Confidential Information to any Third Party other than with the Disclosing Party's advance written consent. No Party shall use the Confidential Information of any other Party for any purpose other than as required to perform or exercise its rights hereunder, or in furtherance of the Project's objectives. The Receiving Party may disclose the Disclosing Party's Confidential Information to the Receiving Party's and its Affiliates' employees and consultants requiring access thereto for the purposes of this Agreement provided that such employees and consultants are under like obligations with respect to Disclosing Party's Confidential Information by virtue of their employment or other relationship with the Receiving Party. Each Receiving Party agrees to take commercially reasonable steps necessary to ensure that the Disclosing Party's Confidential Information shall be maintained in confidence including (without limitation) such steps as it takes to prevent the disclosure of its own proprietary and confidential information of like character. All of the Disclosing Party's Confidential Information is and shall remain the sole and exclusive property of the Disclosing Party. The foregoing obligations of confidentiality and non-use shall survive and remain in effect for a period of five (5) years from, the termination or expiration of this Agreement.

- III. "Intellectual Property" means all forms of intellectual property rights (anywhere in the world, whether statutory, common law or otherwise) including, without limitation, (i) patent rights, patent applications, rights to file patent applications, utility model rights, rights to register utility models, design patent rights, design patent applications and the right to file design patent applications; (ii) copyrights, copyright registrations and applications for copyright registrations; (iii) rights to authorship and moral rights; (iv) invention rights, rights to trade secrets and rights to know-how and expertise, discoveries, information, data and material, and all derivatives, modifications and improvements thereof; (v) rights to trademarks; and (vi) all other intellectual property rights that may exist anywhere in the world, including, in each case whether unregistered, registered or comprising an application for registration or certification or regulatory approval, and all rights and forms of protection of a similar nature of having equivalent or similar effect to any of the foregoing.
- IV. "Invention" refers to any invention, which is capable of being protected by a patent and which is either conceived, developed and reduced to practice, or conceived, developed, and merely requires constructive reduction to practice, by the Research Institution in the course of the Project, or any invention, which is capable of being protected by a patent, other than the Results, which is conceived and developed in the performance of the Project, and either reduced to practice, or merely requires constructive reduction to practice, by the Research Institution in the course of further research based on the Results, not being the Project, but when such claimed invention necessarily incorporates the Results of the Project.
- V. FFAR, DMI and Zoetis have developed a collaborative research effort, the Dairy HERD Initiative (hereinafter referred to as the "HERD," "Dairy HERD" or the "Initiative").
- VI. "Selection Committee" refers to the committee with responsibility for the overall governance and guidance of the Dairy HERD Initiative (and the specific responsibilities set forth in this Agreement), comprised of one individual representative from each Participant.
- VII. "Participant" means (a) FFAR, (b) DMI or (c) Zoetis.
- VIII. "Project" refers to a specific research project within the scope of Dairy HERD.
 - IX. "Project Agreement" means the agreement that FFAR shall enter into with a Research Institution for a specific Project, which can be in the form of a Grant Agreement, a Master Services Agreement, or any other appropriate form of agreement (the "Project Agreement").
 - X. "Project Funders" means, with respect to a given Project. FFAR, DRI and Zoetis shall be deemed a Project Funders for each Project and shall be represented by an employee of each entity.
 - XI. "Project Team" refers to the Research Institution's and/or Project Funder's scientific personnel participating in a Project pursuant to a Project Agreement.
- XII. "Project-specific Inventions" means all inventions made solely by a Project Funder's personnel participating on a Project Team for the applicable Project will be assigned to such Project Funder, and any inventions made jointly by such Project Funder's personnel together with the personnel of another Project Funder or Research Institution participating in such Project will be assigned jointly to such Project Funder and such other Project Funders or Research Institution (the "Project-specific Inventions") in the manner described in the Project Agreement.

- XIII. "Registered Intellectual Property" means all forms of registered Intellectual Property and applications therefor including, but not limited to, patents, patent applications, utility models, applications for utility models, design patents and design patent applications.
- XIV. "Research Institution" refers to a Third Party (other than a Participant) receiving a grant from the Initiative in order to pursue a particular Project. For the avoidance of doubt, a Research Institution may be a research institution or university, under a sponsored research agreement, individual contractors, or any company (whether for-profit, not-for-profit, public or private), in each case whether located in the United States or in any other country. For the avoidance of doubt, any third-party consultants engaged by the Research Institution in connection with a particular Project are not considered to be a Research Institution for purposes of this Agreement.
- XV. "Results" refers to the inventions, data, information, materials and other findings of the Project(s).
- XVI. "Third Party" means an entity which is not FFAR, DMI or Zoetis.

Publication & Data-Sharing

All Results gained in a Project will be made publicly available through publications and appropriate data sharing mechanisms, including publication by the Research Institutions participating in any Project. The term "Publication" shall extend to any form of public release, including but not limited to posters and oral presentations. All publications to be made by any Research Institution or any Project Funder under a Project Agreement will be subject to review by the other Project Funders to determine if any of such Project Funder's Confidential Information is disclosed, and if there are any Inventions disclosed. All publications will be provided to all Project Funders for review at least 30 days prior to publication and will be subject to a delay of up to an additional 60 days to facilitate filing for patent protection on any Intellectual Property. The publishing party also will remove any of the Project Funders' Confidential Information on such Project Funder's request. All publications shall include proper notice of copyright and trademarks if appropriate.

Intellectual Property

Each Project Agreement will include the following terms: (viii). Licenses to Project-specific Inventions. For each Project:

I. With respect to any Intellectual Property (including Project-specific Inventions) and Results developed under a Project Agreement, each Project Funder contributing to a Project and Research Institution hereby agrees to disclose to the Founding Participants such Intellectual Property and Results developed under such Project Agreement and grants to each Founding Participant an irrevocable (except as otherwise provided upon termination of the Agreement or the Project Agreement), worldwide, non-exclusive, royalty free license to such Intellectual Property (including Project-specific Inventions) and Results developed under the applicable Project Agreement, for internal research use by such Founding Participant, including use by: (i) Third Parties performing research on behalf of such Founding Participant and (ii) such Founding Participant's bona fide research collaborators).

- II. With respect to any Intellectual Property (including Project-specific Inventions) and Results developed in a Project Agreement, each Project Funder or each Research Institution participating in a Project Agreement hereby grants to each Founding Participant, for a period not to exceed twelve (12) months from written notice as described above of each Project-specific Invention to a Founding Participant (the "Non-Exclusive Option Period"), as a potential licensee, a non-exclusive option to obtain an irrevocable, worldwide, non-exclusive, royalty-bearing license for the Intellectual Property (including Project-specific Inventions) and Results developed through the applicable Project Agreement and owned by such Project Funder or Research Institution for commercial use. Following the expiration of the Non-Exclusive Option Period, if no Founding Participant has exercised its option to obtain a non-exclusive license as mentioned above, the applicable Project Funder or Research Institution will grant a Founding Participant, on a first come-first-served basis, for a period not to exceed twelve (12) months from the expiration of the Non-Exclusive Option Period (the "Exclusive Option Period"), an option to obtain a worldwide, exclusive, royalty-bearing license to practice the Intellectual Property (including Project-specific Inventions) and Results developed through the applicable Project Agreement and owned by such Project Funder or Research Institution for commercial purposes.
- III. If a commercial license agreement is not concluded within the Non- Exclusive Option Period and the Exclusive Option Period, and no further written agreement is reached to extend the period of negotiation, the Project Funder or Research Institution shall have no further obligations to each Founding Participant who does not receive the above listed license(s) with respect to said Invention(s), except that for six (6) months after such period the Research Institution shall not grant such a license on more favorable conditions to any third parties outside the Founding Participants. For a period of twenty-four (24) months after receipt of an Invention Notice by the Founding Participants, the Project Funder or Research Institution shall inform the Founding Participants if a third party outside the Founding Participants is interested in a commercial license to an Invention developed by the Research Institution in the performance of the Project. Upon request by any Founding Participant within sixty (60) days following receipt of written notice that a third party is interested in a license, the Project Funder or the Research Institution will delay granting of such a license.
- IV. In case any of the Founding Participants has shown an interest in the commercial use of such patentable Inventions, the Project Funder or Research Institution shall, in good faith, take into account the input provided by the interested Founding Participants with regard to the filing, prosecution, maintenance and defense of such Inventions, including without limitation with regard to the wording of claims, the countries in which patents shall be filed and the overall patent strategy. However, final decisions related to these matters shall remain with the applicable Project Funder or Research Institution, in its discretion.
- V. Notwithstanding the above, in case the applicable Project Funder or Research Institution is not willing to file or continue with the prosecution of a patent or patent application for the Inventions for certain or all countries, the Project Funder or Research Institution shall only offer rights in such Invention to the inventor(s) unless otherwise legally or contractually required (potentially including obligations to the U.S. Government). Inventorship of any Invention subject to a Project Agreement will be determined in accordance with U.S. patent laws.