

Research for Understanding PFAS Uptake and Bioaccumulation in Plants and Animals in Agricultural, Rural, and Tribal Communities Informational Webinar for Applicants

EPA STAR Program RFA FON: EPA-G2023-STAR-J1

October 26, 2023



Webinar Objectives

Review application Information for the EPA RFA:

"Research for Understanding PFAS Uptake and Bioaccumulation in Plants and Animals in Agricultural, Rural, and Tribal Communities"

- Provide guidance for eligibility, submission, technical aspects of application process
- Answer questions about the application process



Webinar Rules

Webinar Ground Rules

- Please hold your questions until all EPA presentations have been made.
- You may type your questions in the comments box.



- Specific research projects or ideas should not be discussed but clarifying questions regarding what is written in the RFA announcement may be answered.
- Slides and Q&A transcript will be posted on the RFA website.
- Please keep yourself muted during the presentation.



Agency Contacts

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- Electronic Submissions: electronic-grant-submissions@epa.gov



RFA & Award Information

- RFA will close on December 6th, 2023, at 11:59:59 pm Eastern
 Time
- Estimated Number of Awards: 5 grants
- Anticipated Funding Amount: \$1.6M over 4 years.
- Proposed budget must not exceed \$1.6M.
- Details can be found in Section II Award Information of the RFA.

Read the RFA very carefully, all necessary information is provided



STAR Research Grants

- The Science to Achieve Results (STAR) program's goal is to stimulate and support scientific and engineering research that advances EPA's mission to protect human health and the environment
- STAR is a competitive, peer-reviewed, extramural research program that provides access to the nation's best scientists and engineers in academic and other nonprofit research institutions



Background

- Identifying, characterizing, and understanding per- and polyfluoroalkyl substances (PFAS) uptake within agricultural environments will provide vital information related to exposure pathways from the food supply and will help inform the development of scalable solutions.
- PFAS may bioaccumulate in agricultural operations through a combination of different pathways. The chemicals may be transported cyclically between soil, water, and animals.
- The development of efficient PFAS management in agriculture depends on understanding the science behind each of these pathways.



Research Area

- Develop research that provides new understanding of PFAS bioaccumulation in plants and animals within agricultural operations. Multidisciplinary research is encouraged.
- The information collected should clearly support the development of agronomic strategies for the management and mitigation of PFAS in the food supply, which will ultimately lead to improved farm viability and protection of public health.
- Applicants should describe concisely how the proposed research will better inform decisions in agricultural environments.
- Research should appropriately scale to mitigate PFAS concerns on farms that may have high volumes of water or soil with relatively low PFAS concentrations.
- Applications that do not support the development of agronomic (on-farm)
 management strategies for PFAS mitigation in the food supply will not be rated
 as highly as those that do.



Research Area

- Applications under this solicitation should address at least one of five research sub-categories.
- Applicants should associate the research area category(ies) they choose with the relevant EPA Strategic Plan Goal(s) and Objective(s) of the EPA FY 2022-2026 Strategic Plan https://www.epa.gov/planandbudget/strategicplan
- Applications that do not address at least one of the research subcategories may not be rated as highly as those that do.
- Applications that address multiple sub-categories will not necessarily be rated more highly than those that address fewer sub-categories.



Research Sub-Categories

- PFAS contamination and bioaccumulation through **biosolid agricultural use** to ensure the continued sustainable utilization of beneficial biosolids.
- PFAS contamination and bioaccumulation in livestock (including aquaculture)
 from feed and water.
- PFAS contamination and bioaccumulation through **the utilization of irrigation water**, possibly including recycled municipal wastewater or water from effluent dominated waterbodies.
- Potentially substantial PFAS contamination in pre-harvest agricultural operations through unidentified or lesser-known sources.
- PFAS contamination and bioaccumulation in whole-food webs, wildlife and game, and culturally sensitive plants as it relates to Tribal agricultural settings and communities.



Community Engagement and Partnership

- Applicants must involve agricultural industry partners, agricultural communities, Tribal communities or community-based organizations in the formulation of research objectives.
- This partnership/collaboration will allow for a greater positive impact and more effective research that can lead to real-world solutions
- Applicants may choose to utilize a Community Engagement Research (CEnR) framework, defined as a collaborative process of research involving researchers, community, agricultural, and/or tribal representatives, to meet this partnership/collaboration requirement.



Community Engagement and Partnership, continued

- This Engagement Plan should
 - Describe the type of proposed collaboration/engagement and what role it will play in the overall project including the degree of partner/community input or engagement in the conceptualization, hypothesis/question development, design, methods, analyses, and implementation of the research
 - Describe how the proposed collaboration/engagement will enhance the overall impact of the project such that the project results are applicable and useable
 - Describe how activities of the project will be coordinated with any related or complementary projects and studies
 - Describe how the collaboration/engagement will materialize during project and the partner(s)' intent to participate in the proposed research



Example Outputs

Outputs may include:

- A communication plan to appropriately convey findings to states and/or agricultural communities and industries
- Analytical models and tools to assist in PFAS decision making processes
- Scientific publications and fact sheets to spread new information about PFAS in agriculture
- Descriptions of analytical methods used (e.g., instrumentation, standard operating procedures, quality control procedures and results)



Example Outcomes

Outcomes may include:

- Comprehensive scientific understanding that supports the development of agronomic strategies for the management and mitigation of PFAS in the food supply, which will ultimately lead to improved farm viability and protection of public health
- New strategies for managing PFAS in agriculture
- New cost-effective solutions that address PFAS contamination in agricultural environments at scales appropriate to mitigate its impacts on farms with high volumes of water or soil with relatively low PFAS concentrations.



Eligibility Information

Eligible to Apply (Section III):

Public and private nonprofit institutions/organizations

Public and private institutions of higher education

Hospitals located in the U.S. and its territories, possessions

State and local governments, U.S. territories or possessions

Federally Recognized Indian Tribal Governments

Foreign collaborators, data collection or use are OK*

*International Budget needs to be justified, reviewed, and approved



Eligibility Information (2)

Entities NOT Eligible to Apply (Section III):

- Profit-making companies
- Foreign governments
- International organizations
- Federally-Funded Research and Development Centers (FFRDCs)
- Federal agencies
- Individuals



Eligibility Information (3)

- Some non-eligible institutions/organizations may be on subawards of eligible applicants
- Note that eligible entities can partner with some ineligible entities under EPA's Subaward Policy, which can be found at https://www.epa.gov/grants/grants-policy-issuance-gpi-16-01-epa-subaward-policy-epa-assistance-agreement-recipients.
- For-profit companies are NOT eligible and may NOT be subawardees
- For-profit companies may be <u>consultants</u>:
 - Consultants are not to be considered key personnel on a grant application
 - Contracts/Consultants are subject to competitive procurement requirements (see Section (IV.C.5.iv.f))



Eligibility Information (4)

- Applications must be submitted via Grants.gov
 - If you cannot access Grants.gov, see https://www.epa.gov/grants/exceptions-grantsgov-submission-requirement.
 - You must have <u>SAM.gov</u> registration ACTIVE in order to apply via <u>Grants.gov</u>.
- Applications that exceed federal funding or performance period time limits will not be reviewed.
 - Period of performance should be within 4 years, start date is not the focus.
 - Research usually starts nine to twelve months after the close of the RFA.
- Applications must include a Community Engagement Plan (see Section IV.C.5.iii.e) that demonstrates collaboration/engagement with partner(s)/community(ies) in the design and execution of the proposed research or how the applicant will be able to effectively perform and complete the project without such collaboration/engagement.
- Applications from ineligible organizations, or that are somehow not substantially compliant, will not be reviewed.
- Organizations and PIs may submit more than one application, as long as they are substantially different.



Application Materials and Process

- Section IV. Application And Submission Information of the RFA
- To apply under this solicitation, use the application package available at Grants.gov
- For further submission information see: RFA Section IV.F. "Submission Instructions and other Submission Requirements." Please follow the format in this section and do not separate your application into multiple attachments.
- Note: All necessary forms are included in the electronic application package, with the exception of the Current and Pending Support form, available at: <u>Research Funding Opportunities: How to Apply and</u> <u>Required Forms</u>

Make sure to include the Current and Pending Support form as part of the Project Narrative of your Grants.gov submission





Electronic Submissions

- Details are provided in Section IV.F. "Submission Instructions and Other Submission Requirements."
- If you have trouble with Grants.gov, perform the following steps **before** the close of the RFA (Section IV.F.5.):
 - Contact Grants.gov Support Center before the application deadline date.
 - Document the Grants.gov ticket/case number.
 - Send an email with the FON EPA-G2023-STAR-J1 in the subject line to electronic-grant-submissions@epa.gov before the application deadline time and date and must include the following:
 - i. Grants.gov ticket/case number(s)
 - ii. Description of the issue
 - iii. The entire application package in PDF format.
- **Please attach ONLY **ONE** project narrative attachment labeled "Application" to ensure integrity of page and section ordering.**
- You may resubmit an application before the deadline, but changes are not permitted after an RFA closes. If we see duplicates of the same application, we will process the most recent one.
- If you are experiencing a natural disaster and cannot submit on time, please contact us immediately.
- Letters of support or intent from EPA employees are prohibited, and we will remove such letters if we find them.



Other Information

Please refer to the following RFA sections for additional Information:

IV. Application And Submission Information

- Required application package materials including:
 - EPA Human Subjects Research Statement (HSRS)
 - Scientific Data Management Plan (SDMP)
 - Quality Assurance Statement (QAS)

V. Application Review Information

- Peer Review Criteria
- Relevancy Review Criteria



Application Review Information

Peer Review Criteria

1. Research Merit

2. Responsiveness

3. Project Management

4. Community Engagement Plan



Application Review Information

Relevancy Review Criteria

- 1. The degree to which the proposed science/research is relevant to EPA's priorities as described in this solicitation and support Goal 5: Ensure Clean and Safe Water for All Communities, Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure; Goal 6: Safeguard and Revitalize Communities, Objective 6.2: Reduce Waste and Prevent Environmental Contamination; and/or Goal 7: Ensure Safety of Chemicals for People and the Environment, Objective 7.1: Ensure Chemical and Pesticide Safety and/or Objective 7.2: Promote Pollution Prevention, of EPA's FY2022-2026 Strategic Plan.
- 2. The degree to which results (i.e., outputs/outcomes) of the research have broad application or affect large segments of society.
- 3. The degree to which the research is designed to produce data and methods that can immediately and/or with little to no translation be utilized by the public, states, and tribes to better assess or manage environmental problems.



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Thank you!