FOUNDATION FOR FOOD & AGRICULTURE RESEARCH

Good Food Institute

Enhancing the Flavor of Plant-based & Fermentation-derived Proteins

Key Dates

Full Application Invitation and Receipt Open: January 28, 2026

Informational Webinar: February 11, 2026, 11:00 a.m. EST

Full Application Due: March 25, 2026, by 5:00 p.m. EDT

Award Notification: Fall 2026

Anticipated Project Start Date: Fall 2026

I. Program Overview

As global demand for protein continues to rise, advancing ingredient innovation can help diversify protein sources, strengthen the sustainability of food and agriculture supply chains, and contribute to a safer, more resilient global food system. Improving the functionality and flavor of plant-based and fermentation-derived proteins can increase consumer acceptance, and thus open new markets for U.S. crops, create value-added opportunities for farmers and processors, enhance farmland health and support economic growth.

To drive such innovation the Foundation for Food & Agriculture Research (FFAR) and the Good Food Institute (GFI) have joined forces to support plant-based and fermentation-enabled protein ingredient optimization.

The long-term success of plant-based and fermentation-enabled protein foods depends not only on sustainability and cost but also on their ability to deliver a compelling eating experience. By advancing research in ingredient design, enrichment methods and formulation strategies, we can accelerate progress toward high-protein foods that meet or exceed consumer sensory expectations.

Flavor, inclusive of both taste and aroma, remains a critical barrier to consumer acceptance. While early innovation has made progress, many products on the market still face

challenges with off-flavors or insufficient desirable flavors. Improving flavor emerged as a key recommendation from the joint FFAR-GFI global call for ideas and workshop, summarized in The Priorities for Plant-based and Fermentation-enabled Protein Ingredient Optimization Convening report.

About the Foundation for Food & Agricultural Research

FFAR builds public-private partnerships to fund bold research addressing big food and agriculture challenges. FFAR was established in the 2014 Farm Bill to increase public agriculture research investments, fill knowledge gaps and complement the U.S. Department of Agriculture's research agenda. FFAR's model matches federal funding from Congress with private funding, delivering a powerful return on taxpayer investment. Through collaboration and partnerships, FFAR advances actionable science benefiting farmers, consumers and the environment.

About the Good Food Institute

GFI is a nonprofit, science-driven think tank working to make the global food system better for the planet, people, and animals. As an international network of organizations, GFI advances alternative proteins to help meet climate, global health, food security, and biodiversity goals. GFI is known for producing a wide range of technical reports on plant-based and fermentation-enabled proteins, funding global scientific research on meat and other high-protein foods produced by plants, microbes, and via cell cultivation, and growing the scientific ecosystem fueling this work.

II. Application Requirements

Research Areas Supported

This Request for Applications (RFA) is aimed at supporting innovative, pre-competitive research that improves the flavor and palatability of plant-based and fermentation-derived proteins intended for center-of-plate foods.

While plants and microorganisms can make the necessary components, creating consumer-preferred flavors remains a challenge. This challenge is further exacerbated by off-flavors present in plant and microbial proteins and from variability resulting from the sources or their processing. Opportunities to address these challenges exist throughout the value chain and using a variety of methods. By focusing on ingredient optimization for flavors, this RFA seeks breakthroughs that will lead to enhanced consumer adoption and market growth.

Research areas of interest include, but are not limited to, the following:

- Reducing and identifying off-flavors in plant-based and fermentation-derived protein ingredients through physical, biological or computational approaches across all stages of the value chain.
- Leveraging hybrid ingredients for complementary functions that balance flavor across blended formulations.
- Designing desirable flavors by understanding and optimizing flavor precursors, extraction and reaction processes, and compound formulation.
- Reducing batch-to-batch variability in flavor attributes of protein ingredients through advances in processing control, compositional analysis and predictive modeling.

Applicants should clearly identify the flavor-related challenge(s) they aim to address, the methods proposed to improve sensory outcomes and a plan to ensure that results are robust, transparent, reproducible and broadly impactful. The development of partnerships is highly encouraged both with partners outside academia and internationally in order to maximize the potential impact of this research. Useful resources for researchers looking for collaborators in this vein include GFI's researcher directory and ecosystem map . Proposals should describe how the work advances palatability and outline a pathway to scalability and commercialization. Projects may span process design or formulation with an emphasis on interdisciplinary approaches and consumer relevance (e.g., flavor innovations that improve nutrition).

Research Areas Not Supported

- Research that is not relevant to the U.S. food and agriculture system. Many challenges facing U.S. food and agriculture are part of broader global dynamics therefore research conducted outside the U.S. that offers clear insights or transferable lessons applicable to the U.S. context will be considered relevant.
- Proposals focused on ingredients for other food applications beyond meat, seafood, dairy and egg alternatives (e.g., pastas, bakery, protein flours, protein supplements).
    - Research focused solely on traditional plant-based high-protein foods (e.g., tofu, tempeh) or high-protein foods that are used primarily for a supplement (e.g., protein bars), condiment (e.g., sour cream style products), dessert (e.g., ice cream style products), or feeding non-human animals (e.g., animal feed) will not be supported.
    - Research focused solely on outputs where the high-protein food component is a secondary component (e.g., pasta, bakery) will not be supported.

    - Plant-based and fermentation-enabled milk will not be supported.
    - This opportunity prioritizes research for plant-based and fermentation-enabled center-of-plate options. While yogurt, egg, and cheese alternatives may be considered within scope, proposals that explore these primarily as stand-alone products are less likely to be competitive. Proposals that explore these products as ingredients that support center-of-plate product development (e.g., egg alternative binders for plant-based proteins) are more likely to be competitive.
    - Research focused on upstream microbial and crop development. While advances in strain engineering and crop breeding are critical to improving the sensory quality of proteins, this RFA centers on protein enrichment, ingredient functionality and formulation design.
- Proposals that advance flavor through extrusion, structuring or other mechanical or material texturization processes. While we recognize texture is a key driver of consumer perception and overall palatability, this RFA does not support these projects without some other flavor component.
- Proposals using animal-derived ingredients or animal-derived upstream feedstocks/inputs or research that includes tests, experiments or any other activities whatsoever that could reasonably be expected to cause harm and/or death to an animal subject, including insects.
- Human subject research. However, projects that involve trained sensory panels as one part of the project may be acceptable if the purpose of that analysis is to test the sensory aspects of a new ingredient, process, or product developed as part of an eligible project.

III. Eligibility

Only entities eligible to receive tax-deductible contributions under Sections 170(c)(1) or 501(c)(3) of the U.S. Internal Revenue Code (or their foreign equivalent), as well as public agencies and other government instrumentalities, are eligible to be a Project Grantee. Individuals are not eligible to be a Project Grantee. Eligibility will be limited to institutions of higher education.

The Foundation for Food & Agriculture Research and The Good Food Institute welcome applications from all eligible domestic and international higher education institutions. Multiple applications from the same institution are allowed. Applicants are encouraged to collaborate internationally and with partners outside of academia to ensure their research is informed by practical insights and real-world needs.

Any individual(s) with the skills, knowledge and resources necessary to perform the proposed research as Principal Investigator(s) may apply through their home institution or organization. Students are not eligible to apply as Principal Investigator.

IV. Funding Availability & Award Information

FFAR/GFI Requests of USD$400,000 - 500,000 are available for all proposed projects. There is no maximum on the amount of matching funds that may be included in the total budget. Projects from two (2) to three (3) years in length are eligible for funding. Project start dates may not be earlier than September 1, 2026. Successful projects will receive disbursements contingent upon meeting reporting requirements (see Section VIII).

Key budget considerations are noted below. Applicants are encouraged to contact FFAR's Grants Team to discuss any concerns.

- Matching funds are optional for this funding opportunity.
    - Matching funds must meet FFAR's Matching Funds Guidelines, noting that they cannot be from a US Federal Government entity.
    - No more than 50% of the required match may be in-kind contributions.
    - Funds already committed as a match or dedicated to another project cannot be offered as a match. Matching funds must correspond to project costs in the budget justification.
    - Tuition cannot be charged as a direct cost.
    - FFAR/GFI funds cannot be used for building construction and/or commercial scaling.
- A maximum of 10% of the total award costs may be used for indirect costs (IDC).
- Reasonable budgets work in favor of the applicant. Budgets that are not commensurate with the proposed work or poorly justified will negatively affect the overall evaluation of the application.

V. Application Components

All applicants must submit their application through FFAR's online Grant Management System.

Full Application

Required Components

- Principal Investigator (PI) and Key Personnel Information
- Current and Pending Support
- Project Title (up to 250 characters)
- Project Duration (24 - 36 months)
- Geographic Location(s) (city, state/province if relevant, and country where the proposed research will be conducted)
- Key topics (up to 50 words)
- Proposal Screening Information (up to 600 words)
  The Proposal Screening Information must include all the following components:
    - Description of the gap/s being addressed and the proposed solution/innovation and its relevance to US and global context.
    - Description of how the proposed solution addresses and advances the science of flavor and palatability of plant-based and fermentation-derived proteins.
    - Brief description of the approach and methods that achieve the proposed solution.
    - Description of the project's outputs and potential scientific, commercial and consumer benefits and their relevance or translatability to US food and agriculture. FFAR funds translational research, so pathway(s) to adoption and/or commercialization are particularly important.
- Project Abstract, suitable for public use (up to 250 words)
- Project Narrative (up to 4,000 words)
    - Relevant background information and justification for proposed work
    - Clearly stated hypothesis
    - Project description and approach
    - Potential risks to the research and mitigation plan
    - Description of how the proposed research builds upon existing knowledge or related research projects and how the research results will be broadly impactful in the U.S. food and agricultural community. Research conducted outside the U.S. that offers clear insights or transferable lessons applicable to the U.S. context will be considered relevant.
- Data management plan (up to 250 words)
- Description of pathway(s) to adoption, and/or commercialization if applicable, and potential barriers to adoption or regulatory obstacles and how those barriers or obstacles will be addressed. (up to 750 words)
- Outline and brief description of project objectives, activities and anticipated outputs. (up to 1,000 words).

- Intellectual Property (IP) Management Plan, if applicable. See FFARs IP Policy for reference. (up to 500 words)
- Budget Summary
    - Total proposed budget (FFAR/GFI request + match, if any)
    - Total FFAR/GFI funding request
    - Total matching contributions, if any
    - Matching funder information, if any
- Budget overview and justification (up to 1,000 words).
    - Equipment is considered any durable good with a cost that exceeds $5,000. GFI limits equipment requests to 25% of the total budget. It is important to note that during the review process, proposals will be evaluated on the reasonableness of the budget and the value of the research in comparison to the budget requested. When including equipment requests in the budget, clearly articulate how the requested equipment aligns with the project's objectives and contributes to its overall success in the budget justification.
    - GFI will host a meeting for PIs funded through this RFA in the US in spring 2027. Applicants may incorporate travel funds to attend this meeting within their budgets.
- Organizational Assurances: Research using FFAR/GFI funds may not be used for any test, experiment, or any other activity whatsoever that could reasonably be expected to cause harm and/or death to an animal subject.

Required Attachments

Templates for FFAR forms can be found on the Grants Resources section of the FFAR website. Failure to provide these attachments will result in the application's disqualification.

- Budget Form
- Current and Pending Support (required for PI and Key Personnel)
- Gantt chart outlining the project timeline by quarterly intervals, including activities and anticipated outputs for each objective.
- References cited (will not count towards Project Narrative word limit)
- PI and Key Personnel Bio-sketches (five-page limit per individual)

Optional Attachments

- Additional Key Personnel
- Supporting figures, tables, graphics or equations (will not count towards Project Narrative word limit) Three-slide summary or description of the project
- Letters of collaboration. Applicants may provide letters of collaboration from institutions or investigators who intend to contribute to the project through financial,

personnel, equipment, facilities, or intellectual means. These letters should solely confirm the intent to collaborate and the form of the collaboration. Letters of collaboration should avoid providing additional written support or endorsement for the project. Please combine all letters of collaboration into a single PDF document before uploading as an attachment.

- Matching Funds Contribution Letter(s), if applicable. View FFARs Matching Funds Contribution Template Letter.

VI. How to Apply

All 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. If you already have an account, you may start a new application. If you are a new user, register for an account by clicking the "Create Account" button located under the Sign In button on the bottom right side of the page.

Once you log in, you may begin working on your application. Please be sure to save your work often. 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 Key Dates section.

VII. Evaluation Criteria

All applications will be screened for relevance, accuracy, completeness and compliance with the guidelines stated in this RFA. Full applications will be evaluated on the following criteria:

Technical Merit, Novelty & Innovation (45%)

- Does the application clearly articulate the problem it aims to solve and provide a compelling explanation of the significance and urgency of solving it?
- Does the application clearly state its research question/hypothesis and demonstrate strong alignment with the objectives of the RFA?

- Does the application adequately address novel or innovative research to improve plant-based and fermentation-enabled protein flavor, aligned with the "Research Areas Supported" section?
- Does the application include effective, efficient and feasible methods to accomplish the project goals?
- Does the application include a clear and comprehensive data management plan that includes making data open and accessible to the public?
- Is the budget consistent with and justified by the proposed work plan? Note that equipment is considered any durable good with a cost that exceeds $5,000. GFI limits equipment requests to 25% of the total budget. It is important to note that during the review process, proposals will be evaluated on the reasonableness of the budget and the value of the research in comparison to the budget requested. When including equipment requests in the budget, clearly articulate how the requested equipment aligns with the project's objectives and contributes to its overall success in the budget justification.
- Does the proposal build on the previous literature in the field and demonstrate clear novelty or innovation relative to existing literature and current practice?

Feasibility, Relevance, Anticipated Outcomes & Impacts (45%)

- Does the proposal clearly outline feasible goals and work plan to evaluate an explicitly stated hypothesis?
- Does the application emphasize scalability and commercial potential and present a plan for disseminating or advancing the project's outcomes?
- Does the application address pathways and/or barriers to adoption or commercialization, including any regulatory obstacles, regarding the proposed project?
- Does the proposal clearly outline the objectives and plan for tracking progress and measuring success for each objective?
- Is the project likely to provide a significant benefit to the U.S. food and agriculture system? If the research occurs outside of the U.S., is the knowledge transferrable to the U.S. food and agriculture system?
- Are the anticipated outputs likely to have an impact beyond the life of the proposed project?
- Does the proposal have the potential to improve consistency and/or reduce variability affecting flavor in ways that can be leveraged by multiple stakeholders including consumers?

- Is there a demonstration of, or pathway to, validate the improvement to flavor for consumers?
- Where relevant, does the project engage end users and stakeholders (ingredient suppliers, manufacturers, consumer research partners, customers) to inform design and increase likelihood of real-world uptake?
- Where relevant, does the research team engage end users and stakeholders to inform design and increase the likelihood of real-world uptake?

Qualifications (10%)

- Does the research team include appropriate and adequate expertise?
- Does the research team have appropriate and adequate access to facilities and equipment to implement the project work plan?
- Does the research team have existing partnerships that they can leverage, and if not, do they have a pathway for developing partnerships?
- Does the research team represent a compelling collaboration pathway forward and willingness to engage with others to advance the research?

VIII. Award Administration

Review Process

Proposal Screening Checklist Review

The Proposal Screening Checklist is submitted with the full proposals and will undergo an internal review by FFAR and GFI to assess if the project is:

- Relevant to the RFA.
- Innovative and advances plant-based and fermentation-derived protein ingredients.
- Impactful and translatable to U.S. food and agriculture.

Applications deemed to have significant potential to advance the objective of Enhancing the Flavor of Plant-based and Fermentation-derived Protein will be advanced to full application review.

Full Application Review

Full applications undergo a two-stage peer review process, including primary and secondary review. Applications will be assessed based on reviewer feedback and alignment with program objectives and FFAR and GFI's research portfolios. FFAR and GFI will then review positive funding recommendations and make final selection decisions.

All peer 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 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. All reviews are conducted confidentially.

Award Administration

Selection Notice

Following the full application review process, the PI and Authorized Organization Representative listed on the project will be officially notified by email of the Intent to Fund status of the application by FFAR's Grants Management team. If an application is selected for funding, FFAR reserves the right to request additional or clarifying information for any reason deemed necessary. The Intent to Fund forms required at this stage can be found on FFAR's website. Following notification of award, the grant agreement process with FFAR includes formalizing the terms and conditions of the award. This process also involves institutional review and approval, confirmation of budget allocations, project milestones, reporting requirements and compliance with FFAR's policies. Once both parties execute the agreement, the project may begin, and funding is disbursed according to the agreed-upon schedule.

Requirement to Demonstrate Matching Funds

Matching funds are optional for this funding opportunity. If selected for funding, the grantee will be required to certify matching funds before disbursement of award funds. The match share is intended to supplement, not supplant existing funding for the PI. The applicant must abide by FFAR's Matching Funds Guidelines to meet FFAR's matching requirements. To constitute a valid match, all matching funds on a FFAR grant must be expended during the grant period.

Grant Period(s)

Upon receipt of the Grant Agreement, the potential grantee should note the Start Date and End Date. Grantees may only use FFAR funds on project expenditures on or after the Start Date of the Grant.

If Grantees need additional time to complete their research at the end of their grant period, up to two No-Cost-Extensions (NCE) of up to twelve (12) months each can be requested. Please see FFAR's No-Cost Extension Request Instructions for more information.

Post-Award Management

Annual Reporting Requirements

After FFAR confers a grant, the grantee must provide annual Narrative, Indicator and Financial Status reports within 30 days after the end of each funding year. Annual reports should include an accounting of actual vs planned activities performed, budget expenses incurred under the grant, any changes to the workplan and budget and highlights of project accomplishments (e.g., publications and other communications). Please see FFAR's Annual & Final Reporting Requirements for more details.

Final Report Requirements

Within 90 days of project completion, the grantee is required to 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 an impact report and a final financial expenditure report. Please see FFAR's Annual & Final Reporting Requirements for more details.

Scientific Integrity

FFAR's ability to pursue its mission to build unique partnerships to support innovative science addressing today's food and agriculture challenges depends on the integrity of the science on which it relies. A fundamental purpose of FFAR is to facilitate the advancement of knowledge and the application of science to address challenges related to FFAR's mission. All FFAR grants must be conducted with the highest standards of scientific integrity.

IX. Application Assistance

For questions related to the online submission system, please contact FFAR's Grants Management team at grants@foundationfar.org. FFAR's Grants Office Hours are held the second and fourth Tuesday of each month at 12pm EST. Registration for office hours can be done on FFAR's website.

For questions related to the Enhancing the Flavor of Plant-based and Fermentation-derived Protein program, please contact Constance Gewa at cgewa@foundationfar.org.

FFAR strives 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 mailboxes on evenings, weekends or federal holidays.