



# REQUEST FOR APPLICATIONS

## *Women and Minorities in Science, Technology, Engineering, and Mathematics Fields Program*

FUNDING YEAR: Fiscal Year 2022

APPLICATION DEADLINE: March 31, 2022

ANTICIPATED FUNDING: \$384,000

FUNDING OPPORTUNITY NUMBER: USDA-NIFA-WAMS-008782

ASSISTANCE LISTING NUMBER: 10.318

LETTER OF INTENT DEADLINE: Not Required

**INITIAL ANNOUNCEMENT**  
 National Institute of Food and Agriculture  
 United States Department of Agriculture

**Assistance Listing.** The Women and Minorities in Science, Technology, Engineering, and Mathematics Fields Program (WAMS) is listed in the Assistance Listings under the number 10.318.

**Table 1:** Key Dates and Deadlines

Task Description	Deadline
Application:	5:00 P.M. Eastern, FY 2022 March 31 <sup>st</sup> , 2022
Letter of Intent:	Not Required
Applicants Comments:	Within six months from the issuance of this notice <i>(NIFA may not consider comments received after the sixth month)</i>

**Advancing Diversity, Equity, Inclusion, and Accessibility.** NIFA recognizes research, education, and extension efforts will have the greatest impacts when equity is grounded in the programs. NIFA is committed to enhancing diversity, equity, inclusion, and accessibility of programs and encourages individuals, institutions, and organizations from underserved communities to apply to funding opportunities as lead, co-lead, or subaward recipient(s), and to engage as leaders in the peer panel review process to support the development of strong networks and collaborations. NIFA encourages applications that engage diverse communities and have broad impacts through research, education, extension, and integrated activities to address current and future challenges.

**Stakeholder Input.** The National Institute of Food and Agriculture (NIFA) seeks comments on all request for applications (RFAs) so it can deliver programs efficiently, effectively, with integrity, and with a focus on customer service. NIFA considers comments, to the extent possible when developing RFAs and use comments to help meet the requirements of [Section 103\(c\)\(2\) of the Agricultural Research, Extension, and Education Reform Act of 1998 \(7 U.S.C. 7613\(c\)\(2\)\)](#). Applicants may submit written comments to [Policy@usda.gov](mailto:Policy@usda.gov) (email is for comments only). Please use the following subject line: Response to the WAMS RFA.

## **EXECUTIVE SUMMARY**

NIFA requests applications for the Women and Minorities in Science, Technology, Engineering, and Mathematics Fields (WAMS) program for Fiscal Year 2022. The anticipated amount available for grants in both years is approximately \$384,000. This RFA is being released prior to the passage of an appropriations act for FY2022. Enactment of additional continuing resolutions or an appropriations act may affect the availability or level of funding for this program.

This notice identifies the objectives for WAMS projects, deadlines, funding information, eligibility criteria for projects and applicants, and application forms and associated instructions. NIFA requests applications for WAMS to support research and extension activities that increase the number of women and underrepresented minorities from rural areas who will pursue and complete a postsecondary degree in science, technology, engineering, or mathematics (STEM) disciplines.

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## **PART I. FUNDING OPPORTUNITY DESCRIPTION**

### **A. Legislative Authority**

This program is administered under [7 U.S.C. 5925](#) as amended. Section 1672 of the Food, Agriculture, Conservation, and Trade Act of 1990 ([7 U.S.C. 5925\(d\)\(7\)](#)) authorizes the Secretary of Agriculture to make competitive grants to increase the participation of women and underrepresented minorities from rural areas (definition Part VIII, E) in science, technology, engineering, or mathematics (STEM) fields in higher education. Priority is extended to eligible institutions that carry out continuing programs funded by the Secretary.

### **B. Purpose and Priorities**

For the Women and Minorities in Science, Technology, Engineering, and Mathematics Fields (WAMS) program, NIFA will support projects with a target audience of K-14 students (kindergarten through twelfth grade plus two years of post-secondary schooling (e.g., vocational technical institutions or community or junior colleges)). Four-year undergraduate, graduate, and post-doctoral focused projects will not be awarded under this grant announcement. Projects with a primary target of four-year undergraduate, graduate, and post-doctoral studies should consider other [NIFA's workforce development focused programs](#).

WAMS project activities must support the creation, adaptation, and adoption of learning materials and teaching strategies to operationalize what we know about how students learn. Many of these concepts are identified in the National Research Council's publication: [How People Learn](#). WAMS-funded projects shall also focus on imparting both technical knowledge as well as leadership and interpersonal skills such as communication, teamwork, and problem solving, as these are abilities expected by employers. These concepts may be found in the publication by Michigan State University, College of Agricultural and Natural Resources: [Comparative Analysis of Soft Skills: What is Important for New Graduates?](#).

The purpose of this program is to support education/teaching, and/or extension projects that increase participation by women and underrepresented minorities from rural areas in STEM. NIFA intends this program to address educational needs, as determined by each institution, within broadly defined areas of food and agricultural sciences.

Applications recommended for funding must highlight and emphasize the development of a competent and qualified workforce in the food and agricultural sciences. WAMS-funded projects should improve the economic health and viability of rural communities by developing education and extension initiatives that focus on new and emerging employment opportunities in STEM occupations for women and underrepresented minorities. Projects that contribute to the economic viability of rural communities are also encouraged.

NIFA welcomes (but does not require) applicants to work with the [Extension Foundation](#) for the development and delivery of content for the public and for Extension professionals nationwide through [Connect Extension](#), or a [National Cooperative Extension Project website](#)."

***Leadership Skills Development.*** The development of leadership skills, knowledge, and qualities are necessary to prepare students for agricultural and related careers in the private sector, government, and academia. WAMS teaching applications must demonstrably incorporate a

leadership development component to equip students with technical and leadership abilities upon graduation. Specific activities may include:

1. Developing practical applications to increase understanding of leadership roles, including critical thinking, problem solving, and communication skills; ethics and professionalism; and working in teams;
2. Connecting the academic classroom experience with daily leadership roles and organizational activities;
3. Providing opportunities for mentoring and shadowing; and
4. Organizing leadership academies, workshops, trainings, etc.

***Social and Behavioral Science Disciplines.*** Projects that integrate social and behavioral sciences to provide experiential learning opportunities for students in applied research, and related community development programs. Incorporation of social and behavioral sciences is important for addressing many of the challenges facing agriculture and rural communities, such as increasing global demand for food production in the face of limited natural resources; improving health and reducing obesity; and increasing economic opportunities.

***Advancement in U.S. Food, Agriculture, and Forestry.*** In an increasingly interconnected world, these domestic advancements have global importance, and may require information and cooperation from beyond our borders. Any proposed activity (e.g., partnerships, exchanges, training, and/or travel), must support the domestic objectives of WAMS. Applicants must clearly describe and demonstrate how international activities proposed in applications submitted to WAMS will contribute to advances in U.S. agriculture. When proposing international activities, applicants must describe the metrics that will be used for reporting beneficial outputs and outcomes. These metrics should reflect how the proposed international collaboration adds value to achieving the WAMS program’s objectives by introducing innovative technologies/approaches, promoting synergistic science, addressing issues of mutual concern, or other means. Additional guidance on including international activities in WAMS applications is provided on the NIFA Center for International Programs webpage that includes [Frequently Asked Questions, descriptions of existing MOUs and other resources](#).

Traditional ecological knowledge is considered an acceptable topic of education or extension for projects funded by this RFA, in pursuit of the aforementioned priorities, goals, and objectives.

The WAMS Program is aligned with the following [USDA Strategic Goals](#): Strategic Goal 4/ Facilitate Rural Prosperity and Economic Development.

**Table 2:** Program Key Information

Title	Description
Program Code:	WAMS
Program Code Name:	Women and Minorities in STEM
CFDA Number	10.318
Project Type:	Education/ Teaching, Extension, or Integrated
Grant Type:	Standard Grants
Application Deadline	FY2022 -March 31, 2022
Grant Duration:	24-36 Months

Anticipated # of Awards/Fiscal Year:	4
Maximum Award Amount:	Approximately \$100,000 total for 24 - 36 months
<b>Proposal Submission Limitations:</b>	<b>One application per eligible institution</b>

A proposed project must address one or more Educational Need Areas and/or be an Applied Project that addresses research, outreach and capacity building to benefit the communities served, especially that of their students.

1. **Educational Need Areas.** WAMS projects should focus on the purpose of one or more of the FY 2022 Need Areas. Please note that at least one of these Need Areas must be indicated on the Project Summary ([Part IV § B\(3\)](#)).

a. *Curriculum Design, Materials Development, and Library Resources.* Promotes the development of alternative courses of study and degree programs, new and improved curricula, and instructional materials, delivery systems and technology that respond to differences in student learning styles; to promote the acquisition of library resources including books and journals relating to the food, agriculture, natural resources, and human sciences- including traditional ecological knowledge; and to stimulate the use of new approaches to the study of traditional subjects, new research on teaching and learning theory, and new applications of knowledge. The overall objective is to increase the quality of, and continuously renew, the academic programs at K-14 institutions in the food and agricultural sciences.

b. *Student Experiential Learning.* Furthers the development of student scientific and professional competencies through hands-on experiential learning projects (inside or outside of the classroom) that provide students with opportunities to solve complex problems in the context of real-world situations. Applications may emphasize, but are not limited to: introducing and expanding students’ knowledge of STEM and other technologies, especially those involving Artificial Intelligence, nutrition, climate change and other disciplines related to the food and agricultural industry; enhancing quality of life; conserving resources; traditional ecological knowledge; and addressing community and economic development issues. Projects should focus on advancing student decision-making and communications skills, data and analytical skills and improving their interest in STEM disciplines. Activities may include, but are not limited to internships, practicum experiences, study abroad opportunities, and leadership skill development.

c. *Student Recruitment, Retention, Mentoring and Educational Equity* (including the provision of student financial assistance). Enhances educational equity for under-represented students and strengthens student recruitment and retention programs in order to promote the future strength of the Nation’s scientific, professional, and technical workforce in the food and agricultural sciences. Applications may emphasize, but are not limited to:

i. Initiating new projects or supplementing current efforts to attract and enroll an increased number of students from underrepresented groups in education programs in STEM disciplines as they relate to food and agricultural sciences. These efforts may engage the student’s families, and communities to engage in a



robust exchange of ideas on using the full breadth of the Nation's intellectual resources more effectively.

- ii. Developing or supplementing agricultural and science literacy programs at the K-14 education levels (kindergarten through twelfth grade plus two years of post-secondary schooling (e.g., vocational technical institutions or community or junior colleges)) that attract students to college and careers in the food and agricultural sciences; providing mentoring and summer hands-on learning enrichment programs, student financial support for underrepresented students to attend college or other initiatives for student retention. Projects with a primary target of supporting current four-year undergraduate, graduate, and post-doctoral studies will not be awarded under this program.

2. ***Expected Products and Results.*** The WAMS program requires all project directors to provide appropriate metrics and describe the expected products and results, outcomes, and their potential impact on strengthening food and agricultural science education, research and extension in the United States. Metrics to assess products, outputs and outcomes are to be clearly delineated in the proposal.
3. ***Evaluation Plan.*** All projects must have an Evaluation Plan that includes both a strategy for monitoring the project as it evolves (to provide feedback to guide these efforts), as well as a strategy for evaluating the effectiveness of the project in achieving its goals and for identifying positive and negative findings when the project is completed. The complexity of the evaluation will depend on the scope of the project. Grantees are encouraged to obtain an independent evaluation to secure appropriate documentation of the project's outputs and outcomes. Such efforts should be led by knowledgeable and experienced individuals. As a guide, up to 10% of the grant funds may be used to support this purpose.

## **PART II. AWARD INFORMATION**

### **A. Available Funding**

The anticipated amount available for the Women and Minorities in Science, Technology, Engineering, and Mathematics Fields (WAMS) program in FY 2022 is approximately \$384,000. This RFA is being released prior to the passage of an appropriations act for FY 2022. Enactment of additional continuing resolutions or a full appropriations act may affect the availability or level of funding for this program.

USDA is not committed to fund any particular application or to make a specific number of awards. The [Automated Standard Application for Payments](#), operated by the Department of Treasury, Bureau of Fiscal Service, is the designated payment system for awards resulting from this RFA.

### **B. Application Restrictions**

NIFA will evaluate applications using the criteria described in [Part V](#) of this RFA. Applications for FY 2022 are limited to the following applications types:

1. *New application*: New applications will be evaluated using the criteria described in [Part V](#) of this RFA and are subject to the due dates herein (see [Appendix III](#) for definition).
2. *Resubmitted application*: Resubmitted applications must include responses to the previous review panel summary within one page-limit additional to the allowed project narrative length and are subject to the same criteria and due dates herein. Resubmitted applicants must enter the NIFA-assigned proposal number of the previously submitted application in the *Federal Field (Field 4)* on the application form (see [Appendix III](#) for definition).

### **C. Project and Grant Types**

The following describes the types of *projects* or *grants* that are eligible for funding:

1. **Project Types**. Applicants must propose one of the following:
  - a. *Education/Teaching Projects*. Single-function Education/Teaching Projects develop human capital relevant to overall program goals for U.S. agriculture. An education activity or teaching activity is formal classroom instruction, laboratory instruction, and practicum experience in the food and agricultural and other related matters such as faculty development, curriculum development, instructional materials and equipment, and innovative teaching methodologies
  - b. *Extension Projects*. Single-function Extension Projects conduct programs and activities that deliver science-based knowledge and informal educational programs to people, enabling them to make practical decisions. Extension Projects may also include related matters such as certification programs, in-service training, client recruitment and services, curriculum development, instructional materials and equipment, and innovative instructional methodologies appropriate to informal educational programs.
  - c. *Integrated Education/Teaching and Extension Projects*. An Integrated Project includes education and extension components within the project. The functions addressed in the project should be focused around the problem or issue and should be interwoven throughout the life of the project to complement and reinforce one another. The functions should be interdependent and necessary for the success of the

project and no more than two-thirds of the project's budget may be focused on a single component.

Integrated Project applicants are encouraged to review [NIFA's Integrated Programs Application Information webpage](#) for additional information on integrated programs, including tips for writing Integrated Project applications and an example of an integrated application.

2. **Grant Types.** Standard grant is the grant instrument for this RFA. This is an award instrument by which NIFA agrees to support a specified level of effort for a predetermined project period without the announced intention of providing additional support at a future date.

#### **D. Ethical Conduct of Funded Projects**

In accordance with sections [2, 3, and 8 of 2 CFR Part 422](#), institutions that conduct USDA-funded extramural research must foster an atmosphere conducive to research integrity, bear primary responsibility for prevention and detection of research misconduct, and maintain and effectively communicate and train their staff regarding policies and procedures. In the event an application to NIFA results in an award, the Authorized Representative (AR) assures, through acceptance of the award that the institution will comply with the above requirements. Award recipients must, upon request, make available to NIFA the policies, procedures, and documentation to support the conduct of the training. See [Responsible and Ethical Conduct of Research](#) for further information.

#### **E. Proposal Submission Limitations**

Each eligible, individual institution, independent branch campus, and branch institution of a State system may submit one application as an individual institution each federal fiscal year.

## **PART III. ELIGIBILITY INFORMATION**

### **A. Eligibility Requirements**

As contained in Section 7204 of the Food, Conservation, and Energy Act of 2008 (FCEA) (Pub. L. 110-246 which amends Section 1672 of the Food, Agriculture, Conservation, and Trade Act of 1990 ([7 U.S.C. 5925](#))), applications may only be submitted by the following eligible applicants: (a) State agricultural experiment stations; (b) colleges and universities; (c) university research foundations; (d) other research institutions and organizations; (e) Federal agencies; (f) national laboratories; (g) private organizations or corporations; and, (h) individuals or any group consisting of two or more of the entities described in subparagraphs (A) through (H).

Applicants for the Women and Minorities in Science, Technology, Engineering, and Mathematics Fields (WAMS) program must meet all the requirements discussed in this RFA. Failure to meet the eligibility criteria by the application deadline may result in exclusion from consideration or, preclude NIFA from making an award. For those new to Federal financial assistance, NIFA's [Grants Overview](#) provides highly recommended information about grants and other resources to help understand the Federal awards process.

***Duplicate or Multiple Submission*** – duplicate or multiple submission is not allowed. NIFA will disqualify both applications if an applicant submits duplicate or multiple submissions. For those new to Federal financial assistance, NIFA's [Grants Overview](#) provides highly recommended information about grants and other resources to help understand the Federal awards process.

### **B. Cost Sharing or Matching**

In accordance with [7 U.S.C. 5925\(a\)\(2\)](#) if a grant provides a particular benefit to a specific agricultural commodity, the grant recipient is required to match the USDA funds awarded on a dollar-for-dollar basis from non-Federal sources with cash and/or in-kind contributions (**see Part IV. R&R Budget. 3. for details**).

NIFA may waive the matching funds requirement for a grant if NIFA determines that: (1) the results of the project, while of particular benefit to a specific agricultural commodity, are likely to be applicable to agricultural commodities generally; or (2) the project involves a minor commodity, the project deals with scientifically important research, and the grant recipient is unable to satisfy the matching funds requirement.

## PART IV. APPLICATION AND SUBMISSION

### A. Method of Application

Applicants must apply to this RFA electronically; no other method or response is accepted. The electronic application for this RFA and additional resources are available on [Grants.gov](https://www.grants.gov) and [Grants 101](#). **Table 3** provides instructions on how to obtain an electronic application. **Part II § 1** of the [NIFA Grants.gov Application Guide](#) (Application Guide) contains detailed information regarding the [Grants.gov](https://www.grants.gov) registration process.

**Table 3: Steps to Obtain Application Materials**

Steps	Action
Step One: Register	<i>New Users</i> to <a href="https://www.grants.gov">Grants.gov</a> must register early with <a href="https://www.grants.gov">Grants.gov</a> prior to submitting an application ( <a href="#">Register Here</a> ).
Step Two: Download Adobe	Download and Install <a href="#">Adobe Reader</a> (see <a href="#">Adobe Software Compatibility</a> for basic system requirements).
Step Three: Find Application	Using this funding opportunity number <b>USDA-NIFA-WAMS-008782</b> , search for application here: Opportunity Package.
Step Four: Assess Readiness	Contact an AR prior to starting an application to assess the organization's readiness to submit an electronic application.

**Table 4: Help and Resources**

Grants.gov Support	NIFA Support
<a href="#">Grants.gov Online Support</a> Telephone support: 800-518-4726 Toll-Free or 606-545-5035 Email support: <a href="mailto:support@grants.gov">support@grants.gov</a> Self-service customer-based support: <a href="https://www.grants.gov">Grants.gov</a> <a href="mailto:iPortalgrantapplicationquestions@usda.gov">iPortalgrantapplicationquestions@usda.gov</a> Key Information: Customer service business Hours 24/7, except <a href="#">federal holidays</a>	Email: <a href="mailto:grantapplicationquestions@usda.gov">grantapplicationquestions@usda.gov</a>  Key Information: Business hours: Monday thru Friday, 7a.m. – 5p.m. ET, except <a href="#">federal holidays</a>

### B. Content and Form of the Application

The [Application Guide](#) is part of the corresponding application package for this RFA. The RFA overrides the [Application Guide](#) if there is a discrepancy between the two documents. NIFA will accept subsequent submissions to an application until the application deadline. However, applicants that do not meet the application requirements, to include partial applications, risk being excluded from NIFA's review. NIFA will assign a proposal number to all applications that meet the requirements of this RFA. Applicants must refer to the proposal number when corresponding with NIFA. **Table 5** outlines other key instructions for applicants.

**Table 5: Key Application Instructions**

Instruction	References (All references are to the <u>Application Guide</u> )
Attachments must be in a portable document format (PDF) format.	Part IV
Check the manifest of submitted files to verify attachments are in the correct format.	Part IV
Conduct an administrative review of the application before submission.	Part IV
Follow the submission instructions.	Part V
Provide an accurate email address, where designated, on the SF-424 R&R.	Part V
Contact the <a href="https://www.grants.gov">Grants.gov</a> helpdesk for technical support and keep a record of the correspondence.	N/A
Contact NIFA if applicant does not receive correspondence from NIFA regarding an application within <b>30</b> days of the application deadline.	N/A

**SF 424 R&R Cover Sheet.** See **Part V** of the [Application Guide](#) for the required certifications and assurances.

**SF 424 R&R Project/Performance Site Location(s).** See **Part V** of the [Application Guide](#).

**R&R Other Project Information Form.** See **Part V** of the [Application Guide](#).

1. Field 7. Project Summary (PS)/Abstract. The PS must show how the project goals align with the project goals of the WAMS Program. See **Part V** of the [Application Guide](#) for instructions and suggested templates.
2. Field 8. Project Narrative (PN). The PN must not exceed **20 double-spaced** pages of written text including figures and tables. The font size should be no smaller than 12 points, Times New Roman, and the page margins no smaller than 1 inch. The page limits outlined here ensure fair and equitable competition. Appendices to the PN are allowed if they are directly germane to the proposed project. Do not add appendices to circumvent the page limit. The PN must include all of the following:
  - a. *Potential for Advancing the Quality of Education; Significance of the Problem*
    - i. Identification of Educational Problem and Project Impact: Briefly state: (1) the specific instructional problem/challenge (or opportunity) to be addressed; (2) the anticipated project audience; and (3) the project’s target objectives and its anticipated, overall impact on improving the quality of food and agricultural sciences education. Clearly identify and explain how the proposed project will address your *Educational Need Area* described in [Part I](#).

- ii. **Project Justification:** Summarize the body of knowledge justifying the need for the proposed project. Describe any ongoing or recently completed, significant activities related to the proposed project for which funding was received under a previous WAMS or other program's awards.
- iii. **Institutional Goals:** Demonstrate how the project will (1) contribute to the achievement of the institution/organizations' long-term (five- to ten-year) goals; (2) help satisfy the institution's high-priority objectives; and (3) be linked to/supported by the institution's strategic plan.
- iv. **Innovation:** Describe the proposal's creative approach to improving the quality of food and agricultural sciences education, solving an education problem, and promoting activities that advance equal opportunity for women and underserved minorities. Using either actual experiences or literature background information, show why you selected this approach.

b. *Proposed Approach and Cooperative Linkages*

- i. **Plan of Operation and Methodology:** Describe procedures for accomplishing the objectives of the project. Describe plans for management of the project to ensure its proper and efficient administration. Describe the way in which resources and personnel will be used to conduct the project.
- ii. **Timetable:** Identify all important project milestones and dates as they relate to project start-up, execution, evaluation, dissemination, and closeout.
- iii. **Products, Results, Measurable Outcomes and Impacts:** Outline the expected products/results and their outcome and impact on strengthening access to food and agricultural sciences education for women and underserved minorities in the United States. Make sure to differentiate among the terms.
- iv. **Evaluation Plans:** State the methodologies to be used in assessing the accomplishment of stated products, results and measurable impacts from the project. Discuss the strategies and metrics for evaluating progress toward meeting the WAMS Program Goals from Part I. Describe any data to be collected and analyzed. Demonstrate how the project will improve education and outreach to women and underserved minorities. This section shall clearly indicate how you plan to measure impacts.
- v. **Dissemination Plans:** The application must document how project accomplishments will be disseminated to the broadest extent throughout the community. Discuss the institution/organization's commitment to disseminate project results and products and the potential for institutionalization. Identify target audiences and explain methods of communication.
- vi. **Partnerships and Collaborative Efforts (if applicable):** Explain how the project will maximize partnership and collaborative efforts to strengthen food and agricultural sciences education. Provide evidence, via letters from the parties involved in the partnership or collaborative arrangement.

c. *Institutional Capability and Capacity Building*

- i. **Institutional/organizational Commitment and Capability:** Demonstrate that the program administration is committed to this project and has the capability to ensure its completion.

- ii. Institutional/organizational Resources: Document that necessary institutional / organizational resources (administrative, facilities, equipment, management of generated data and/or materials), and other appropriate resources, will be made available to the project. Demonstrate how the institutional/organizational resources to be made available to the project, when combined with the support requested from USDA, will be adequate to carry out the activities of the project.
- iii. Continuation Plans: Discuss the likelihood of, or specific plans for, continuation or expansion of the project beyond the period of USDA support. For example, does the institution's/organization's long-range budget or academic plan provide for the realistic continuation or expansion of the initiative undertaken by this project after the grant period ends, are plans for eventual self- support built into the project, are plans being made to institutionalize the program if it meets with success, and are there indications of other continuing non-Federal support.
- iv. Key Personnel: Discuss the adequacy and specific attributes and project responsibilities of each key person associated with the project. Also include the background and qualifications of those personnel who will be responsible for assessing project results and administering the project evaluation and reporting process.

d. *Budget and Cost-effectiveness*

- i. Budget: In addition to the separate, required budget forms and budget justification, discuss how the budget specifically supports the proposed project activities. Explain how such budget items as professional or technical staff time and salary, travel, equipment, etc., are necessary and reasonable to achieve project objectives. If applicable, justify that the total budget is allocated adequately between the applicant and any collaborating institution / organization(s) and will be appropriate to carry out the activities of the project.
- ii. Cost-effectiveness: Justify the project's cost-effectiveness. Show how the project maximizes the use of limited resources, optimizes educational value for the dollar, achieves economies of scale, or leverages additional funds.

**Field 12, Add Other Attachments.** See **Part V § 4.12** of the [Application Guide](#).

1. *Response to previous review*- PDF Attachment. 1 Page Limit. Title the attachment as 'Response to Previous Review' in the document header and save file as 'Response to Previous Review'. This requirement only applies to "Resubmitted Applications" as described under [Part II § B](#) of this RFA. PDs must respond to the previous review panel summary on no more than one page. If desired, additional comments may be included in the text of the PN, subject to the page limitations of that section.

**R&R Senior/Key Person Profile (Expanded).** See **Part V** of the [Application Guide](#) for profile requirements, details about the biographical sketch, and suggested support templates.

**R&R Personal Data.** This information is voluntary and is not a precondition of award (see **Part V** of the [Application Guide](#)).



**R&R Budget.** See **Part V § 7** of the [Application Guide](#).

1. Budgets for each project year do NOT have to be the same from year to year. However, detailed budget information (budget and narrative) must be submitted for each year of the proposed project.
2. During the tenure of a grant, PDs must attend one National Project Directors' Meeting/Conference, if offered, in Kansas City, Missouri or any other announced location. The purpose of the meeting will be to discuss project and grant management, opportunities for collaborative efforts, future directions for education reform, and opportunities to enhance dissemination of exemplary end products/results of the projects. Reasonable travel expenses to attend this meeting may be included in the application's budget under travel expenses. While budgets should account for this travel, NIFA may consider virtual or hybrid meetings based on local and national pandemic conditions.
3. Match – If an applicant concludes that the matching requirements described under [Part III § B](#) of this RFA is not applicable to them; the applicant must include an explanation of their conclusion in the *budget justification*. NIFA will consider this justification when determining final matching requirements or if required matching can be waived. NIFA retains the right to make final determinations regarding matching requirements. Grants that require matching funds as specified under [Part III § B](#) of this RFA must list in their *budget justification* the matching sources, the identification of the entity(ies) providing the match, and the total pledged amount. A written verification of commitments of matching support (a pledge agreement) is not required. However, applicants are subject to the documentation, valuing and reporting requirements, as specified in [2 CFR Part 200, “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards \(the Uniform Guidance\),”](#) and [7 CFR Part 3430, “Competitive and Noncompetitive Non-Formula Federal Assistance Programs – General Award Administrative Provisions.”](#)
4. Indirect costs (IDC) – See [Part IV § C](#) of this RFA for funding restrictions regarding indirect cost, and **Part V 7.9** of the [Application Guide](#) for additional information.

***Data Management Plan.*** A Data Management Plan (DMP) is required for this program. Applicants should clearly articulate how the project director (PD) and co-PDs plan to manage and disseminate the data generated by the project. The DMP will be considered during the merit review process (see [Part V § B](#) of this RFA, **Part III § 3.1** of the [Application Guide](#) and [NIFA's Data Management Plan](#) page).

***Supplemental Information Form.*** See **Part VI § 1** of the [Application Guide](#).

1. Field 2. Program to which the applicant is applying. Enter the program name Women and Minorities in STEM and the program code WAMS. Accurate entry is critical.
2. Field 8. Conflict of Interest List. See **Part VI § 1.8** of the [Application Guide](#).

***Representations Regarding Felony Conviction and Tax Delinquent Status for Corporate Applicants.*** This is required for corporate applicants. See **Part VI § 2** of the [Application Guide](#) for a description of the term, “corporation.”

### **C. Funding Restrictions**

***Indirect Cost (IDC) not to exceed 30 percent of Total Federal Funds Awarded (TFFA) of the recipient.*** Section 1462(a) and (c) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA) limits IDC for the overall award to 30 percent of Total Federal Funds Awarded (TFFA) under a research, education, or extension grant. The maximum IDC rate allowed under the award is determined by calculating the amount of IDC using:

1. the sum of an institution's negotiated indirect cost rate and the indirect cost rate charged by sub-awardees, if any; or
2. 30 percent of TFFA.

The maximum allowable IDC rate under the award, including the IDC charged by the sub-awardee(s), if any, is the lesser of the two rates.

If the result of number one is the lesser of the two rates, the grant recipient is allowed to charge the negotiated IDC rate on the prime award and the sub-award(s), if any. Any sub-awards would be subject to the sub-awardee's negotiated IDC rate. The sub-awardee may charge its negotiated IDC rate on its portion of the award, provided the sum of the IDC rate charged under the award by the prime awardee and the sub-awardee(s) does not exceed 30 percent of the TFFA.

If the result of number two is the lesser of the two rates, then the maximum IDC rate allowed for the overall award, including any sub-award(s), is limited to 30 percent of the TFFA. That is, the IDC of the prime awardee plus the sum of the IDC charged by the sub-awardee(s), if any, may not exceed 30 percent of the TFFA.

In the event of an award, the prime awardee is responsible for ensuring the maximum indirect cost allowed for the award is not exceeded when combining IDC for the Federal portion (i.e., prime and sub-awardee(s)) and any applicable cost-sharing. Amounts exceeding the maximum allowable IDC are considered unallowable. See sections [408](#) and [410](#) of [2 CFR 200](#).

Successful applicants must not use grant funds awarded under the authority of this RFA to renovate or refurbish research, education, or extension space; purchase or install fixed equipment in such space; or to plan, repair, rehabilitate, acquire, or construct buildings or facilities.

## **PART V. APPLICATION REVIEW REQUIREMENTS**

### **A. NIFA's Evaluation Process**

NIFA evaluates each application in a two-part process. First, we screen each application to ensure that it meets the administrative requirements as set forth in this RFA. Second, a scientific peer-review process will be used to technically evaluate applications that meet the administrative requirements using a review panel (see [NIFA Peer Review Process](#)).

#### **Scientific Peer Review Process:**

NIFA selects reviewers for the review panel based upon their training and experience in relevant scientific, extension, or education fields, taking into account the following factors:

1. the level of relevant formal scientific, technical education, or extension experience of the individual, as well as the extent to which an individual is engaged in relevant research, education, or extension activities;
2. the need to include experts from various areas of specialization within relevant scientific, education, or extension fields;
3. the need to include other experts (e.g., producers, range or forest managers/operators, and consumers) who can assess relevance of the applications to targeted audiences and to program needs;
4. the need to include experts from a variety of organizational types (e.g., colleges, universities, industry, state and Federal agencies, and private profit and non-profit organizations) and geographic locations;
5. the need to maintain a balanced composition with regard to minority and female representation and an equitable age distribution; and
6. the need to include reviewers who can judge the effective usefulness of each application to producers and the general public.

After each peer review panel has completed its deliberations, the responsible program staff of NIFA will recommend that your project is either approved for support from currently available funds or declined due to insufficient funds or unfavorable review.

NIFA reserves the right to negotiate with the PD/PI and/or the submitting organization or institution regarding project revisions (e.g., reductions in the scope of work, funding level, period, or method of support) prior to recommending any project for funding.

After the review process has been completed, NIFA sends copies of reviews, *not* including the identity of reviewers, and a summary (if applicable) of the review panel comments to the PD. ***Conflicts of interest.*** NIFA takes extreme care to prevent any actual or perceived conflicts of interest that may influence the review or evaluation (see [NIFA Peer Review Process for Competitive Grant Applications](#)).

## **B. Evaluation Criteria**

NIFA will use the following criteria, listed in order of importance, to evaluate this RFA:

1. **Potential for Advancing Quality of Education; Significance of the Problem.** This criterion is used to assess the likelihood that the project will have an impact upon and advance the quality of food and agricultural sciences by strengthening institutional capacities to meet clearly delineated needs. Elements considered include institutional long-range goals, WAMS's Goals, identification of a problem or opportunity to be addressed, justification for the project, innovation, advancing educational equity, multidisciplinary and/or problem-based focus, and potential for adoption by other institutions.
2. **Proposed Approach and Cooperative Linkages.** This criterion relates to the soundness of the proposed approach including objectives, methodology, plan of operation, timetable, logic model, expected products and results, evaluation, and dissemination plans. Emphasis is placed on the quality of educational or research support provided to the applicant institution through, if applicable, its partnerships and collaborative initiatives, and on the potential cooperative linkages likely to evolve as a result of this project.
3. **Institutional Capability and Capacity Building.** This criterion relates to the institution's capability to perform the project and the degree to which the project will strengthen its teaching or research outreach and women and underrepresented minority student retention capacity. Elements include the institution's commitment to the project, the adequacy of institutional resources (administrative, facilities, equipment, data generation management and/or materials) available to carry out the project, potential for academic or research institutional adoption of project objectives enhancement, and plans for project continuation or expansion beyond the period of USDA support.
4. **Key Personnel.** This criterion relates to the adequacy of the number and qualifications of key persons who will develop and carry out the project, and the qualifications of project personnel who will provide for the assessment of project results and impacts and dissemination of these findings.
5. **Budget and Cost-Effectiveness.** This criterion relates to how well the total budget supports the project and is cost effective. Elements considered include the necessity and reasonableness of costs to carry out project activities and achieve project objectives; the appropriateness of budget allocations between the applicant and any collaborating institution(s); the adequacy of time committed to the project by key project personnel; and the degree to which the project maximizes the use of limited resources, optimizes educational value for the dollar, achieves economies of scale, and focuses expertise and activity on high-priority Educational Need Areas.

## **C. Organizational Management Information**

Applicants must submit specific management information relating to an applicant prior to an award and update the information as needed. Applicants may only have to update their information if they had previously provided the information under this or another NIFA program. NIFA provides the requisite forms during the pre-award process. Although an applicant may be eligible for award under this program, there are factors that may exclude an applicant from

receiving federal financial and nonfinancial assistance and benefits under this program (e.g., debarment or suspension of an individual, or a determination that an applicant is not responsible).

**D. Application Disposition**

Applicants may withdraw at any time before NIFA makes a final funding decision. NIFA will retain all applications, including withdrawn applications and unfunded applications.

## **PART VI. AWARD ADMINISTRATION**

### **A. General**

Within the limit of funds authorized, the NIFA awarding official will make grants to responsible and eligible applicants whose applications are judged most meritorious under the procedures set forth in this RFA. The date specified by the NIFA awarding official as the effective date of the grant must be no later than September 30 of the federal fiscal year in which the project is approved for support and funds are appropriated for such purpose, unless otherwise permitted by law. The project need not be initiated on the grant effective date, but as soon thereafter as practical so that project goals may be attained within the funded project period. All funds granted by NIFA under this RFA may be used only for the purpose for which they are granted in accordance with the approved application and budget, regulations, terms and conditions of the award, applicable federal cost principles, USDA assistance regulations, and [NIFA General Awards Administration Provisions 7 CFR part 3430, subparts A through E](#).

*Award Notice.* The award document will provide pertinent instructions and information as described in [2 CFR 200.210](#) (see [NIFA's Terms and Conditions](#)).

### **B. Administrative and National Policy Requirements**

Several federal statutes and regulations apply to grant applications and the projects outlined in this RFA (some are listed here: [Federal Regulations](#)). Unless specifically noted by statute or award-specific requirements, [NIFA Policy Guide](#) applies to all NIFA awards.

## **PART VII. OTHER INFORMATION**

### **A. Use of Funds and Changes in Budget**

***Delegation of fiscal responsibility.*** Unless the terms and conditions of the award state otherwise, awardees may not in whole or in part delegate or transfer to another person, institution, or organization the responsibility for use or expenditure of award funds.

***Changes in Budget or Project Plans.*** In accordance with [2 CFR 200.308](#), awardees must request prior approval from NIFA for the following program or budget-related reasons (the awardee is subject to the terms and conditions identified in the award):

1. Change in the scope or the objective of the project or program without prior written approval (even if there is no associated budget revision requiring);
2. Change in a key person specified in the application or the federal award;
3. Disengagement from the project for more than three months, or a 25 percent reduction in time devoted to the project;
4. Inclusion of costs that require prior approval in accordance with [2 CFR 200 Subpart E \(Cost Principles\)](#), or [45 CFR Part 75 Appendix IX, \(Principles for Determining Costs Applicable to Research and Development under Awards and Contracts with Hospitals\)](#), or [48 CFR](#), unless waived by the federal awarding agency;
5. [48 CFR Part 31, Contract Cost Principles and Procedures](#);
6. Transfer of funds budgeted for participant support costs to other categories of expense ([2 CFR 200.456 Participant support costs](#));
7. Sub-awarding, transferring or contracting out of any work under a federal award, including fixed amount sub-awards (see [2 CFR 200.333, Fixed Amount Sub-awards](#)), unless described in the application and funded in the approved federal awards. This provision does not apply to the acquisition of supplies, material, equipment, or general support services;
8. Changes in the approved cost-sharing or matching provided by the non-federal entity; and
9. The need for additional federal funds to complete the project.

### **B. Confidential Aspects of Applications and Awards**

When an application results in an award, it becomes a part of NIFA transaction records, which are available to the public. Information that the Secretary of Agriculture determines to be confidential, privileged, or proprietary in nature will be held in confidence to the extent permitted by law. Therefore, applicants should clearly mark any information within the application they wish to have considered as confidential, privileged, or proprietary. NIFA will retain a copy of an application that does not result in an award for three years. Such an application will be released only with the consent of the applicant or to the extent required by law. An applicant may withdraw at any time prior to the final action thereon.

### **C. Regulatory Information**

This program is not subject to the provisions of [Executive Order 12372](#), which requires intergovernmental consultation with state and local officials. Under the provisions of the Paperwork Reduction Act of 1995 ([44 U.S.C. Chapter 35](#)), the collection of information requirements contained in this notice have been approved under [OMB Document No. 0524-0039](#).

## APPENDIX I: AGENCY CONTACT

### Program Contact

Name	Email	Telephone
Carlos Ortiz, PhD	<a href="mailto:carlos.ortiz@usda.gov">carlos.ortiz@usda.gov</a>	202-445-5594

For administrative questions related to

1. Grants.gov, see Part IV of this RFA
2. Other RFA or application questions, please email [grantapplicationquestions@usda.gov](mailto:grantapplicationquestions@usda.gov)
3. Awards under this RFA, please email [awards@usda.gov](mailto:awards@usda.gov)

#### **U.S. Postal Mailing Address:**

National Institute of Food and Agriculture  
U.S. Department of Agriculture  
P.O. Box 419205, MS 10000  
Kansas City, MO 64141-6205

#### **Courier/Package Delivery Address:**

National Institute of Food and Agriculture  
United States Department of Agriculture  
2312 East Bannister Road, MS 10000  
Kansas City, MO 64141-3061



## APPENDIX II: GLOSSARY OF TERMS

Name	Acronyms
Authorized Representative	AR
Agricultural Research, Extension, and Education reform Act of 1998	AREERA
Catalog of Federal Domestic Assistance	CFDA
Data Management Plan	DMP
Food, Agricultural, Natural Resources and Human Sciences	FANH
Food, Conservation, and Energy Act	FCEA
Indirect Cost	IDC
National Agricultural Research, Extension, and Teaching Policy Act	NARETPA
National Institute of Food and Agriculture	NIFA
Request for Application	RFA
Research, Education, and Economics	REE
Science, Technology, Engineering or Mathematics	STEM
Total Federal Funds Awarded	TFFA
United States Department of Agriculture	USDA
Women and Minorities in Science, Technology, Engineering, and Mathematics Fields Program	WAMS

## APPENDIX III: DEFINITIONS

Refer to [7 CFR 3430 Competitive and Noncompetitive Non-formula Federal Assistance Programs – General Award Administrative Provisions](#) for additional definitions.

Matching: The process through which a grant recipient match awarded USDA funds with cash and in-kind contributions on a dollar-for-dollar basis. The matching funds must derive from non-Federal sources.

New Application: An application not previously submitted to a program.

Resubmitted Application: A project application that was previously submitted to a program, but the application was not funded.

Institution of Higher Education: An educational institution in any state that:

1. Admits as regular students those persons having a certificate of graduation from a school providing secondary education, or the recognized equivalent of such a certificate;
2. Is legally authorized within such state to provide a program of education beyond secondary education;
3. Provides an educational program for which the institution awards a bachelor's degree or provides not less than a 2-year program that is acceptable for full credit toward such a degree;
4. Is a public or other nonprofit institution; and
5. Is accredited by a nationally recognized accrediting agency or association, or if not so accredited, is an institution that has been granted pre-accreditation status by such an agency or association that has been recognized by the Secretary of Education for the granting of pre-accreditation status, and the Secretary of Education has determined that there is satisfactory assurance that the institution will meet the accreditation standards of such an agency or association within a reasonable time.

K-14: Kindergarten through twelfth grade plus two years of post-secondary schooling (e.g., vocational technical institutions or community or junior colleges); it does not include 4-year colleges or universities.

Partnership: Requires that all partners have a substantial involvement in the project throughout the life of the project. If a partnership between multiple entities is proposed, the proposal should clearly identify the following:

1. A narrative of each entity's clearly established role in the project;
2. How each entity involved as a partner on the project will contribute to execution of project objectives, determine experimental design, develop the project work plan and timetable, and submit collaborative, timely reports; and
3. A comprehensive project budget that reflects each entity's financial or in-kind contribution to the total project budget costs.

Rural Area: Any locality that has a population of 50,000 inhabitants or less, and is generally characterized as having fewer than 1,000 inhabitants per square mile (U.S. Census Bureau).

Training: The planned and systematic acquisition of practical knowledge, skills or competencies required for a trade, occupation or profession delivered by formal classroom instruction, laboratory instruction, or practicum experience that prepares women and underrepresented minorities from rural areas for participation in STEM fields.

Underrepresented minority: Any ethnic group – African American, Alaskan Native, American Indian, Asian American, Hispanic American, Native Hawaiian, Pacific Islander, or any other group – whose representation among food and agriculture science professionals in science, technology, engineering, and mathematics (STEM) fields is disproportionately less than their proportion in the general population as indicated in standard statistical references.