

Crop-Animal Systems Research Request for Applications

Matching funds are required for this program

Opportunity Open: April 30, 2025

Pre-Application Due: June 11, 2025

Full Application Invitations: July 16, 2025

Full Applications Due: September 10, 2025

Award Notification: Early 2026

Anticipated Project Start Date: Mid-2026

Much of the research on the crops and animals that make up our food supply tends to focus on each system independently. However, crop and animal systems are deeply interconnected, whether located on the same land or not, through a range of factors, including feed and nutrient management, among others. The Foundation for Food & Agriculture Research (FFAR) is pleased to announce the launch of the Crop-Animal Systems Research Request for Applications (RFA), aimed at supporting innovative and transformative research that explores these interconnections to advance both crop AND animal systems.

Building on a decade of impactful work, FFAR released a Research Strategy in 2023 outlining clear research goals and redefining our priorities. This strategy provides a roadmap to better position FFAR to address the pressing challenges in food and agriculture over the next decade and beyond. FFAR's Research Strategy focuses on four interrelated, strategic research priorities — recognizing the complex relationships among thriving production systems, vibrant agroecosystems, healthy food systems and the scientific workforce. Recognizing these interrelationships, this RFA aims to support cropanimal systems research, with the goal of generating knowledge that advances both cropand animal production systems.

I. Application Requirements:

Research Areas Supported

FFAR seeks projects that foster innovation with the potential for transformative impact to crop and animal systems. Through the <u>Thriving Production Systems Priority Area</u>,

FFAR funds crop and animal systems research to develop knowledge and tools that support the following themes:

- Crop Resilience & Productivity Advances research that delivers crop productivity and resilience against biotic and abiotic stress.
- Integrated Animal Health, Welfare & Productivity Supports research to improve animal health and welfare while maintaining or increasing productivity.
- Economically Viable Systems Advances research that designs and assesses adaptive production systems to advance farmers' and ranchers' profitability now and in the future.
- Agricultural Stewardship Supports research to cultivate efficient crop and animal systems that protect and restore natural resources.

The objective of this RFA is to simultaneously advance crop and animal systems. Therefore, applicants must demonstrate how their proposed research aligns with one or more of the above themes to advance both systems. Cross-disciplinary collaborative teams that leverage the strength and expertise of diverse scientific fields are essential to both crop and animal research. Research areas of interest include, but are not limited to the following:

- Resource-efficient animal feed
- Improved animal nutrition
- Bioaccumulation of environmental contaminants (e.g., per-and polyfluoroalkyl substances, etc.) in crop and animal systems
- Efficient cycling of nutrients between crops and livestock
- Optimal rotations of crops with grazing periods to maintain soil health, control pests and maximize forage availability for livestock
- Incorporation of circular agriculture principles
- Other relevant topics that advance crop and animal systems

FFAR will **not** consider applications addressing:

- Research that addresses only crop or animal systems, but not both
- Teams bringing expertise in only one of the two systems
- Research that fully overlaps with the research foci of FFAR's existing <u>Greener Cattle Initiative</u> (GCI) and the <u>International Consortium for Antimicrobial Stewardship in Agriculture (ICASA)</u>
- Research that is not relevant to the U.S. food and agriculture system

All research must be conducted in accordance with standard research compliance requirements, such as 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

FFAR recognizes that cross-disciplinary collaborative teams are needed to examine and advance crop-animal systems. Applicants must outline their team's crop AND animal systems expertise. FFAR will prioritize transformative research to benefit U.S. agriculture and our food supply.

II. Eligibility

Any individual(s) with the skills, knowledge and resources necessary to carry out the proposed research as Program Director(s)/Principal Investigator(s) (P.I.) may apply to the Crop-Animal Systems RFA through their home institution or organization.

FFAR welcomes applications from all domestic and international higher education institutions, nonprofit and for-profit organizations and U.S. government-affiliated research agencies. The following principles guide FFAR's international engagement under this RFA:

- The proposal must identify a clear benefit to the U.S. food and agriculture system and a clear pathway to deploy the technology or solution in the U.S.
- FFAR will prioritize research that delivers broader benefits across geographies and production systems.
- FFAR will not support research that addresses a challenge primarily limited to another country or region outside the U.S. or where the technology or solution is not broadly relevant to the U.S.

III. Funding Availability & Award Information

At FFAR's discretion, we will award up to \$4,000,000 in FFAR funding through the Crop-Animal Systems RFA. Individual awards must range from U.S. \$300,000 to \$1,000,000 of FFAR funds plus matching funds. Projects must have planned durations ranging between 24 and 60 months. Successful projects will receive annual disbursements. Key budget considerations are noted below, and additional budgetary guidelines can be found on our website. Applicants are encouraged to contact FFAR's Grants Team to discuss any concerns related to the matching requirements (see Matching Guidelines).

- All grants require matching contributions equal to or greater than the
 FFAR funding request. Matching funds must come from an entity other than the
 U.S. Federal Government. Any excess match is welcome, but it will not influence
 the potential success of an application.
- Matching funds cannot supplement or supplant preexisting funds for projects initiated before or during 2024. Matching funds must correspond to line items in the full application budget. At least 50% of matching funds must be a cash match per FFAR's definition of cash. The remainder may be an in-kind match per FFAR's definition of in-kind.
- A maximum of 10% of the total award may be used for indirect costs as outlined in FFAR's Indirect Cost Policy.
- Reasonable budgets work in favor of the applicant. Budgets that are not commensurate with the proposed work or poorly justified will negatively affect the application's overall evaluation.

FFAR values its partnership with U.S. checkoff organizations for their role in pooling resources to conduct important research on behalf of their producers. The following commodity groups have expressed potential interest in exploring opportunities to provide

matching support for relevant research projects. If interested, please email the designated contacts to discuss your proposals and whether matching funds may be available:

The United Soybean Board

Contact:

Dr. Keenan McRoberts, Vice President, Strategic Alignment Kmcroberts@unitedsoybean.org

The United Soybean Board (USB), created by the 1990 Farm Bill to manage and direct the National Soybean Checkoff, is dedicated to marketing and research for the soybean industry.

Led by volunteer farmers from across the United States, USB is today's leading source for soybean international and domestic marketing expertise, soy-related health information, and support for soybean research and development.

Oversight of USB is provided by the Secretary of Agriculture through the United States Department of Agriculture (USDA), Agricultural Marketing Service (AMS). The authority for the checkoff is the Congressional Act, Soybean Promotion, Research, and Consumer Information Act. The criteria by which USDA administers USB is outlined in the Soybean Promotion, Research, and Consumer Information Order. The Act and Order contain certain constraints under which the checkoff program must operate, specifically restricting the use of checkoff funds for lobbying the United States government.

For additional information please visit: unitedsoybean.org.

Dairy Management Inc.

Contact:

Dr. Tim Kurt, Senior Vice President, Environmental Research Strategy & Group Lead Tim.Kurt@dairy.org

Dairy Management Inc. and its related organizations work to increase sales and demand for dairy through research, education and innovation, and to maintain confidence in dairy foods, farms and businesses. DMI manages National Dairy Council and the American Dairy Association and founded the U.S. Dairy Export Council and the Innovation Center for U.S. Dairy.

DMI, which is funded by America's nearly 28,000 dairy farmers, as well as dairy importers, is a strategic consultant and resource to businesses and organizations in the food and beverage sector that seek to increase sales and raise their image through the innovative use of dairy and dairy ingredients. DMI works with dairy and food industry leaders to increase sales of their foods that include dairy products and ingredients to meet mutual business and consumer interests.

For additional information, please visit: usdairy.com.

IV. Application

Applicants must submit a pre-application using FFAR'S Grant Management System. All information provided will be treated as confidential. The most innovative, rigorous and cutting-edge projects with significant potential for advancing FFAR's mission will be invited to submit a full application. **Applicants must submit a pre-application to be invited to submit a full application.**

Pre-Application Components

- Organization information
- P.I. information
- Key project personnel name(s), affiliation, expertise
- Project title (up to 50 words)
- Project timing
 - o Proposed project start and end date
 - Proposed project duration (in calendar months)
- Project topics and key words (20-word limit)
- Locations of performance
- Pre-proposal project description (up to 2,000 words)
 - What challenge or existing paradigm is the project addressing? What are the underlying research hypotheses?
 - How will the project address the stated challenge and advance understanding of an understudied research topic or information gap?
 - What innovative outcomes will the project generate? How will the project solve challenges to food supply or agriculture production systems?
 - What impact(s) in the U.S. food and agriculture system will this research lead to and what is the pathway to impact?
 - Why is FFAR ideally positioned to fund this project?
 - o How does the project contribute to both crop and animal systems?

Budget

- Total FFAR funding request
- Total matching funds (at least 50% of match must be cash per FFAR matching guidelines)
- Total proposed budget (FFAR funds + matching funds)
- Matching funder information: List any funding partners and indicate if the partners' contributions are secured, still under discussion, or potential.
- Optional Attachment
 - Additional Key Personnel: Applicants with more than three (3)
 coinvestigators must upload a table including the name, institution,
 expertise, role, email and phone number of co-investigators in addition to
 the three (3) individuals listed on the Contact Information section of the
 online application.

Applications that demonstrate strong partnerships by matching from external sources outside the applicant institutions are encouraged. These partners may include but are not limited to the private sector, nonprofits, commodity and trade groups, state governments and others that do not traditionally work in agriculture.

Full Application Components

Required components:

- Organization information
- P.I. information
- Key project personnel name(s), affiliation, expertise, project role
- Project title (up to 50 words)
- Project topics and key words (20-word limit)
- Project timeline
 - Proposed project start and end date
 - Proposed project duration (in calendar months)
- Locations of performance and USDA involvement (if any)
- Abstract (up to 500 words)
- Overall goals and objectives (up to 500 words)
- Project milestones by year, linked to objectives (up to 500 words per year described)
- Project justification and approach (up to 5,000 words)
- Anticipated outcomes or outputs (up to 500 words)
- Plans for stakeholder engagement (up to 500 words)
- Data management plan (up to 500 words)
- Barriers to adoption or commercialization of the research outcome(s) (Note: FFAR strongly encourages applicants to address social and economic factors in the project design, evaluation processes and outcomes, where applicable.) (up to 500 words)
- Project funding overlap, if applicable
- Proposed budget
 - Total FFAR funding request
 - Total matching funds (at least 50% of match must be cash per FFAR matching guidelines)
 - Total proposed budget (FFAR funds + matching funds)
 - Budget justification by year (up to 1,000 words)
- Matching funder information
- Organization assurances

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

- Project Description and References Cited: This should be identical to the Project Description written out in the Full Proposal Application form, but may include graphics, figures, equations and tables, which will not count toward the word limit. Please also include up to five pages of references cited, which will also not count toward the word limit. (up to 5,000 words)
- Budget Form
- P.I. and Key Personnel Biosketch: five-page limit per individual
- Current & Pending Support of P.I. and Key Personnel

- Project Timeline (by year)
- Matching Fund Verification Letter(s)

<u>Optional attachments</u>: Applicants can upload any of the following as a single PDF document.

- Five (5)-slide summary or description of the project
- Graphics, Figures, Equations, and Tables (up to 5 pages)
- Letters of Support: Applicants can provide letters of support for the proposed project, especially from matching funders.
- Additional Key Personnel

V. How to Apply

Applicants must submit their application through FFAR's online Grant Management System, which requires completing each section before advancing to the next.

To start a **new** application, <u>please click here</u>. 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 the <u>Grant Management Account</u>.

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

<u>Pre-Application Review:</u> Submitted pre-applications undergo an internal review by FFAR's science team to assess its relevance to the Crop-Animal Systems RFA and its potential to meet the evaluation criteria. The most innovative, rigorous and cutting-edge projects with significant potential for advancing FFAR's mission are invited to submit a full application. Applicants must submit a pre-application to be eligible to submit a full application.

<u>Full Application Review:</u> Full proposals undergo a three-stage peer review process. First, each submission is assigned to an external review panel of at least three subject matter experts. In the second stage, FFAR Priority Area subject matter experts provide funding recommendations based on the initial peer reviews and a comparative evaluation of how well submissions meet the Crop-Animal Systems RFA objectives and advance FFAR's mission. Finally, FFAR's Executive Team reviews positive funding recommendations with consideration to FFAR's Priority Areas and research themes, the portfolio balance across FFAR programs and available funding.

All external reviewers must agree and adhere to the terms outlined in FFAR's Conflict of Interest Policy and Non-Disclosure Agreement. FFAR makes 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 are recused from evaluating or participating in related discussions. Each stage of the review is conducted confidentially, and as such FFAR is responsible for protecting the confidentiality of the contents of the applications.

Award Administration

<u>Funding Notification:</u> FFAR notifies applicants of their awards through email. If an application is selected for funding, FFAR reserves the right to request additional or clarifying information for any reason deemed necessary. The notice does not constitute an award or obligatory funding from FFAR until there is a fully executed Grant Agreement. Potential grantees are free to accept or reject the Grant Agreement as offered. FFAR encourages applicants to review FFAR's <u>Applicant & Grantee Resources</u> and <u>FFAR's Intellectual Property (IP) Policy</u> before applying to ensure they know the terms under which grants are offered.

Post Award Management

<u>Grant Period:</u> Upon receipt of the Grant Agreement, the grantee should confirm the project's start and end dates. Grantees may use FFAR 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 FFAR funds after the end date except to pay allowable project costs committed on or before that date.

<u>Annual Reporting Requirements:</u> After FFAR confers a grant, the grantee must provide annual scientific, impact and financial progress reports. The report should include activities carried out 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 must provide a final project report. This report should address the project impacts and objectives outlined in the original grant application, describe any modifications to the project objectives and scope, outline the final project accomplishments and include a final project accounting of all grant funds.

<u>Scientific Integrity:</u> FFAR strives to advance knowledge and the application of science to address challenges related to food supply and agriculture. FFAR's ability to pursue its mission depends on the integrity of the funded science projects and programs. All FFAR grants must be conducted with the highest standards of scientific integrity.

VII. Evaluation Criteria

All applications will be screened for relevance, accuracy, completeness and compliance with the 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 crop AND animal systems?
- Does the application challenge an existing paradigm(s) in food and agriculture science?

Technical Merit and Feasibility (30%)

- 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 does it leverage multiple disciplinary approaches to advance crop AND animal systems?
- Does the application present a plan for disseminating the project outcomes?

Anticipated Outcomes and Outputs (25%)

- Does the application adequately describe the potential impact, a pathway to achieve that impact and applied relevance of the research to U.S. agriculture?
- How significant, i.e., transformative, are the potential outcomes of the project?
- Is the budget justified by the work and are 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?

Partnerships (15%)

- Does the project present a compelling partnership opportunity?
- Does the proposal include adequate confirmation of partner commitment(s)?

VIII. 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 Crop-Animal Systems RFA, please email Ryan Comella at rcomella@foundationfar.org and Nikki Dutta at ndutta@foundationfar.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 federal holidays.