REQUEST FOR PROPOSALS

GFI Research Grant Program

Start or edit a proposal here.

PROPOSALS DUE:
May 15, 2025, Noon Eastern Daylight Time (EDT) (UTC-4)

Last updated: March 12, 2025

Good Food Institute

Introduction

The Good Food Institute (GFI) is a global nonprofit dedicated to building a sustainable, healthy, and just food system. Our team of scientists, entrepreneurs, lawyers, and policy experts is committed to leveraging food innovation to address the pressing question: How can we sustainably feed the world's growing population with safe and nutritious foods, all while benefiting people, animals, and the planet? We are steadfast in our mission to accelerate research, development, and the journey to competitive commercialization for innovative alternative protein solutions. This includes pioneering methods to produce "meat" through animal-free means, crafting plant-based meat alternatives, and spearheading the exploration and advancement of fermentation-derived ingredients. It's important to note that when we say "meat," we encompass not only terrestrial livestock products but also seafood such as fish and shellfish. Our dedication extends beyond meat substitutes, embracing a broader spectrum that encompasses enabling ingredients and fermentation-based innovations, driving forward the evolution of the alternative protein landscape as a whole.

GFI and its Science & Technology team specifically work to catalyze research and development to improve the organoleptic properties, price point, and production capacity of plant-based, fermentation-derived, and cultivated meat products. To that end, GFI established the Research Grant Program in 2018, made possible by the generous donations of philanthropic supporters. This program supports essential research designed to solve many of the challenges facing these technologies and seeks to create open-access tools and methods for the development of appetizing, affordable, and widely available alternative protein products.

Background

Cultivated meat, plant-based, and fermentation-derived products offer exciting research opportunities with tremendous positive impacts for the climate and global health. In an emerging field like alternative proteins, research funding has an outsized catalytic effect, serving to generate preliminary data that stimulate follow-on investment from conventional funding mechanisms. With the support of several generous donors, GFI's Research Grant Program is advancing this foundational, open-access research and creating a thriving ecosystem around this game-changing field. Since launching in 2018, GFI's Research Grant Program has provided yearly opportunities for researchers to apply for rapidly-deployed funding.

Field Catalyst Grant opportunities

This Request for Proposals (RFP) is soliciting research proposals aimed at tackling urgent scientific and technological challenges within the alternative protein industry. We support early to mid-stage research proposals, corresponding to a technology readiness level (TRL) of 1-6. **Up to 3.5 MM USD is allocated for Field Catalyst awards across two priority areas.** Field Catalyst Grants offer targeted funding for high-priority scientific and technological topics, typically spanning no more than 24 months and $250,000. However, additional funding is available for projects involving new collaborations, as detailed in the Award Information section of this RFP. It is imperative that proposals directly address the challenges outlined in the funding priorities, as those failing to do so will not be considered for funding.

Priority A / *Functionality from Fermentation: Ingredients for Plant-based Meats*

We seek to fund the identification and characterization of fermentation-derived ingredients that enhance alternative protein-based meat products to increase their adoption through

improved taste, lowered cost, and nutritional benefits. These ingredients can be specific protein or protein classes that enhance the organoleptic properties of an AP meat, or a biomass product that contributes a significant percentage of the protein level as well as functionality/organoleptic benefit.

Production platform: Fermentation
Technology sector: Ingredient optimization

For more information, please see the following resources:

- Eastham, J. L., & Leman, A. R. (2024). Precision fermentation for food proteins: Ingredient innovations, bioprocess considerations, and outlook — A mini-review. Current Opinion in Food Science, 58, 101194. https://doi.org/10.1016/j.cofs.2024.101194

Previous GFI-funded research related to this topic:

- Microbial production of fats/oils for AP Meat organoleptics.
- Turning mushrooms into fish: "Fish Fillet Analogue Using Formulation Based on Mushroom (Pleurotus Ostreatus) and Enzymatic Treatment: Texture, Sensory, Aromatic Profile and Physicochemical Characterization." *Foods (Basel, Switzerland)* 13 (15): 2358. https://doi.org/10.3390/foods13152358.
- Controlling texture of filamentous fungi: "GastronOmics: Edibility and Safety of Mycelium of the Oyster Mushroom Pleurotus Ostreatus." *Current Research in Food Science* 9 (100866): 100866. https://doi.org/10.1016/j.crfs.2024.100866.

Current challenge

This topic area aims to develop ingredients specific to plant-based/ alternative protein meat product challenges in color, flavor, and binding. Taste parity is within reach with binders that mimic animal connective tissue, flavors that are identical to animal-based products, and colors that mimic the red-to-brown transition of animal meat. For example, color shelf-stable reds that transition to grey/brown above cooking temperatures and whites that do not employ TiO2 or CaCO3 are perennial targets. Flavors that closely resemble animal-based products and/or mask the off-flavors of plant proteins are essential to achieve taste parity. Finally, binders that provide animal-product-like texture and mouthfeel using innovative but easy-to-understand ingredients will improve both product development and consumer adoption. This research would solve currently intractable product development challenges.

Proposed solution

GFI is looking for proposals focused on **end-product formulation, characterization,** and **assessment** of fermentation-derived ingredients used in meat product formulations. Such analyses include, but are not limited to, nutritional content, digestibility, functional properties (i.e. emulsification, gelation, water and oil holding capacity, etc), chemical/physical properties (i.e. color, salt content), sensory appeal, and food safety (i.e. allergenicity).

GFI encourages innovations related to **biomass** and/or **precision fermentation** ingredients that improve plant-based / alternative meat formulations. Examples include, but are not restricted to:

- In **biomass fermentation**, whole cell mass is inactivated, dewatered, and texturized to provide a high protein content cell biomass. This biomass can be added to AP meat products as a high protein ingredient, binding ingredient, or could also be optimized to drive flavors such as umami or provide meat-like textures. Within an AP meat, biomass-derived protein can complement plant-based ingredients by diversifying the amino acid content of end products and providing essential amino acids that are often rare in plant-based proteins.
- To date, **precision fermentation**-derived ingredients such as globin proteins have been formulated to improve the iron-binding and organoleptics of AP meat. There is an opportunity for other precision fermentation-derived proteins or ingredients to increase the appeal and enable the production of AP meats, such as alternatives to egg-white protein binder ingredients. These PF-derived ingredients could enable improved binding, water/fat retention, texture, aroma, taste, or nutritional value (such as mineral delivery) of meat alternatives.

Successful proposals **must** articulate:

- Which ingredient (that falls within the above guidelines) will be the focus of the project, with a specific target meat alternative end product formulation and assessment.
    - The food formulation challenge and its relation to functionality and/or organoleptics.
    - The approach(es) used to specifically investigate how the particular ingredient(s) address the food formulation challenge.
- A clear description of the ingredient's potential as an available ingredient to address the identified organoleptic/functional challenge.
- The current BioMRL of the ingredient production along with an assessment of whether the ingredient can be used to address functional and organoleptic challenges in the near-term. Funded Proposals will demonstrate potential solutions for AP meat products in the next ~5 years.

Proposals that focus on the following **will NOT** be considered:

- Cultivated meat ingredients (derived from or used in animal-cell culture)
- Ingredients aimed at animal feed applications
- Proposals focused on ingredient use as high protein flours/ingredients for other food applications beyond meat alternatives (pastas, bakery, protein supplements)
- Formulations focused directly on dairy/milk/cheese products
- Ingredients that rely on the transformation or conversion of animal-derived products by microbial fermentation. No proposals using animal-derived ingredients or upstream feedstocks/inputs will be considered (e.g. biomass derived from microbes fed bovine dairy feedstocks)
- Proposals focused solely on the production of microbial-derived fats.
- Proposals focused on R&D, scaleup, or production of the ingredient (fat or otherwise).

For questions about this priority topic area, general questions about eligibility, preparing or submitting a proposal, or if you need support with our application system, reach out to RFP@gfi.org.

Priority B / *Pathways to propel cell line development*

Advancing cell line development across terrestrial and aquatic species to bolster innovation and strengthen open-access research tools for the cultivated meat ecosystem.

Production platform: Cultivated meat
Technology sector: Cell line development

For more information, please see the following resources:

- Cell line development and utilisation trends in the cultivated meat industry
- Cell line development from food-relevant aquatic species
- Establishment of cell line repositories and standardized isolation protocols
- Improving efficiency and assessment of adaptation to suspension growth
- Promoting stemness and proliferation in fish cell cultures
- Riquelme-Guzmán, C., Stout, A. J., Kaplan, D. L., & Flack, J. E. (2024). Unlocking the potential of cultivated meat through cell line engineering. *iScience*, *27*(10), 110877. https://doi.org/10.1016/j.isci.2024.110877
- Martins, B., Bister, A., Dohmen, R. G. J., Gouveia, M. A., Hueber, R., Melzener, L., Messmer, T., Papadopoulos, J., Pimenta, J., Raina, D., Schaeken, L., Shirley, S., Bouchet, B. P., & Flack, J. E. (2024). Advances and Challenges in Cell Biology for Cultured Meat. *Annual review of animal biosciences*, *12*, 345–368. https://doi.org/10.1146/annurev-animal-021022-055132

Previous GFI-funded research related to this topic:

- Differentiation and cell lines for cultivated carp
- The Frozen Farmyard: A cell line repository
- Developing myosatellite lines from Atlantic salmon
- Developing cell lines for cultivated seafood

Current challenge
Access to high-quality cell lines from diverse species with an array of beneficial phenotypes is a prerequisite for companies and researchers to scale and optimize cultivated meat and seafood production. Achieving this scale and optimization is necessary if cultivated meat is to meaningfully deliver on all its environmental, public health, and animal welfare benefits. A lack of suitable cell lines is a persistent bottleneck to innovation that requires continued fundamental research and a stronger supply chain to overcome.

Certain attributes and characteristics are important to a cell line's utility for cultivated meat and seafood research (Ravikumar et. al., 2024). As a basic requirement, stable, continuous cell lines that can be induced to differentiate into desired cell types are needed. Cell lines with a rapid doubling time that have been adapted to serum-free and animal component-free media, and growth in suspension or 3D culture systems are crucial to enable cost-effective scaling for

commercial production. However, the nature of the cell line development challenge differs substantially between terrestrial animals and aquatic counterparts, such as fish and crustaceans. For instance, there are some differences between the species groups in the most essential cell types to develop.

For terrestrial species, which benefit from a historically stronger foundation of basic research outside the alternative protein industry, some suitable cell lines exist for a limited selection of species. However, it would be of great benefit to the field to increase the diversity of cell lines available and the phenotypes they possess. For fish, only a few appropriate cell lines exist, which is especially problematic considering the wide variety of fish species commonly consumed globally. The situation is even more dire for crustaceans, where no continuous cell lines have been reported, although progress has been made in developing methods for primary culture (Jang et al. 2022).

Proposed solution

GFI is looking to fund proposals to **develop new cell lines or optimize existing cell lines** from food-relevant terrestrial, fish, and crustacean species. Since there are differences in the state of cell line development progress across these three species groups, applicants are required to select at least one of the research pathways detailed below. The scope and objectives of each pathway have been carefully designed for a specific species group, considering what is likely to be achievable and of greatest impact to the field, given the current state of research.

Pathway 1: Crustacean cell lines

Cell type: Myoblasts or myosatellite cells

Core objectives:

1. Develop a continuous cell line that can successfully differentiate into muscle cells
2. Adapt the cell line to grow in reduced serum or serum-free media
3. Develop an experimental strategy to assess the genotypic and phenotypic stability of your line
4. Deposit your cell line in a repository, and add it to GFI's global cell line database

Pathway 2: Fish cell lines

Cell type: Myoblasts or myosatellite cells / adipogenic progenitors

Core objectives:

1. Develop a continuous cell line or optimize an existing continuous cell line that can:
    a. Grow in reduced serum or serum-free media
    b. Grow in suspension or 3D culture systems, ideally with a doubling time ≤ 24 hours
    c. Differentiate into muscle and/or fat cells
2. Develop an experimental strategy to define and show that your cell line is genotypically and phenotypically stable
3. Deposit your cell line in a repository, and add it to GFI's global cell line database

Pathway 3: Terrestrial cell lines

Cell type: Embryonic stem cells (ESCs) / induced pluripotent stem cells (iPSCs) / myoblasts or myosatellite cells / adipogenic progenitors

Core objectives:

1. Develop a continuous cell line or optimize an existing continuous cell line that can:
    a. Grow in serum-free media
    b. Grow in suspension or 3D culture systems with a doubling time ≤ 24 hours
    c. Differentiate into muscle and/or fat cells
    d. For ESC or iPSC lines: Grow in feeder-free conditions
2. Develop an experimental strategy to define and show that your cell line is genotypically and phenotypically stable
3. Deposit your cell line in a repository, and add it to GFI's global cell line database

Secondary objectives

Cell line development exists upstream of a number of other research challenges in cultivated meat and seafood production. Therefore, we want to fund projects that not only develop one or more high-performance cell lines, but also use them to enable at least **one complementary secondary objective**. Some examples include:

1. Identify an approach to reduce the production or accumulation of toxic waste metabolites in suspension or 3D culture systems without hampering cell line stability–e.g., cell engineering, manipulation of culture conditions, media recycling, tweaking culture media formulations, etc.
2. Determining if donor animal characteristics (such as age, breed, sex, etc.) or cell isolation parameters (such as source tissue type, anatomical location, etc.) affect critical quality attributes of cell lines derived from their tissues
3. Comparing different published protocols or improving methods for enhanced proliferation and/or differentiation (myogenic or adipogenic) in 2D and 3D culture systems
4. Comparing different cell engineering strategies to obtain a desired cellular phenotype that improves the commercial relevance of a cell line
5. Comparing the genotypic and phenotypic stability of cell lines, especially those available in GFI's cell line database or used by companies for manufacturing
6. Collecting dry mass, biomass composition, stoichiometric, and kinetics data from relevant species and cell types in different bioreactor environments to inform life cycle assessment (LCA) and techno-economic assessment (TEA) modeling
7. Measuring the amount of biomass accumulated and metabolic changes that occur during fat and muscle differentiation to inform LCA and TEA modeling

Addressing a secondary objective is **essential for pathway 3 and encouraged for pathway 2**. Given the challenges associated with crustacean cell line development, selecting a secondary objective is **optional for pathway 1**, and proposals with a strong focus on addressing the core objectives are recommended.

Applicants may propose a secondary objective different from those listed above, but it is crucial that it is not overly ambitious and does not detract from your ability to address the core objectives of the selected research pathway(s).

Successful proposals **must** articulate:

- The pathway, species, and cell type(s) on which you plan to focus your research and why. If your proposal spans more than one pathway, please highlight one of them as your primary focus.
- A secondary objective aimed at taking your research a step beyond the cell line development stage.
  [Essential for pathway 3, encouraged for pathway 2, optional for pathway 1]
- Your proposed experimental strategies, including supporting preliminary data (if any), to achieve the core and secondary objectives selected.
- To the extent possible for your chosen species and cell sourcing method, a plan for how details related to the provenance of the cell line (e.g., animal health particulars and vaccination history, source tissue type and anatomical location, veterinarian assessment, documentation of pain relief or euthanasia administered, if any) will be documented.
- A plan to bank and share your cell line(s) with the cultivated meat and seafood research community.
- A strategy highlighting how the cell line(s) developed will help bring cultivated meat or seafood closer to market readiness. Whether or not you plan to commercialize the outputs of your research, we urge you to consider its commercial applicability carefully.
  For example, will your research rely exclusively on off-patent technologies? If patented technologies are used, how is this justified, given the goals of your research?
- The developed cell lines are not required to comply with kosher or halal standards, but if this is feasible and appropriate given your chosen species and experimental approach, a plan to document compliance with these standards is encouraged.

Proposals that focus on the following **will NOT** be considered:

- Proposals that do not develop a new or optimized cell line from a food-relevant terrestrial, fish or crustacean species. Cell lines from insects and organisms without a history of large-scale industrial farming or fishing for human consumption, or focused on cell types not relevant to meat or seafood (e.g., mammary cells) will be considered out of scope.
- Proposals that do not justify the choice of species or cell type(s).
- Proposals that exclude any of the core objectives stated for a selected pathway, do not select a secondary objective for pathway 3, or do not highlight proposed experimental strategies.
- Proposals that attempt to replace serum with insect hydrolysates or other animal-derived materials. Proposals aiming to replace serum by albumin as an intermediate step may be considered.
- Proposals that do not highlight a plan to document details related to the provenance of the cell line.
- Proposals that do not highlight a plan to bank and share the cell line(s) developed from this project with the broader research community.
- Proposals where the commercial applicability of the funded research is unclear.
- Proposals that do not agree to add the cell line(s) to GFI's global database.

For questions about this priority topic area, general questions about eligibility, preparing or submitting a proposal, or if you need support with our application system, reach out to RFP@gfi.org.

Eligibility information

Submissions are open to applicants from all sectors worldwide, encompassing academia, government, industry, and nonprofits. GFI strongly encourages women and gender minorities, racial and ethnic minorities, and other individuals under-represented in the alternative protein industry to apply for funding through this RFP.

Graduate students or postdoctoral researchers are eligible to lead the proposed project, contingent upon the inclusion of a Letter of Commitment signed by a faculty member from the student or postdoc's higher education institution. This Letter of Commitment should:

- Explicitly affirm the faculty member's commitment to act as a collaborator and advisor for the project,
- Confirm the proposed research will have access to the necessary laboratory facilities,
- If the applicant is a student, include the current aims of their dissertation (completed and planned) and describe how the proposed research project contributes to it.

GFI enthusiastically invites proposals from scientists who are new to the alternative protein field or have not previously received funding from GFI. However, we also welcome proposals from researchers who have previously received a GFI grant award. GFI will not fund efforts exceeding 100% FTE (full-time equivalent) for any personnel.

Investigators may be included as key personnel in multiple proposal submissions, but are limited to serving as the Principal Investigator on one proposal per RFP.

Proposal information

Proposals should include research goals that can be achieved in a period of twenty-four (24) or fewer months.

Total budgets (including indirect costs) should be less than or equal to $250,000. To encourage interdisciplinary collaborations and engage research partners new to the alternative protein field, applicants may request an additional $50,000 in funding. To qualify to request this additional funding, the proposal must include at least one meaningful research collaboration with a partner who has not received funding of any kind for work in the alternative protein sector. Research partnerships may include individuals or groups within the applicant organization but must represent a different department, discipline, and skillset (e.g., another department or division within the same university). The description of this collaboration should highlight how it will bring new researchers, perspectives, and technologies to the field. Total budgets (including indirect costs) for applicants including such collaborations should not exceed $300,000.

Indirect costs must be included in the total budget limit and may not represent more than 10% of the requested direct costs. Indirect costs must support administrative or overhead costs directly associated with the proposed research. This guidance applies to both applicant and subaward organizations.

Creating a proposal

1. Proposals are created and submitted through our proposal portal. Applicants must create a user profile to create and submit a proposal.

2. The proposal will request the following information and materials.

   Project details (mandatory) - Including organizational information, project title, summary, key personnel, and information about proposed human subject, animal, and hazardous material use.

   Research design (mandatory) – Upload - **6-page limit**
   Up to one page describing the research team, summarizing qualifications and background. Up to five pages describing project aims, research design, methods, collaborations (if applicable), and references. (*There is no need to include an explanation/justification for work within the alt protein field. Utilize your limited space to describe your research.*)

   Work plan (mandatory) - Upload - **1-page limit**
   Outline the project objectives, milestones, tasks, and dependencies included in your research design. You may choose the format, but Gantt charts and timeline diagrams are often preferred. Please use general timeframes rather than specific calendar dates.

   Budget (mandatory) - Upload - **1-page limit + 1 page per subaward**
   Use the template within the proposal to itemize costs by budget category for your organization, with an additional budget page for each subaward organization. The total budget should not exceed $250,000 or $300,000 if the proposal includes a new-to-the-field collaboration. Budget requests must be in US dollars. A link to the template is in the proposal and features a tab that offers detailed completion instructions.

   Budget justification (mandatory) - Upload - **2-page limit**
   Detail and justify the resources requested for the project for all budget categories, including subawards. If requesting the additional $50,000, provide details about the qualifying new to the field collaboration.

   Applicants are advised to base their budget on the actual estimated cost of the proposed research. GFI strives to maximize the amount of high-impact research funded

through our limited funding pool. We encourage applicants to request the funding required for the success of their project while building a conservative and realistic budget.

Impact strategy (mandatory) - Upload - **2-page limit**
Provide a detailed description of your plans to achieve meaningful outcomes and maximize the impact of the proposed research. Funds may be requested within the budget for costs associated with the proposed plan. Further guidance is available in the FAQ at the end of this document.

Letter(s) of commitment (optional) - Upload - single PDF - 2-page limit per letter

- Letter from collaborator **committing to contribute financial or in-kind resources** to the project if funded. The letter must describe the collaborator's role and contribution, and provide an estimate of the monetary value of the contribution.
- Letter from the applicant organization outlining **financial or in-kind contribution commitments** to the project.
- If the Principal Investigator is a graduate student or postdoctoral fellow, a letter from a faculty member at the applicant organization committing to act as a collaborator and advisor for the project's duration, confirming the project's access to the necessary laboratory facilities, and for student-led projects, describing the current aims of the student's dissertation (completed and planned) and how the proposed research project contributes to them.

All proposal document uploads should be in PDF format, use Arial font size 11pt or larger, have document margins of 0.5", and use a standard A4/US letter page size, excluding letters of commitment. All submissions must be in English.

Please verify that your proposal follows the budget and upload page limits. **Proposals containing uploads exceeding the page limits will not be reviewed.**

Proposals may be submitted until the deadline listed on the first page of this RFP. **Proposals will not be accepted after the deadline for any reason**.

Review process and evaluation criteria

All submitted proposals will undergo a comprehensive evaluation process, commencing with a compliance review and scope evaluation. Please note that proposals must adhere to guidelines, meet the inclusion criteria for the selected priority topic, and be scientifically and methodologically sound to progress to subsequent review phases. Following this initial screening, external experts from academia and industry will undertake a rigorous scientific assessment to evaluate proposals for feasibility, suitability, and priority for GFI funding.

Proposals will be evaluated using the following criteria:

- **Originality and significance** *(Primary review criteria. All others are secondary.)*
    - **Novelty, innovation, and transformational potential of the proposed research**
    - **Relevance to the funding priority area**
    - **Suitability of the proposed methodology**

- **Research team**
    - Researchers' ability to deliver the proposed project including
        - Expertise and experience of the researchers (Lead team and collaborators) involved in the proposed work
        - The balance of skills within the team
        - Strong, meaningful, and synergistic collaborations

- **Project planning**
    - Clear, well-defined research objectives
    - Proposed methods are clear, feasible, and capable of producing reliable results
    - Well-structured plan detailing the research stages, a timeline, and milestones

- **Value for money**
    - Reasonable budget for the proposed activities, with a transparent justification
    - Research value for the budget requested

- **Expected impact**
    - Comprehensiveness, feasibility, and creativity of the Impact Strategy
    - Potential for achieving meaningful and/or broad impact

We recognize that our requirement for proposals to be written in English means that many researchers may be writing in a non-native language. Reviewers are instructed to provide ratings and feedback based on concept quality in combination with the secondary review criteria and not based on language proficiency.

Award administration

The Principal Investigator, faculty advisor (if the Principal Investigator is a graduate student or postdoc), and the Authorized Signatory for the applicant organization must sign a Grant Agreement with GFI. The Grant Agreement will detail the award terms and conditions. A sample of our Grant Agreement can be viewed here. This document may be subject to updates prior to award execution.

Proposals submitted to GFI and selected for funding will have the following information made public: the project title; project summary; project team members' names, titles, and affiliations; and other information deemed relevant by GFI, such as a description of the proposed project scope, purpose, and grant amount. Information within a proposal that applicants wish to remain confidential must be clearly marked with a legend within the proposal indicating its confidential status. To the extent permitted by U.S. law, GFI and its affiliates will hold this information in confidence, but we reserve the right to require the removal of such confidentiality requirements as part of accepting the proposal and awarding funds if the proposal is otherwise accepted. For proposals that do not receive funding, GFI will

release no details about the researchers involved or the content within the proposals. We may release anonymized aggregated statistics regarding the number of proposals received, the types of institutions they came from (i.e., public vs. private), and the countries of the researchers' institutions, but no identifying information will be included in these statistics. Applicants have the right to withdraw proposals at any time by sending a request indicating their desire to do so to RFP@gfi.org.

GFI reserves the right to negotiate with project leaders regarding any of the content within their proposal including project aims and scope, budget, and timeline prior to making any final funding decisions. All decisions made related to funding, project duration extensions, and budget increases shall be made at the GFI review committee's sole discretion and may not be appealed.

Requirements for award recipients

Expectations of and specific requirements for award recipients will be explained in the Grant Agreement, which must be signed by the PI as well as an Authorized Signatory from both GFI and the applicant organization prior to receipt of any funding.

The basic requirements include but are not limited to:

- Regular communication with GFI's Science and Technology team throughout the duration of the project to ensure consistent progress.
- Disseminating the project results in a publicly accessible manner.
- Consent to be featured on GFI's website, blog, and social media with a short description of your project goal(s).
- Grantee reporting will be required as follows:
    - A MidTerm Report will be due at the project midpoint and precede the final disbursement of grant funds;
    - A Final Report will be due within thirty (30) days of the project end date;
    - Final Grant Expenditure Report will be due within ninety (90) days after the end of the project end date.
    - A Publication Status Report will be due no later than one (1) year after the project end date.

  A template for each report and instructions will be emailed to the Principal Investigator prior to the due date. GFI may from time to time request additional information about the Project.
- The Principal Investigator or key personnel involved with the project may be asked to participate in a conference or similar event related to alternative proteins or serve as an external reviewer for GFI research proposals.

For additional information on GFI and the alternative protein technologies we support, please visit
gfi.org/essentials

For additional information on GFI's research funding and grant recipients, please visit
gfi.org/researchgrants

For questions about our Program or the proposal process, please contact GFI's grant management team at

RFP@gfi.org

Research Grant Program Applicant

Frequently Asked Questions (FAQ)

Last updated: March 10, 2025

We hope this FAQ document provides helpful information as you consider applying for GFI research funding. Please refer back to this section of the RFP frequently.
We will update the FAQs to clarify commonly asked questions throughout the submission period.

Funding Focus

What types of research is GFI looking for?

In general, we are seeking to fund innovative projects that will advance the science and technology of the plant-based, fermentation-derived, and cultivated meat sectors. “Meat” includes products conventionally produced by terrestrial livestock (chicken, pork, beef, etc.) as well as seafood such as fish and shellfish.

Each year our RFP targets priority areas identified as having the greatest potential to significantly advance alternative protein technologies. Proposals that do not address one of the current priority areas will not be considered.

What types of research is GFI NOT looking for?

GFI is not currently interested in funding research in the following areas:

- Insect farming or insect-based foods. Projects focused on insect tissue culture may be acceptable, provided the project outputs are directly applicable to improving the sensory properties, cost, or scale of the plant-based, fermentation-derived, and cultivated meat industries.
- 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.

- We recognize there is a tremendous need for research in social sciences, economics, environmental science, public policy, law, marketing, etc., but GFI's Research Grants Program is specifically focused on scientific and technical/technological research. Therefore, we are not currently inviting proposals focused on market research, consumer preference studies, life cycle analyses, and similar topics.
- Proteins specifically targeting egg or dairy alternatives. We recognize that some proposals may include technologies that have cross-applicability to egg/dairy proteins, however, we expect proposals to focus on meat-relevant application cases.

How are GFI and the Research Grant Program funded?

This program is made possible thanks to generous donors making philanthropic gifts to GFI. GFI funds this research from unrestricted gifts and also restricted gifts to this program made by a handful of donors, who wish to remain anonymous. GFI donors come from more than 60 countries, making gifts of $5, $50, $500, $50,000 or more. In the past three years, 57 percent of total giving came from individual donors, 41 percent from philanthropic foundations, two percent from corporations, and a small amount of non-U.S. government grants. We do not accept gifts that may compromise GFI's independence or integrity, or that may create a real or perceived conflict of interest. GFI will only accept gifts from companies in the alternative protein sector for event sponsorships or open-access research, but they do not have any influence in our grant-making. GFI donors have no role in our sponsored projects nor rights to resulting intellectual property. GFI donors make possible core programs and operations across our six global organizations.

How competitive is GFI's research funding?

Funding availability differs for each RFP we release. Historically, we have funded ~15% of the proposals we receive through our Research Grant Program, though funding decisions do not consider that metric in any way. We award funding only to projects that we feel significantly contribute to the scientific and technological foundation of the alternative protein industry.

Can I submit a proposal that spans two funding priority areas?

Proposals that encompass more than one of the RFP funding priority areas may be submitted, however the priority topics have a narrow focus. A proposal may only be submitted to a single priority area. Ensure that you can meet all the criteria for the topic area you select. Select the priority area that has the strongest alignment with your research focus. Duplicate proposals will not be considered.

Does GFI give preference to researchers in the United States?

No. To date, we have funded research in twenty-one different countries across five continents, and we remain committed to supporting the most exceptional research globally. Recognizing that we exclusively accept proposals in English, we acknowledge the potential language barrier for certain researchers. It's important to note that our selection process does not penalize those writing in a non-native language. Our priority is to fund outstanding scientific research, valuing merit over language proficiency.

Does GFI accept proposals that involve joint funding?

In some circumstances, yes. We understand that some research projects may need more funding than GFI alone is able to provide. We encourage applicants to leverage GFI funding opportunities to secure additional research funds (or vice versa). Applicants can also highlight financial contributions from their institutions or collaborators in their proposal and by including a Letter of Commitment. However, we do not require matching funds for our funding opportunities unless specified in a particular RFP.

Policies

What are GFI's policies surrounding research with potential implications for human health, animal welfare, or the environment?

GFI's mission aims to improve environmental sustainability, human health, and animal welfare. To that end, we want to be cognizant of how the research we support impacts these areas. Researchers must demonstrate a good-faith effort to identify any aspects of their research that present environmental, human health, and animal welfare hazards and to attempt to find suitable alternatives that mitigate these hazards.

While GFI seeks to avoid funding research activities that could reasonably be expected to cause harm and/or death to animals, in some instances, GFI policy may allow limited activities in this area (e.g., cell line isolation from living or dead animals) with appropriate institutional approval.

Proposals must provide a description of any activities that may impact human health, animal welfare, or the environment both the Research Design upload and the Environmental & Social Impacts tab in the proposal form. Describe how you will minimize use and/or impact, and provide a clear justification for why the activities and/or resources are needed.

Why does GFI only fund open-access research?

Our grant program is structured to ensure that any funded research is carried out in the public interest and benefits the public at large in accordance with our charitable purposes. GFI's research program is designed to be maximally helpful to the entire sector, which means making research findings available to everyone. A rising tide lifts all boats.

What are GFI's intellectual property policies for funded research?

To maintain our tax-exempt status and uphold our commitment to benefit the public interest, GFI, as a 501(c)(3) organization, must adhere to certain regulations and guidelines set forth by the IRS. To ensure we comply with those regulations, GFI has separate intellectual property (IP) policies depending on the grantee organization type. They are summarized below. Review our sample Grant Agreement here to see the full policies. Note that the Grant Agreement may be subject to updates prior to award execution.

For-Profit Awardees:

- Discoveries, creations, or developments made during the project will be jointly owned by the grantee and GFI, excluding any pre-existing IP or unrelated work.
- IP ownership is equally (50/50) held by GFI and the Grantee, including patents, copyrights, and related.
- Though it is not mandatory, each party can individually choose to file, prosecute, and maintain rights to the IP, at their own cost.
- Both parties must cooperate in preparing, filing, and maintaining patents, copyrights, and related.
- Each party can use the IP for internal, non-commercial purposes and provide non-exclusive, royalty-free licenses to third parties for non-commercial, research, and development purposes, without accounting to the other party. Commercial and/or royalty-bearing licenses, by contrast, require notification and information-sharing between parties.
- All licenses granted to third parties must be non-exclusive.
- If either party generates revenue from IP, the revenue is split equally up to three times the grant amount.
- Parties must notify each other of any third-party infringement on IP.

Non-Profit Awardees:

- IP created during the project belongs exclusively to the Grantee.
- The Grantee commits to licensing their intellectual property to anyone requesting it, under fair, reasonable, and non-discriminatory terms.
- All licenses granted to third parties must be non-exclusive.

These principles advance GFI's foundational mission to support open-access research that will be available and accessible to benefit the alternative protein sector and global society as a whole.

Proposal Inclusions

Where do I include CVs and/or Biosketches for key personnel?

The proposal does not require CVs/Biosketches. In fact, we limit descriptions of the research team to one page: the Research Design upload should incorporate a concise description of the research team, including collaborators. It should be the first page of the up to 6-page upload and provide a summary of the qualifications, background, and experience of key personnel.

How do I include references in my proposal?

References should be included in the Research Design upload within the 6-page limit. Applicants should be aware that reviewers have no obligation to read the references. However, if reviewers cannot verify or contextualize the proposed research, it may undermine the credibility and persuasiveness of the proposal.

Budget

How does GFI define direct and indirect costs?

Direct costs are project-specific expenses. These are costs for personnel who will be involved in the project, supplies and consumables needed for the specific research proposed, travel to a conference to present results, publication charges for submitting a manuscript, and other costs that can be specifically identified with the proposed research project.

Indirect costs are real costs incurred by organizations in support of research activities that cannot be directly applied to a specific grant (but which are nevertheless necessarily incidental to a project). These costs result from shared services, such as utilities, administration, lab and computer equipment, and office and laboratory space rental.

Indirect costs must be no more than 10 percent of the requested direct costs for projects and must be in support of the proposed research.

Which currency should be used for the budget?

Please use US dollars (USD) when preparing the budget for your proposal. This will help ensure consistency and facilitate the review process. Actual award amounts will be subject to the exchange rate applicable at the time of award.

Does GFI limit the amount that can be requested for equipment purchases?

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.

Can I request costs associated with equipment fabrication in my budget?

Yes. If the proposed work includes equipment that cannot be purchased or can be more effectively or inexpensively fabricated by your organization or a third party, you may include those expenses in the appropriate categories within the budget. The total cost of fabricating the required equipment should not exceed 25% of the total budget. Provide the details of what will be fabricated, who will do the fabrication, and the associated expenses in your budget justification. Also, describe how the equipment aligns with the project's objectives and contributes to its overall success.

Can my budget include the cost of equipment or facility rental?

Yes. If the proposed research requires the rental of equipment or facilities that are otherwise unavailable to you, include them in the Facility/Equipment Rental category of your budget and include a description of the space or equipment and the rental rate in the budget justification. (Note: If the rented facility or equipment will be used for multiple purposes (e.g., general institutional activities, or shared across several projects), its cost will be considered an Indirect Cost rather than a Facility or Equipment cost.)

Can I include the cost of equipment maintenance in my budget?

Yes. Costs associated with maintaining or servicing existing equipment that will be used for the proposed research may be included in the budget. If the maintenance will be provided by an external service provider, the expense should be allocated to the Services budget category If the maintenance will be provided by the applicant organization, the expense should be included in the Other direct costs budget category. A description of the expected maintenance activities and who will be providing them should be included in the budget justification.

Can I include the cost of a service contract in my budget?

Yes. Costs associated with a service contract may be included in the budget. These expenses should be allocated to the Services budget category. However, it's important to note that GFI anticipates the primary work will be carried out by the applicant organization. If a significant portion of the budget is directed toward services provided by external entities, it may impact the scoring of the Research Team or Project Planning criteria. To enhance your proposal's evaluation, we recommend balancing the use of service contracts and ensuring that the core research activities are primarily conducted by the applicant organization.

What is the difference between a research collaborator and a service contractor?

A service agreement is a transactional arrangement where a service provider is engaged to deliver specific services or analyses, and payment is based on the agreed-upon fee for those services. This contract procures specialized expertise for a distinct and discrete task(s) within the project without intellectual contribution to the proposed work (e.g., computing, data services, analytical lab services, fabrication, equipment service, spectroscopy, etc.).

A subaward, by contrast, involves a collaborative partnership where the subrecipient contributes unique expertise or resources. These collaborations represent an integrated and ongoing contribution to the project playing a substantive role in the broader project.

How do I include collaborators in my budget?

Collaborators within the applicant organization:
Include expenses related to work performed by other groups within your organization in the primary budget, categorizing them appropriately. In the budget justification, provide detailed information about these costs and specify the research group to which they are associated.

Collaborators at another organization:
Use an additional budget page for each external organization. Include the total of all additional budget pages in the Subaward category of the primary budget. In the budget justification, provide detailed information about these costs and specify the research group to which they are associated.

Contributing (unpaid) collaborators:
Collaborations for which no grant funding is requested do not require inclusion in the budget. A letter of commitment defining the financial or in-kind resource commitment and describing the collaborator’s role should be included in your proposal materials.

How will collaborators receive their funds?

The applicant organization will receive the funding disbursement from GFI. The applicant organization will be responsible for distributing funds to collaborators outside of their organization via subaward. Please note: any contracts you execute with collaborators must comport with the terms of your GFI Grant Agreement, flowing down all pertinent terms and restrictions (e.g., IP ownership/licensing, no animal use, no lobbying, etc).

How does GFI define “new to the alternative protein field”?

A person or entity is considered "new to the alternative protein field" by GFI if they have not previously secured funding (grant, industry, government, or investment support) for initiatives related to research or development in cultivated meat, fermentation-derived, or plant-based protein development, or supporting processes.

What are the guidelines for requesting the additional $50,000?

Applicants may request additional funding, up to $50,000, if their proposal involves collaboration with an individual or group new to the alternative protein field, as defined previously. GFI anticipates that a portion of these funds will support the collaborator, however there are no specific requirements for allocation. Collaboration can involve individuals or groups both within or outside the applicant organization. Proposals requesting this additional funding will be subject to the same evaluation criteria related to the value of the proposed research relative to the budget requested (see “Review process and evaluation criteria” in the RFP).

If the collaboration is within the applicant organization, the collaborator should belong to a different division or department, bringing a unique discipline or skillset to the project. If the collaborator is outside of the applicant organization, the associated costs should be detailed on an additional budget page, and the total budget amount should be included in the Subaward category of the primary budget. In both instances, details about the collaborator and their contribution to the project should be included in the description of the research team in the Research Design upload.

Can I include costs associated with the publication of my research results in my budget?

Yes. Costs associated with the publication of research findings can be included within the budget and should be allocated to the Publication Cost budget category. Include a description of the planned publication mechanism and the anticipated cost in the budget justification. *Note: We require research methodology and results to be made publicly available.* Please

budget for open-access peer-reviewed journal publication if possible. These costs must be incurred prior to the project end date.

Does GFI allow budget requests for costs associated with intellectual property management?

Yes. As long as they are incurred prior to the project end date, costs associated with the preparation, submission, and management of IP related to the research project can be included within the budget and should be allocated to the most applicable budget category. Include a detailed description of the activities and cost in the budget justification. A grantee's IP management costs incurred *after* the project's end date are the responsibility of the grantee; GFI grant funds will not cover such post hoc costs.

Impact Strategy

What should be included in my Impact Strategy?

Within the 2-page limit, provide a detailed description of your plans to achieve meaningful outcomes and maximize the impact of the proposed research. **You can use the provided prompts as a guide**. **Not all prompts will be applicable to all projects.** Funds may be requested within the budget for costs associated with the proposed plan.

Specific challenges you're addressing:

- Highlight the specific issues or challenges your research aims to address.
- Elaborate on how your research contributes to advancing knowledge in your domain.
- Share details about the innovative aspects of your research and articulate how these innovations will have a positive impact on the field as a whole or support industry growth. Highlight the transformative potential of your project.

Engagement with impacted groups/stakeholders:

- Identify the individuals or groups who will benefit from the proposed work.
- Share your plan to involve them in planning, executing, and maximizing engagement with the outcomes of your research.
- Share your proactive strategies for engaging with various stakeholders, including industry, academia, and the public, and how that engagement will enhance impact.
- Detail how partnerships and collaborations will be mutually beneficial and their role in amplifying the impact of your research.

Advancing knowledge:

- Elaborate on how your research contributes to advancing knowledge in your domain.
- Provide insights into your mechanisms for translating this knowledge into broader advancements for the entire field.

Economic and social benefits:

- Provide an overview of how your findings will translate into tangible economic and societal benefits.

- Share your plans for maximizing the positive outcomes of your research on a broader scale.
- Articulate your plan to ensure the outcomes of your research lead to lasting impact or contribute to long-term positive change. Showcase the sustainability and enduring significance of your proposed project. This could include plans to procure additional funding.

Dissemination plan:

- Share your plan for publicly disseminating the results and solutions you derive, emphasizing their positive impact on the field.
- Highlight your strategies for disseminating your research beyond traditional channels. Showcase your creative methods for reaching a wider audience in sharing your findings.

Proposal Submission

Can I submit my proposal myself, or does it need to be submitted by my Sponsored Research Office or Authorized Signatory?

An eligible applicant has the autonomy to submit their own proposal; there is no mandatory requirement for submission through a Sponsored Research Office or an Authorized Signatory. However, GFI recommends applicants adhere to their internal proposal review process and obtain all necessary approvals prior to submission. This approach ensures a streamlined award execution process in the event your proposal is selected for funding. Your institution will be the named grantee of the funds and will need to sign the Grant Agreement.

Can I submit a proposal from an organization where I am not affiliated or employed?

No. Grant awards are made between GFI and the organization listed in your proposal. The Principal Investigator must be an employee of or have a direct affiliation with the organization named in the proposal. The easiest way to ensure your organization can accept a grant award from GFI is to follow your organization's proposal review process and obtain the necessary approvals prior to submission.

How do I know if my proposal was received?

You should receive an automated email from our submission portal that will originate from sender@app.goodgrants.com. If you do not receive this message, please check your spam filter or junk mail folder. You can also verify the status of your proposal by logging in to the proposal portal, selecting "Apply" at the top of your screen and scrolling down to “My Proposals” For questions about your submission status, contact RFP@gfi.org.

How long does it take to receive a decision from GFI?

We strive to make decisions as quickly and efficiently as possible, while also being rigorous in our review process. At times, decisions may take longer than anticipated, usually due to a high volume of proposal submissions. We aim to notify applicants about funding decisions within 12 weeks of the RFP close date.

What is the anticipated time frame for projects selected for funding to begin?

GFI anticipates a project start date between September and November 2025. The initial disbursement of grant funding will be processed upon execution of the Grant Agreement. The second and final disbursement will occur after the Midterm report has been received and accepted.

Resources

Where can I find additional resources about the plant-based, fermentation-derived, and cultivated meat industries?

Please visit gfi.org/essentials to find GFI's essential readings and research on plant-based, fermentation-derived, and cultivated meat. To learn more about our online community and events, please visit gfi.org/community.

Thank you for your interest in the GFI Research Grant Program

Please email any questions related to the program or this RFP to RFP@gfi.org

Additional program information can be found at gfi.org/researchgrants