



United States  
Department of  
Agriculture

National Institute  
of Food  
and Agriculture

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NIFA

# REQUEST FOR APPLICATION

## 1890 Institution Teaching, Research and Extension Capacity Building Grants (CBG) Program

**MODIFICATION: This RFA is an updated version of the FY 2020-FY 2021 solicitation. It includes only the references to FY 2021 funding; FY 2020 references have been eliminated. General updates and edits appear in dark red.**

**FUNDING YEAR:** FY 2021

**APPLICATION DEADLINE:** September 10, 2021

**LETTER OF INTENT DEADLINE:** Not Applicable

**AMOUNT AVAILABLE FY 2021:** Approximately \$24,693,760

**ASSISTANCE LISTING NUMBER:** 10.216

## INITIAL ANNOUNCEMENT

National Institute of Food and Agriculture, United States (U.S.) Department of Agriculture (USDA).

**Catalog of Federal Domestic Assistance.** The CBG is listed in the Assistance Listings under the number **10.216**.

**Table 1: Key Dates and Deadlines**

Task Description	Deadline
Application:	FY 2021: <b>September 10, 2021</b> 5:00 P.M. Eastern
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> )

**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 1890 Institution Teaching, Research and Extension Capacity Building Grants (CBG) Program RFA.

## **EXECUTIVE SUMMARY**

NIFA requests applications for the CBG Program for fiscal year (FY) 2021 to strengthen research, teaching, and extension capacity needed to advance fundamental sciences, as well as translational research and development in support of food and agriculture; and to coordinate opportunities to build on these discoveries at the 1890 Land-Grant Institutions.

The anticipated amount available for grants in **FY 2021** is approximately **\$24.6 million**.

Eligible institutions may submit up to twelve Standard/Collaborative and three Professional Development applications per institution in **FY 2021**.

This notice identifies the objectives for CBG projects, deadline dates, funding information, eligibility criteria for projects and applicants, and application forms and associated instructions needed to apply for a CBG grant.

## TABLE OF CONTENTS

TABLE OF CONTENTS .....	4
PART I FUNDING OPPORTUNITY DESCRIPTION .....	6
A. Legislative Authority .....	6
B. Purpose and Priorities .....	6
PART II AWARD INFORMATION .....	9
A. Available Funding .....	9
B. Types of Application .....	9
C. Project and Grant Types .....	10
D. Ethical Conduct of Funded Projects .....	17
PART III ELIGIBILITY INFORMATION .....	18
A. Eligibility Requirements.....	18
B. Cost Sharing or Matching .....	19
PART IV APPLICATION AND SUBMISSION .....	20
A. Method of Application .....	20
B. Content and Form of the Application .....	20
C. Potential for Building and Strengthening Capacity and Advancing the Quality of Teaching/Education, Research, or Extension .....	22
D. Overall Approach, Cooperative Linkages and Quality of the Proposal .....	23
E. Funding Restrictions .....	30
PART V APPLICATION REVIEW REQUIREMENTS .....	31
A. NIFA’s Evaluation Process .....	31
B. Scientific Peer Review Process: .....	31
C. Evaluation Criteria.....	31
D. Organizational Management Information .....	33
E. Application Disposition .....	34
PART VI AWARD ADMINISTRATION.....	35
A. General.....	35
B. Administrative and National Policy Requirements.....	35
PART VII OTHER INFORMATION.....	36
A. Use of Funds and Changes in Budget .....	36
B. Confidential Aspects of Applications and Awards.....	36
C. Regulatory Information .....	36
APPENDIX I: AGENCY CONTACT .....	37
APPENDIX II: GLOSSARY OF TERMS .....	38
APPENDIX III: DEFINITIONS .....	38

## TABLE OF TABLES

Table 1: Key Dates and Deadlines .....	2
Table 2: CBG Priority Areas .....	7
Table 3: Program Key Information .....	8
Table 4: Applications, Awards, and Project Duration (by Grant Type).....	9
Table 5: Maximum Fund Request Allocations* .....	9
Table 6: Discipline Codes .....	15
Table 7: Eligible Institutions .....	18
Table 8: Steps to Obtain Application Materials .....	20
Table 9: Help and Resources .....	20
Table 10: Key Application Instructions .....	21
Figure 1: Expected Outcome Format .....	28

## PART I FUNDING OPPORTUNITY DESCRIPTION

### A. Legislative Authority

Authority for this program is contained in Section 1417 (b)(4) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA), as amended [[7 U.S.C. 3152 \(b\)\(4\)](#)] and pursuant to annual appropriations made available specifically for the 1890 Capacity Building Program. [Section 7107 of the Food, Conservation, and Energy Act of 2008 \(FCEA\) \(Pub. L. 110-246\)](#) amended the authority for the 1890 Capacity Building Program to allow for extension capacity building, as well as teaching and research.

See [Appendix III](#) for definitions of “capacity building” and “food and agricultural sciences.”

### B. Purpose and Priorities

CBG [under Assistance Listing 10.216](#), is designed specifically to build the institutional teaching, research, and extension capacities of the eligible institutions through cooperative programs with Federal and non-Federal entities.

The program is designed to achieve three major goals:

1. To advance the cultural diversity of the [food and agricultural](#) sciences scientific and professional workforce by attracting and educating more students from underrepresented groups.
2. To strengthen linkages among the 1890 institutions, other colleges and universities, USDA, other federal agencies, and private industry; and
3. To enhance and strengthen the quality of Teaching/Education, Research, and Extension programs at the 1890 institutions to establish them as full partners more readily in the U.S. [food and agricultural](#) sciences higher education system.

***eXtension.*** CBG encourages (but does not require) projects that develop content suitable for delivery through [eXtension](#).

***Global Engagement.*** NIFA supports global engagement that advances U.S. agricultural goals. NIFA recognizes that collaboration with international partners may be necessary to attain the agency's goals for U.S. agriculture, promote global competence of our nation's future agricultural workforce, and promote safe and nutritious food security in a growing world. Therefore, although application to this RFA is limited to eligible U.S. institutions, applicants may collaborate with international partners, to include subcontracts to international partners or other institutions. Applications must clearly demonstrate benefits to the U.S.

***Social and Behavioral Sciences.*** CBG supports social and behavioral sciences and encourages projects that integrate them with related biological sciences. Incorporating social and behavioral sciences is important for addressing many of the challenges that face agriculture and rural communities, such as increasing global demand for food production in the face of limited natural resources; improving health and reducing obesity by engaging in healthy diets; [fostering opportunities for positive youth development](#); and alleviating poverty by fostering economic opportunity.

***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. CBG 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.

**Metrics.** Applications must describe and assess the expected products, results, outcomes, and their potential impacts on strengthening **food and agriculture** Teaching/Education, Research, and Extension in the United States.

**Stakeholder Input.** NIFA, with stakeholder input, has identified 10 priority areas. Applications must encourage regional or national program delivery in one of the priority areas in **Table 2**.

**Table 2: CBG Priority Areas**

Human health, obesity as it relates to nutrition, and human sciences	Rural communities for the 21st century (expanded opportunities for small businesses and small farms)
Bioenergy/biofuel and natural resources	Sustainable agriculture
Food safety	<b>Positive</b> youth development
Water quality	Family and consumer sciences
Global food security and agricultural biosecurity	Environmental sciences

### **Other Areas in General Food & Agricultural Science**

This priority area is for innovative applications in Teaching/Education, Research, or Extension in areas that address local, regional, or national issues in the **food and agricultural** sciences not included in the priority areas listed above. Projects in this area may not fit any of the USDA or NIFA Strategic Goals, but address an emerging local, regional, or national issue.

### **Background**

CBG advances food and agricultural sciences, including conventional and organic food production systems. The program directly aligns with [USDA Strategic Plan](#), Goal #4: Facilitate Rural Prosperity and Economic Development; Objective 4.1: Expand rural business opportunity and rural quality of life with access to capital; improved infrastructure, broadband access and connectivity; and support for workforce availability.

The program area priorities in this RFA also align with the theme outlined in the [USDA Science Blueprint](#). Theme 5: Ag Science Policy Leadership/Beacon for Science/ Objective: *Develop and expand degree, certificate, curriculum, and youth programs that integrate science, technology, engineering, and mathematics (STEM) into instruction, considering real world challenges relevant to agricultural and food science.*

The outcomes of projects supported through this RFA are expected to provide foundations for achieving the goals of the [USDA Agriculture Innovation Agenda](#).

Additional requirements on expected performance goals, indicators and targets may be required as a condition of award.

**Table 3: Program Key Information**

<b>Title</b>	<b>Description</b>
Program Code:	Research (EQ), Teaching (EP), Extension (EWE)
Program Code Name:	1890 Capacity Building Grants Program (CBG)
CFDA Number	10.216
Project Type:	Research Project, Teaching/Education Project, Extension Project, Integrated Project
Grant Type:	Professional Development Grant, Standard Grant, Collaborative Grant
Application Deadline	FY 2021: <b>September 10, 2021</b>
Grant Duration:	24-36 Months (Standard/Collaborative Grant) 12 Months (Professional Development Grant)
Anticipated # of Awards:	50
Maximum Award Amount:	<b>Approximately \$750,000</b>

## PART II AWARD INFORMATION

### A. Available Funding

The anticipated amount available for CBG in **FY 2021** is approximately **\$24.6 million**. The assistance instrument will be in the form of grants. 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.

**Table 4: Applications, Awards, and Project Duration (by Grant Type)**

Grant Type	Maximum # of Applications Per Institution	Maximum # of Awards	Project Duration
Professional Development	3	1 award per faculty member	12 months (funds may be used for salary and benefits up to one year)
Standard/ Collaborative	12	No limit, but institution cannot receive more than 10% of the available funds	Up to 36 months

**Table 5: Maximum Fund Request Allocations\***

Project Types (up and down) Grant Types (left to right)	Standard	Collaborative	Professional Development
Teaching/Education	\$150,000	\$300,000	\$100,000
Research	\$300,000	\$500,000	\$100,000
Extension	\$250,000	\$350,000	\$100,000
Integrated	\$600,000	\$600,000	N/A

*\*See pages 13-14 for additional funding for AI*

### B. Types of Application

NIFA will evaluate applications using the criteria described in [Part V](#) of this RFA. Applications for **FY 2021** are limited to the following application 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 the response to the previous review panel summary 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).

3. *Renewal application.* Renewal applications must contain the same information as required for new applications and must contain a *progress report*. The progress report must include the implementation of the data management plan (DMP) of the previously funded project. Renewal applications are subject to the same criteria and due dates herein. Applicants submitting a renewal application must enter the NIFA-assigned proposal number of the previously approved 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.

4. **Project Types.** Applicants must propose one of the following project types:
  - a. **Teaching/Education Projects:** A teaching or education project should develop human capital in order to help meet current and future national **food and agricultural** sciences workplace needs. Examples of relevant activities under this project type include (but are not limited to) the following: formal classroom instruction, laboratory instruction, and practicum experience such as faculty development, student recruitment and services, curriculum development, instructional materials and equipment, and innovative teaching methodologies.

**Need Areas:** Teaching/Education applications must demonstrate how the chosen Priority Area is addressed when selecting one of the following Teaching/Education Need Areas.

- i. *Curricula Design and Materials Development.* This Need Area promotes developing new (or adapting existing) curricula and related materials to meet changes anticipated within the **food and agricultural** sciences. Projects must be integrated and multidisciplinary and possess learner-centered instruction which will demonstrate an improvement in teaching and student learning against core course objectives. Applicants are expected to demonstrate how the project will reach large audiences efficiently and effectively, provide hands-on learning experiences, extend learning beyond the classroom, reinforce recent research on how to motivate students to learn, retain, apply, and transfer knowledge, skills, and competencies, and integrate and synthesize knowledge.
- ii. *Faculty Preparation and Enhancement for Education.* This Need Area prepares academic faculty for sustainable change to address emerging student clientele (demographic composition, learning styles, digital applicability), improving teaching competency (subject matter expertise and pedagogy), or developing student recruitment and advising skills (career opportunities in emerging agricultural sciences fields). Training of targeted faculty recipient(s) must be intentional and relevant to the identified educational needs of the students, who will be the beneficiaries of such faculty development.
- iii. *Instructional Delivery Systems.* This Need Area encourages the development and use of alternative methods of delivering instruction to enhance the quality, effectiveness, and cost efficiency of teaching programs. Examples of alternative methods of delivering instruction include (but are not limited to): using state-of-the-art digital technology; faculty sharing, cross enrollments, joint degrees,

teleconferencing; networking via satellite communications; e-learning and online instruction; or utilizing mobile classrooms/laboratories and individualized learning centers. Multi-institutional, regional, or national collaborations are encouraged. Emphasis should be on improving the art of teaching by faculty.

- iv. *Scientific Instrumentation for Teaching.* This Need Area provides students with the necessary experience with suitable, up-to-date equipment to involve them in work central to understanding advances in the **food and agricultural** sciences and to prepare them for work or further graduate/professional training. Additionally, this Need Area will support the acquisition of instructional laboratory and classroom equipment.
  - v. *Student Experiential Learning.* This Need Area encourages the development of new student learning opportunities where students are placed in team-oriented, problem-solving, decision-making situations in the context of real-world experiences. Experiential learning in laboratory research or other internships with business and industry, community organizations, Federal agencies, and other domains that provide knowledge and skills for graduate study will be given priority.
  - vi. *Student Recruitment and Retention.* This Need Area aims to enhance student recruitment and retention programs in order to strengthen the Nation's scientific and professional workforce. Recruitment and retention efforts should be summarized quantitatively (i.e., numbers of students recruited against those contacted) and qualitatively (i.e., lessons learned that improve future recruitment strategies).
- b. **Research Projects:** Single-function research projects support fundamental or applied research conducted by individual investigators, co-investigators within the same discipline, or multidisciplinary teams. The following must be considered when developing research applications:
- i. Fundamental research means research that: (i) increases knowledge or understanding of the fundamental aspects of phenomena and has the potential for broad application and, (ii) impacts agriculture, food, nutrition, or the environment.
  - ii. Applied research means research that includes expansion of the findings of fundamental research to uncover practical ways in which new knowledge can be advanced to benefit individuals and society; and/or
  - iii. Multi-disciplinary projects are those in which investigators from two or more disciplines collaborate closely to address a common problem. These collaborations, where appropriate, may integrate the biological, physical, chemical, or social sciences.

**Need Areas.** Research applications must demonstrate how the chosen Priority Area is addressed when selecting one of the following Research Need Areas:

*Studies and Experimentation in Food **and** Agricultural Sciences.* The purpose of this Need Area is to advance the body of knowledge in basic and applied natural and social sciences that comprise the **food and agricultural** sciences. Projects addressing this Area are encouraged to focus on multidisciplinary and interdisciplinary research activities

- addressing critical issues rather than single discipline-specific research studies.
- i. *Centralized Research Support Systems.* The purpose of this Need Area is to establish centralized research support systems that:
    - meet national needs or serve regions or 1890 institution clientele that cannot otherwise afford or does not have access to such support; or
    - provide research support more economically, thereby freeing up resources for other research uses. You must demonstrate how your chosen Priority Area is addressed when selecting this Need Area.
  
  - c. ***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. Program delivery may range from community-based to national audiences and use communication methods from face-to-face to electronic or combinations thereof. 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. These projects must lead to measurable, documented changes in learning, actions, or conditions in an identified audience or stakeholder group. These projects must synthesize and incorporate a wide range of the latest relevant research results.

**Extension applications must demonstrate how the chosen Priority Area is addressed when selecting one of the following Extension Need Areas.**

- i. *Extension Program Development Support Systems.* The purpose of this Need Area is to increase the quality of extension education programs to clientele through training of Extension specialists, educators, paraprofessionals, technicians, and volunteers. The training may focus on professional development, leadership development, application of the Extension program development model, development of train-the-trainer models, volunteer development, volunteer delivery systems, etc. This Need Area will also include program accountability support systems which will translate into the delivery of more effective programs by enhancing the expertise and instruments available to effectively report impacts and evaluate Extension programs.
  
- ii. *Extension Technology Upgrades.* The purpose of this Need Area is to provide funds to upgrade traditional equipment and instruments, establish mobile delivery systems (laboratories and food safety kitchens, etc.), and offer emerging delivery technologies (e.g., IT applications such as distance education, web conferencing, podcasting, and **social media** interfaces).
  
- iii. *Extension Delivery/Methodology.* The purpose of this Need Area is to: develop effective methodologies, strategies, or delivery systems to enhance services to the underserved, including developing new or modifying existing curriculums; establish

program centers, experiential learning programs, or after-school programs; and utilize research results for effective community-based programs.

- iv. *Other Extension Initiatives.* The purpose of this Need Area is to support projects that may not fit the Need Areas above, but are creative initiatives designed to provide enhancement of the institutions' Extension capacity.
  
- d. *Integrated Projects.* An Integrated Project includes at least two of the three functions of the agricultural knowledge system (i.e., research, teaching/education, and extension) within a project. The project must name one of the project types (teaching/education, research, or extension) as the **primary project type**. The primary project type is defined as the area which will receive most of the funding (up to two-thirds of the total funding). There is no program code for the integrated application. Therefore, it is imperative that the applicants clearly identify the primary project type in their summary and select the appropriate program code for this area.

The functions addressed in the project must be focused around a problem or issue and be interwoven throughout the life of the project to complement and reinforce one another. The functions must 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 applications must include individuals on the project team with significant expertise in each component of the project (research, teaching/education, and/or extension). Integrated applications may be submitted by a single eligible institution where the expertise for all areas (research, teaching/education, and/or extension) are within the Project Director's (PD) institution or multi-institutions where the expertise for one or two of the areas are from another institution(s).

For additional information on integrated programs, including tips for writing Integrated Project applications and an example of an integrated application, see [Integrated Programs Application Information](#). You are also encouraged to contact the Program Contact to discuss the anticipated project parameters and outcomes to ensure the application content appropriately meets the requirements of an Integrated Project.

***Building Artificial Intelligence (AI) Capacity for Education, Research and Extension at 1890 Institutions:*** In support of the [Executive Order on Maintaining American Leadership in Artificial Intelligence](#), [USDA Science Blueprint](#) and [USDA Agriculture Innovation Agenda](#), the 1890 CBG program for FY2021 is seeking proposals that strengthen artificial intelligence and machine learning capacity in food and agricultural sciences. Examples of relevant activities under this Need Area include (but are not limited to) curricula design and materials development, scientific instrumentation for teaching, student experiential learning, and student recruitment and retention. Research proposals could include application of artificial intelligence and machine learning for (including but not limited to) monitoring, analytics, and automation in all food and agricultural disciplines, including precision crop agriculture, precision livestock farming, and advanced food manufacturing. Extension proposals should address how artificial intelligence and machine learning tools could be applied to improve access to information and enhance extension services. USDA-NIFA and NSF have recently established nationwide network of artificial intelligence research institutes (<https://nifa.usda.gov/press-release/artificial->

intelligence-research). Applicants are strongly encouraged to foster collaborations with the following USDA-NIFA funded AI institutes:

USDA-NIFA AI Institute for Future Agricultural Resilience, Management, and Sustainability. Dr. Vikram Adve, Director, University of Illinois at Urbana-Champaign, (217) 244-2016; [vadve@illinois.edu](mailto:vadve@illinois.edu)

USDA-NIFA AI Institute for Next Generation Food Systems. Dr. Ilias Tagkopoulos, Director, University of California, Davis, (530) 752-4821/ (530) 752-7707; [itagkopoulos@ucdavis.edu](mailto:itagkopoulos@ucdavis.edu)

Applicants may partner with other institutions with AI programs but must obtain prior approval from NIFA before submitting the proposal. Prior approval requests should include justification for such a partnership.

Budget: In addition to the budget allocation described on page 9, the successful applicant with an AI focus may request up to \$150,000.

**Discipline Codes.** Eligible institutions may, within the Teaching/Education, Research, or Extension Project Need Areas identified for support, propose projects in any discipline(s) or subject matter area(s) of the **food and agricultural** sciences noted in **Table 6**. Applicants are to identify a ***primary discipline code*** and may identify one additional discipline code that categorizes the project application. At review, each application is evaluated by three peer reviewers. The discipline codes selected by the applicants are used to match reviewers' education and expertise to the applications.

**Table 6: Discipline Codes**

<b>Teaching/Education Codes</b>	<b>Discipline</b>
T1	Agribusiness Management & Marketing
T2	Agricultural Engineering
T3	Animal Sciences
T4	Aquaculture
T5	Data Science
T6	Entomology
T7	Environmental Science & Natural Resource Conservation
T8	Food Science/Technology
T9	General Agricultural Science
T10	Human Sciences
T11	Human Nutrition
T12	International Education
T13	Plant Sciences
T14	Related Biological Sciences
T15	Rural Development/Social Science
T16	Veterinary Science
<b>T17</b>	<b>Artificial Intelligence</b>
<b>Research Codes</b>	<b>Discipline</b>
R1	Agribusiness Management & Marketing
R2	Agricultural Engineering
R3	Agricultural Social Sciences
R4	Animal Sciences
R5	Aquaculture
R6	Conservation and Renewable Natural Resources
R7	Data Science
R8	Entomology
R9	Environmental Sciences/Management
R10	Food Science/Technology
R11	Human Nutrition
R12	International Education/Research
R13	Plant Sciences
R14	Related Biological Sciences
R15	Soil Sciences
R16	Human Sciences
<b>R17</b>	<b>Artificial Intelligence</b>
<b>Extension Codes</b>	<b>Discipline</b>
E1	4-H Youth Development
E2	Agriculture
E3	Leadership Development
E4	Natural Resources
E5	Family and Consumer Sciences
E6	Community and Economic Development
E7	International Extension

5. **Grant Types.** Applicants must select the appropriate grant type:

- a. **Standard Grant:** 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. Standard Grants support targeted original scientific Teaching/Education, Research, Extension, or Integrated Projects. An eligible, individual institution, independent branch campus, or branch institution of a State system may submit a grant application for project activities to be undertaken principally on behalf of its own students or faculty, and to be managed primarily by its own personnel. The project is to be executed, without the requirement of sharing grant funds with other project partners (subaward budgets are not allowable). Applications for Standard Grants must address local or regional problems or opportunities in one of the listed Priority Areas (Part I, Table 2). The application must have the potential to encourage regional or national program delivery in one of the selected priority areas. A Project Director may receive only one new award as the lead individual in a Need Area that focuses on a single subject or discipline. **Funds do not** have to be equally divided among project years.
- b. **Collaborative Grant:** Collaborative Grants support projects with at least one additional partner or a multi-partner approach to enhance Teaching/Education, Research, and Extension programs. Collaborative Grants should build linkages to generate a critical mass of expertise, skill, and technology to address programs related to the **food and agricultural** sciences (applicants should address one of the listed Priority Areas (Part I, Table 2). Projects should be multidisciplinary and/or interdisciplinary and should address issues at the local, state, regional, and/or national level(s). Grants can reduce duplication of efforts and/or build capacity and should be organized and led by a strong project director with documented project management knowledge and skills to organize and carry out the initiative. Collaborative Grants are expected to be larger than Standard Grants (refer to Part II, Table 5 for the maximum fund amounts). The partners must share grant funds (the applicant institution will transfer no more than 50% of the awarded funds to the other institutions participating in the project). A separate subaward budget is to be included in the application for each of the identified project partners. The award of grant funds through subawards is limited to the eligible applicant institutions and collaborating institutions.
- c. **Professional Development Grant:** Professional Development Grants are intended to provide an opportunity for individual faculty members (i.e., each award is to support one faculty member at the applicant university) to enhance the quality of their Teaching/Education, Research, and/or Extension work. Examples of projects addressing this area include, but are not limited to:
  - i. Gaining experience with recent developments or innovative technology relevant to their professional responsibilities.
  - ii. Working under the guidance and direction of experts who have substantial expertise in an area related to project/career goals.

- iii. Working with professionals or peers in government, industry, or colleges or universities to learn new applications and enhance networks within a field; and/or
- iv. Expanding competence with new methods of information delivery related to Teaching/Education and Extension.

Professional Development applications that support Teaching/Education, Research, and/or Extension faculty, may include approaches such as:

- i. Sabbaticals;
- ii. Mini-sabbaticals for short-term training;
- iii. Faculty exchanges; and/or
- iv. Continuing education.

The training must address critical U.S. **food and agricultural** sciences issues at the local, state, regional, and national level(s). The application should align with the university's strategic plan for **food and agricultural** sciences. Applications should also address one or more of the CBG priority areas identified in Part I, Table 2.

Funds may be used for salary and benefits (up to one year), travel, supplies and training/course fees. **Funds will not be awarded** to support activities in fulfillment of degree requirements or travel to make presentations at conferences or meetings.

#### **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.

## PART III ELIGIBILITY INFORMATION

### A. Eligibility Requirements

Applicants for the CBG 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.

Applications may only be submitted by eligible 1890 Land-Grant Institutions, including Tuskegee University, West Virginia State University, and Central State University (per Section 7129 of Pub. L. 113-79) [7 U.S.C. 3152\(d\)\(2\)](#). The eligible institutions are:

**Table 7: Eligible Institutions**

Eligible Applicants	
Alabama A&M University	Prairie View A&M University
Alcorn State University	South Carolina State University
Central State University	Southern University and A&M College
Delaware State University	Tennessee State University
Florida A&M University	Tuskegee University
Fort Valley State University	University of Arkansas-Pine Bluff
Kentucky State University	University of Maryland-Eastern Shore
Langston University	Virginia State University
Lincoln University (MO)	West Virginia State University
North Carolina A&T State University	

Faculty and students receiving support for **developmental activities or educational costs** must be an eligible participant (citizen or national of the United States as defined in Part VIII, E. – Definitions). Students must be enrolled at institutions that are eligible to receive CBG awards (see above paragraphs). Where student or faculty eligibility is claimed under 8 U.S.C. 1101(a) (22), documentary evidence from the United States Citizenship and Immigration Services (USCIS) as to such eligibility must be made available to NIFA upon request.

United States citizenship is not required for faculty who serve as PD, co-PD, or key personnel on a Standard or Collaborative project. United States citizenship is required for faculty who serve as PD on a Professional Development project.

*Faculty may not serve as PD on more than two active CBG projects.* If an applicant has two active projects, at least one project must be scheduled to expire by the end of the current fiscal year. Faculty may submit multiple Standard and/or Collaborative Grant applications as the lead PD to the CBG program in FY 2021. Additionally, there is no limit on the number of applications for which faculty may be listed as co-PD or key personnel. **NOTE:** All key personnel must submit a current and pending support form. Key personnel may not commit more than 100% effort on concurrent projects.

Collaborative and Integrated Project award recipients may subcontract, as deemed appropriate, to organizations not eligible to apply provided such organizations are necessary to conduct a successful project. The subcontract must advance capacity building at the 1890 institution in the area of the submitted application.

**B. Cost Sharing or Matching**

*No Match Required* - The CBG has *NO* matching requirement. NIFA will not factor matching resources into the review process as an evaluation criterion.

## 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 8** 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 8: 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	Use this funding opportunity number <b>USDA-NIFA-CBGP-008120</b> search for application here: <a href="#">Opportunity Package</a> .
Step Four: Assess Readiness	Contact an AR prior to starting an application to assess the organization’s readiness to submit an electronic application.

**Table 9: 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="#">Grants.gov iPortal</a>  <i>Key Information: Customer service business Hours 24/7, except <a href="#">federal holidays</a>.</i>	Email: <a href="mailto:policy@usda.gov">policy@usda.gov</a> <i>Key Information: Business hours: Monday thru Friday, 7a.m. – 5p.m. ET, except <a href="#">federal holidays</a></i>

### 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 10** outlines other key instructions for applicants.

**Table 10: Key Application Instructions**

<b>Instruction</b>	<b>References (All references are to the <u>Application Guide</u>)</b>
Attachments must be in a portable document format (PDF) format.	<b>Part III § 3</b>
Check the manifest of submitted files to verify attachments are in the correct format.	<b>Part III § 6.1</b>
Conduct an administrative review of the application before submission.	<b>Part VII</b>
Follow the submission instructions.	<b>Part IV § 1.5</b>
Provide an accurate email address, where designated, on the SF-424 R&R.	<b>Part IV § 1.5</b>
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 § 2** and **Part V § 2.17** of the [Application Guide](#) for the required certifications and assurances.

**SF 424 R&R Project/Performance Site Location(s).** See **Part V § 3** of the [Application Guide](#).

**R&R Other Project Information Form.** See **Part V § 4** 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 CBG. See **Part V § 4.7** of the [Application Guide](#) for instructions and suggested templates.
2. **Field 8.** Project Narrative (PN). For Standard and Collaborative Grant applications, the PN must not exceed 20 *1.5 spaced* pages of written text and up to 5 *1.5 spaced* additional pages for figures and tables (the font size for tables should be no smaller than 11 points, Times New Roman). Figures and tables may come after the 20 pages of text or be intertwined with the text (but they should not exceed 5 pages). For Professional Development Grant applications, the PN must not exceed eight pages, including figures and tables. 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. You are encouraged to include a table of contents in the project narrative, which will not count toward the narrative’s page limitation. After converting the narrative to PDF format and making the necessary

adjustments, you should verify that you have not exceeded the applicable page limit.

Proposals with project narratives that exceed the page limit requirement will not be accepted for review. Applicants must address all components of the Evaluation Criteria in their Project Narrative (see [Part V, B.](#)). The PN must include all the following:

- a. Data management plan (DMP). **Maximum of two pages. DMP does not count towards the page limit of the project narrative, and it should be placed directly after the 25-page narrative section in the application.**
- b. Logic model. The logic model is required for Integrated Project applications, and recommended for Teaching/Education, Research, and Extension Project applications. The logic model planning process is a tool that should be used to develop your project before writing your proposal. It should detail the activities, outputs, and outcomes of the proposed project. Two additional pages may be used solely for the logic model. The logic model does not count towards the page limit of the narrative, and it should be placed directly after the 25-page narrative section in the application. More information and resources related to the logic model planning process are provided at [Logic Model Planning Process](#).
- c. Response to previous review: The response to previous review must not exceed one *1.5 spaced* page. This does not count towards the page limit for the PN. This is only required for resubmitted applications.
- d. Cover Page (first page of the narrative) will not count towards the page limit of the PN and should include the following;
  - i. Type of Application (see [Part II, B.](#))
  - ii. Project Type (see [Part II, C.](#))
  - iii. Grant Type (see [Part II, C.](#))
  - iv. Need Area addressed (see [Part II, C.](#))
  - v. Program Code (see **Table 3**). For integrated project applications, the program code for the primary component must be listed. For example, if the primary component of an integrated project is research, then the applicant must indicate “EQ” as the program code.
  - vi. Primary CBG Priority Area (see **Table 2**)
  - vii. Discipline Code (see **Table 6**)

**For new and renewal applications, the cover page should come before the table of contents. For resubmitted applications, please use this order: 1) response to previous review, 2) cover page, 3) table of contents.**

**Standard and Collaborative Grant Applications.** To facilitate application review and evaluation, the applicant must include the following headings in the Project Narrative (A. through D.), followed by the applicant’s response for each numbered item under A. through D. below.

### **C. Potential for Building and Strengthening Capacity and Advancing the Quality of Teaching/Education, Research, or Extension**

1. **Significance of the Problem and Opportunity.** Clearly state the specific instructional, research, or extension problem or opportunity to be addressed and the connection(s) with the institutional goals, strategic plan, or Plan of Work.

**Project Justification.** Summarize the body of knowledge justifying the need for the proposed project using graphical and tabulated format when possible. Discuss how the project will be of value at the state, regional, national, or international level(s). Describe any ongoing or recently completed significant activities related to the proposed project for which previous funding was received under this program or other funding programs (including projects supported under the NIFA 1890 Facilities Grants Program and 1890 Formula Programs).

2. **Impact on Building and Strengthening Capacity.** Describe the institution's capability to perform the project and the degree to which the project will enhance its teaching/education, research, or extension capacity. Include a description of baseline information/preliminary data. Additionally, include the project's potential for adoption by other institutions.
3. **Continuation Plans.** Describe the likelihood of, or specific plans for, continuation or expansion of the project beyond the period of USDA support. Applicants must indicate if eventual self-support is built into the project and if plans are being made to institutionalize the program if it is successful.
4. **Innovation.** Describe the creative approach to 1) improving the quality of **food and agricultural** sciences, 2) the approach to solving a scientific problem or advancing a field of science that address objective(s) that are of high importance at the 1890 institution, and 3) the potential results in institutional capacity building.
5. **Multidisciplinary and/or Problem-based Focus.** Indicate how the teaching/education project is relevant to multiple disciplines in the **food and agricultural** sciences, or with other academic curricula and how the research or extension project is multidisciplinary and interdisciplinary, and/or involves integrated (teaching/education, research and extension) activities. Identify the field of science and the objective(s) that are of high importance and will be addressed at your institution. If partners are included, provide a concise plan on how they will be managed and coordinated. Identify potential results in 1890 institutional capacity building.
6. **Products and Results.** Explain, including metrics, the expected products, and results, outputs, and their potential impact on strengthening **food and agricultural** sciences education, research, and extension in the United States. Metrics to assess products and outputs are to be clearly delineated in the proposal. Describe the economic, environmental, or social gains resulting from the project outcomes (see Definitions, 'Outcomes' in Part VIII, E.). If the application has a collaborator(s), include a clear identification of the role of the collaborator(s), and the expected outcomes for the 1890 institution (see Part IV, B., c., Field 12 – Other Attachments).
7. **Institutional Commitment.** Explain the institutional resources (administrative, facilities, equipment, and/or materials) that are available to carry out the project.

#### **D. Overall Approach, Cooperative Linkages and Quality of the Proposal**

8. **Proposed Approach and Cooperative Linkages.** Cite and discuss the specific project objectives to be accomplished. For Collaborative Grant and Integrated Project proposals, identify the individual(s) responsible to accomplish each objective.
9. **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. Clearly identify and describe the metrics for evaluating successful project management. Discuss extent to which students from the 1890 institutions will be involved in the teaching/education, research, extension, or integrated project.
10. **Timetable.** Provide a timetable for conducting the project. Identify all important project milestones and dates as they relate to project start-up, execution, evaluation, dissemination, and closeout. Identify limitations that may impact the timetable and provide strategies to avoid or compensate for the limitations. For Collaborative Grant applications, include the responsibilities of all partners in the project timetable.
11. **Evaluation Plan.** Program evaluation is a systematic method for collecting, analyzing, and using information to answer basic questions about proposed initiatives to build or strengthen capacity of the institution in a specific area in the **food and agricultural** sciences. Provide a methodology and implementation plan for evaluating the accomplishment of stated objectives, results, and measurable outcomes during the project. Clearly identify the performance measure(s) by which the project's success will be assessed. In the evaluation plan, indicate the criteria and corresponding weight of each to be used in the evaluation process. Describe any data to be collected and analyzed and explain the methodology that will be used to determine the extent to which the needs underlying the project are met. Indicate how the evaluation will determine whether and to what degree the project had an impact on teaching/education, research, and extension capacity. Identify those personnel who will be responsible for assessing project results and administering the project evaluation and reporting process and include a description of their expertise or credentials. The evaluation plan is a crucial component of the application. The following outline may be used as a guide when developing an evaluation plan to monitor institutional capacity building/strengthening:
  - a. Section I: A description of the evaluation framework which specifies what you want to evaluate, what questions are to be addressed in the evaluation, and the timeframe for conducting the evaluation.
  - b. Section II: A description of the program implementation objectives.
  - c. Section III: A description of the program outcome objectives, performance measures, and impact.
  - d. Section IV: Procedures for managing and monitoring the evaluation and reporting.
12. **Dissemination Plan.** Document how project accomplishments (products, results, and impacts, etc.) will be disseminated to the broadest extent throughout the academic or scientific community and to policy makers and the public. Discuss the institution's

commitment to disseminate project results and products. Identify target audiences and explain methods of communication.

13. **Partnership and Collaborative Efforts.** Explain how the project will maximize partnership and collaborative efforts to strengthen **food and agricultural** sciences across teaching/education, research and extension (e.g., involvement of faculty in related disciplines at the same institution, Collaborative Grant applications with other educational institutions, or expand cooperative activities with business or industry at the 1890 institution). As appropriate, clearly describe the collaborative management plan to ensure successful outcomes towards project goals.
14. **Potential Pitfalls, Limitations, and Alternatives (if applicable).** Identify and explain any potential challenges that might impede progress during the duration of the project. Additionally, describe any potential strategies or alternatives that might be implemented to address such challenges. **This section is optional for all applications and therefore, it will not count against the applicant during the evaluation process.**

#### **E. Roles and Project Responsibility of Key Personnel**

15. **Number and Qualifications of Project Personnel.** The application must clearly explain the adequacy of the number and qualifications of key persons who will develop and carry out the project.
16. **Capacity of Personnel to carry out the Project.** Qualified and sufficient personnel are critical for meeting the capacity building objective of a project. Proposals must clearly identify the role of all key personnel, responsibilities, and outcomes for each member, and describe the management plan to assure successful project outcomes.

#### **F. Budget and Cost-Effectiveness**

17. **Budget (including Justification).** **In summary form**, explain how the total budget adequately supports the project. Details about the budget (as it pertains to the Evaluation Criteria in Part V., B.) should be included in the R&R Budget (see Part V, 7 of the NIFA Grants.gov Application Guide).
18. **Cost Effectiveness.** **In summary form**, explain 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. Details about the cost-effectiveness of the budget (as it pertains to the Evaluation Criteria in Part V., B.) should be included in the R&R Budget (see Part V, 7 of the NIFA Grants.gov Application Guide).

## **Professional Development Applications**

To facilitate application review and evaluation, the applicant must include the following headings in the Project Narrative (A. through D.), followed by the applicant's response for each item below.

- A. **Merit of the Proposed Activities as a Means of Enhancing the Capabilities and Competitiveness of the Applicant.** Describe the merit and appropriateness of the proposed activities and how they will provide professional development for the applicant. Explain the relevant methods that will be involved with the project. Describe the collaborators that will be involved and their respective role with the project and ensure that they are directly linked to the proposed objectives and activities. Identify all products, outputs, outcomes, and overall impact of the project, and ensure that they are appropriately linked to the project's objectives and activities. Include a realistic timetable that will ensure successful completion of the project.

**Potential Pitfalls, Limitations, and Alternatives (if applicable).** Identify and explain any potential challenges that might impede progress during the duration of the project. Additionally, describe any potential strategies or alternatives that might be implemented to address such challenges. **This section is optional for all applications and therefore, it will not count against the applicant during the evaluation process.**

- B. **Merit of Applicant's Experience.** Describe the applicant's previous experience and background, including (but not limited to) the following:
- 1) relevant professional development experience that provided appropriate knowledge and expertise in a **food and agricultural** science discipline, and
  - 2) relevant experience in teaching/education, research, and/or extension.
- C. **Relevance to 1890 Institution and U.S. Agriculture.** Describe the relevance of the project/training to the food, agriculture, and natural resources strategic plan at the institution. Additionally, explain the relevance of the project/training to long-range improvements in the sustainability of U.S. agriculture, the environment, human health and well-being, and rural communities.
- D. **Appropriateness and Cost-effectiveness of the Proposed Budget. In summary form,** explain how the total budget adequately supports the project, and the necessity and reasonableness of costs to carry out project activities and achieve project objectives. Details about the budget and its cost-effectiveness (as it pertains to the Evaluation Criteria in Part V., B.) should be included in the R&R Budget (see Part V, 7 of the NIFA Grants.gov Application Guide).

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

The following attachments must be included in your CBG application:

1. **Accomplishment report of previously funded projects (if applicable).** Project Directors with an active or previously received 1890 capacity building grant award must

submit a one-page accomplishment report (one report per project). The report must include impacts and outcomes of the funded project and briefly describe how the new proposal is related to the outcomes from the previous award. A copy of the REEport report must be included in the Appendix.

2. **Progress Report (if applicable).** This requirement only applies to the Renewal applications or Resubmitted Renewal applications (see Part II, B.). These applications must include a progress report within the applicable page limitation of the Project Narrative.
3. **Collaborative Arrangement Letter(s).** If it is necessary to enter into formal consulting or collaborative arrangements with others, such arrangements should be fully explained and justified in the project narrative (Partnership and Collaborative Efforts, Part IV, B.). If the consultant(s) or collaborator(s) are known at the time of the application, a vitae or resume should be provided. In addition, letters of support should be provided that describe the services that will be performed. You are required to provide additional information on consultants and collaborators in the budget portion of the application, including the rate of pay, letters of commitment, and vitae. Provide evidence (via letters from the parties involved in the partnership or collaborative arrangement) that indicates the roles, responsibilities, and anticipated outcomes from each member of the partnership. Partnership and Collaborative Letters must be signed by the Authorized Representatives (ARs). Letters should be submitted in PDF, and there is no page limit. If the application has a USDA collaborator(s), documentation of USDA – 1890 Institution collaboration must be provided in the application. The collaboration should advance capacity building at the 1890 institution in the area of the submitted application. Provide a letter (PDF format) from the USDA cooperating office that is **signed by the USDA Unit Director (supervisor of the USDA collaborating staff person) and the USDA collaborator (i.e., staff person who will work on the project)** that clearly identifies the role and expected outputs and outcomes of their participation. Identify the person(s) at each agency or office who will serve as liaison or technical (scientists, educator, etc.) contact for the project and provide their phone number and email address. **Due to potential conflicts of interest, NIFA collaborators are NOT permitted.**

**For Professional Development Applications** (e.g., sabbaticals and faculty exchanges): Provide documentation that arrangements have been made with a relevant expert(s) to serve as host, including:

- i. A letter from the home institution detailing the arrangements at the home institution with respect to salary, date, and duration of the professional development experience;
- ii. A letter from the host or training institution indicating willingness to serve in this capacity and a description of the host's contribution to the proposed activities, both scientifically and regarding the use of facilities and equipment; and
- iii. A statement signed by the Department Head or equivalent official at the host institution indicating a commitment to provide Teaching/Education, Research, and/or Extension related space and facilities for the period of the applicant's presence.

4. **Institution/School/Department Goals and Objectives.** Include an institutional letter indicating that the application is within the strategic plan of the institution in FANH sciences. The letter must describe which school or department at your institution would potentially benefit from funds to build or strengthen capacity. The letter must be developed on official university letterhead and signed by the Dean, Agricultural Research Director, or Extension Administrator (limit to one page, PDF format). **The institutional letter is required for all grant applications. Applications that do not include the institutional letter will not be accepted for review.**
  
5. **Expected Outcomes – PDF Attachment.** Title the attachment “Expected Outcomes” in the document header and save file as “Expected Outcomes.” Please use a format, similar to what is provided in **Figure 1** below, to submit expected outcomes and attach it as the last page of the application. A fillable version of this document can be found at: <https://nifa.usda.gov/resource/recommended-format-submitting-expected-impacts>

**Figure 1: Expected Outcome Format**

<b>Primary Project Function: (Choose one)</b>	
<b>Education, Extension, or Research</b>	
<b>DATA FOR MSI PROGRAMS: 1890s, HSI, 1994s, ANNH, Insular</b>	
<b>Expected outcomes during entire grant period</b>	<b>Number Expected</b>
1. Number of farmers/community members to be served, for example, provided with training and/or new information regarding markets, technology, production practices, etc.	
2. Number of products to be developed for the education and training of students through grant funds during the project period	
2-A. curricula, academic programs	
2-B. recruitment/retention programs	
2-C. teaching or educational materials, distance education capability, experiential learning opportunities	
3. Number of faculty supported by this grant for professional development during the grant period: participation in sabbaticals, workshops, conferences, etc.	
4. Number of students who will indirectly benefit from the products produced from the grant during the grant period (i.e., using the curriculum/instrumentation, enrolled in the program, recruited or retained but not paid by the grant using scholarships, fellowships, and assistantships).	
5. Number of <u>male</u> students to be directly supported by this grant (i.e., scholarships, fellowships, assistantships, internships included as a cost in your project budget) for undergraduate or post-graduate education.	
6. Number of underrepresented <sup>1</sup> <u>male</u> students to be supported during the grant period (provide the best estimate based on past experience)	

<sup>1</sup> Underrepresented: those whose representation among food and agricultural professionals is disproportionately less than their proportion in the general population as indicated in standard statistical references, or as documented on a case-by-case basis by national survey data (e.g., the U.S. Department of Education's Digest of Education Statistics, U.S. Department of Agriculture's Food and Agricultural Education Information Systems).

<b>Primary Project Function: (Choose one) Education, Extension, or Research</b>	
7. Number of <u>female</u> students to be directly supported by this grant (i.e., scholarships, fellowships, assistantships, internships included as a cost in your project budget) for undergraduate or post-graduate education	
8. Number of underrepresented <sup>1</sup> <u>female</u> students to be supported during the grant period (provide the best estimate based on past experience)	
9. Number of students supported by this grant (i.e., scholarships, fellowships, assistantships) who are pursuing their degree	
9-A. Two year or other certificates	
9-B. Undergraduate or other 4-year degrees	
9-C. Master's degree	
9-D. Ph.D. degree	
9-E. Postdoctoral training	
10. Number of students who will be supported by this grant on an internship or other experiential learning opportunity	
10-A. Domestic experiences, with a government or non-governmental organization that is not affiliated with your university	
10-B. International experiences, including study abroad, educational travel longer than a month, etc.	

Notes:

1. Provide your best estimate based on past experiences, graduation rates, retention rates, etc.
2. Number of underrepresented students to be supported during the grant period (questions #6 and #8) should be less than or equal to total number of students supported by the grant (questions #5 and #7).
3. Response to question #9 should be the sum of 9-A through 9-E.
4. Response to question #10 should be the sum of 10-A and 10-B.

**R&R Senior/Key Person Profile (Expanded).** See **Part V § 5** of the [Application Guide](#) for profile requirements, details about the biographical sketch, and suggested support templates. **Professional Development Applications** –Include Current and Pending Support forms for the Professional Development applicant and the host expert(s)/mentor(s) (if applicable).

**R&R Personal Data.** This information is voluntary and is not a precondition of award (see **Part V § 6** of the [Application Guide](#)).

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

1. 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 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](#)).

**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 “CBG” and the program code: Research (EQ), Teaching (EP), Extension (EWE). 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.”

## **E. 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 (see 7 CFR 3430.52(b)). 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. 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](#)).

### **B. 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:

- 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;
- the need to include experts from various areas of specialization within relevant scientific, education, or extension fields;
- 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;
- 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;
- the need to maintain a balanced composition with regard to minority and female representation and an equitable age distribution; and
- 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](#)).

### **C. Evaluation Criteria**

NIFA will use the following criteria to evaluate this RFA.

#### **Standard and Collaborative Grant Applications:**

Each application will be evaluated by three peer reviewers. We will use the evaluation criteria below (which are listed in priority order of importance) to review **Standard** and **Collaborative** applications submitted in response to this RFA:

- 1. Potential for Building and Strengthening Capacity and Advancing the Quality of Teaching/Education, Research or Extension.** This criterion is used to assess the likelihood that the project will have an impact on and advance the quality of the **food and agricultural sciences** by strengthening institutional capacities to meet clearly delineated needs of the 1890 institutional objectives, strategic plan, or Plan of Work. Elements considered include institutional goals in the **food and agricultural sciences**, NIFA/USDA's Strategic Goals and/or Objectives, identification of a problem or opportunity to be addressed as one of the Priority Areas, justification for the project, innovation, advancing educational equity, multidisciplinary and/or problem-based focus, the institution's capability to perform the project and the degree to which the project will strengthen its Teaching/Education, Research, or Extension capacity, and potential for adoption by other institutions. Elements include the institution's commitment to the project, the adequacy of institutional resources (administrative, facilities, equipment, and/or materials) available to carry out the project, potential for academic, research or extension enhancement, and plans for project continuation or expansion beyond the period of USDA support.
- 2. Overall Approach, Cooperative Linkages, and Quality of the Proposal.** This criterion relates to the soundness of the proposed approach, with an emphasis on the following: objectives that show a clear connection to the institutional goals or strategic plan or Plan of Work; methodology; plan of operation, and timetable that describes limitations and strategies to avoid or compensate for identified limitations. For collaborative grant proposals: a timetable that includes the responsibilities of all partners in the project timetable; expected products and results; an evaluation plan that includes performance measures to assess project success; and dissemination plans. For Teaching/Education, Research, Extension, and Integrated proposals: emphasis is placed on the identified core competencies that students and/or clients will attain through new knowledge, the quality of educational, research, and/or extension support provided to the applicant institution through its partnerships and collaborative initiatives, and on the potential cooperative linkages likely to evolve as a result of this project that clearly identifies the key personnel responsibilities for products, outputs, outcomes, and potential impacts. Metrics to assess products, outputs, and outcomes are to be clearly delineated in the proposal to include clear identification of the role of the partners and the outcomes for the 1890 institution. Participation of a USDA agency cooperator(s) is optional; however, if the application included a USDA cooperator(s), their role must be clearly identified. Overall quality of the proposal relates to the degree to which the proposal complies with the application guidelines. The proposal is enhanced by its adherence to instructions (cover page, table of contents, organization, pagination, margin, font size, the specified page limitation, appendices, etc.); accuracy of forms; clarity of budget justification; well-prepared vitae for all key personnel associated with the project; and presentation. Also assessed is how effectively ideas are presented, clearly articulated, and thoroughly explained, as well as the inclusion of all required forms.
- 3. Personnel Resources.** This criterion relates to the adequacy of the number and qualifications of key personnel who will develop and carry out the project, and the qualifications of project personnel who will manage the 1) successful attainment of the proposed outcomes, 2)

assessment of project results and impacts, and 3) dissemination of these findings. Proposals must clearly identify the role of all key personnel, responsibilities, and outcomes for each member, and describe the management plan to assure successful project outcomes. Qualified and sufficient personnel are critical for meeting the capacity building objective of a project.

4. **Budget and Cost-Effectiveness.** This criterion relates to the extent to which the total budget adequately 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, leverages additional funds, and focuses expertise and activity on high-priority Teaching/Education, Research, or Extension Need Areas based on the 1890 institutional objectives, strategic plan, or Plan of Work.

#### **Professional Development Applications:**

We will use the evaluation criteria below (which are listed in priority order of importance) to review **Professional Development** applications submitted in response to this RFA:

#### **1. Merit of the Proposed Activities as a Means of Enhancing the Capabilities and Competitiveness of the Applicant.**

- a. Relevant methods and appropriate activities;
- b. Appropriate collaborators;
- c. Clear objectives and targeted outcomes; and
- d. Realistic timetable for completion.

#### **2. Merit of Applicant's Experience.**

- e. Applicant's professional development experience; and
- f. Applicant's experience in teaching/education, research, and/or extension.

#### **3. Relevance to 1890 Institution and U.S. Agriculture.**

- g. Relevance of the project/training to the **food and agricultural sciences** strategic plan at the applicant's institution; and
- h. Relevance of the project/training to long-range improvements in the sustainability of U.S. agriculture, the environment, human health and well-being, and rural communities.

#### **4. Appropriateness and Cost-effectiveness of the Proposed Budget.**

- i. Budget, including justification; and
- j. Cost-effectiveness.

#### **D. 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).

**E. 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 200.211](#) (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 award

## 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 §200.75 Participant support costs](#));
7. Sub-awarding, transferring or contracting out of any work under a federal award, including fixed amount sub-awards (see [Fixed Amount Sub-awards §200.333](#)), 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

### Programmatic Contact

Name	Email	Telephone	Fax
Manoharan Muthusamy	<a href="mailto:manoharan.muthusamy@usda.gov">manoharan.muthusamy@usda.gov</a>	816-702-9676	

**For administrative questions related to:**

1. Grants.gov, see Part IV of this RFA
2. Other RFA or application questions, please email [policy@usda.gov](mailto:policy@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
Agriculture and Food Research Initiative	AFRI
Authorized Representative	AR
Agricultural Research, Extension, and Education reform Act of 1998	AREERA
Coordinated Agricultural Project	CAP
Catalog of Federal Domestic Assistance	CFDA
Center of Excellence	COE
Data Management Plan	DMP
National Institute of Food and Agriculture	NIFA
Request for Application	RFA
Research, Education, and Economics	REE
United States Department of Agriculture	USDA

### APPENDIX III: DEFINITIONS

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

<b>Terms</b>	<b>Definitions</b>
Capacity Building	Means enhancing and strengthening the quality and depth of an institution’s research, academic and/or extension programs as evidenced by its: faculty expertise, scientific and technical resources, research environment, curriculum, student experiential learning opportunities, scientific instrumentation, library resources, academic standing and racial, ethnic, or gender diversity of its faculty and student body, faculty and student recruitment and retention programs, extension delivery systems, organizational structures and reward systems for attracting and retaining first-rate research faculty or students at the graduate and post-doctorate levels.
Continuation Award	An award instrument by which NIFA agrees to support a specified level of effort for a predetermined period of time with a statement of intention to provide additional support at a future date, provided that performance has been satisfactory, appropriations are available for this purpose, and continued support would be in the best interest of the federal government and the public.
Eligible Participant	Means, for purposes of the Program Need Areas “Faculty Preparation and Enhancement for Teaching” and “Student Recruitment and Retention”, an individual who is a citizen or national of the United States as defined in this section.
Extension Application	Means an application that addresses one or more of the Extension Need Areas or specific subject matter/emphasis areas identified in the annual Request for Applications.
Extension Capacity	Means the quality and depth of an institution's Extension infrastructure as evidenced by its: curriculum, instructional delivery systems, Extension faculty, volunteer, and other program support systems, use of technology in program delivery, library resources and service to underserved populations.
Food and Agricultural Sciences	Means basic, applied, and developmental research, extension, and teaching/education activities in the food and fiber, agricultural, renewable natural resources, forestry, and physical and social sciences, in the broadest sense of these terms, including but not limited to, activities relating to the production, processing, marketing,

Terms	Definitions
	distribution, conservation, utilization, consumption, research, and development of food and agriculturally related products and services, and inclusive of programs in agriculture, natural resources, aquaculture, forestry, veterinary medicine, family and consumer sciences (previously known as home economics), rural human ecology, rural economic, community, or business development, and closely allied disciplines.
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.
Outcomes	Means specific, measurable project results and benefits that indicate the project's plan of operation has been achieved. Measurable outcomes include: <ul style="list-style-type: none"> <li>a. Results are intended or unintended consequences of the project, e.g., "...additional course materials now available online to reinforce student learning during non-classroom hours";</li> <li>b. Products may be actual items or services acquired with funds, e.g., "...mechanisms and content to transition existing course(s) or elements of course(s) for Web-based access" or "created new and innovative prevention and intervention initiatives"; and</li> <li>c. Impacts are a measure of the results by comparing what might have happened in the absence of the funded project.</li> </ul>
Plan of Operation	Means a detailed, step-by-step description of how the applicant intends to accomplish the project's outcomes. At a minimum, the plan should include a timetable indicating how outcomes are achieved, a description of resources to be used or acquired, and the responsibilities expected of all project personnel.
Renewal Application	A project application that seeks additional funding for a project beyond the period that was approved in an original or amended award.
Research Application	Means an application that addresses one or more of the Research Need Areas or specific subject matter/emphasis areas identified in the annual Request for Applications.
Research Capacity	Means the quality and depth of an institution's research infrastructure as evidenced by its: faculty expertise in the

Terms	Definitions
	natural or social sciences, scientific and technical resources, research environment, library resources, and organizational structures and reward systems for attracting and retaining first-rate research faculty or students at the graduate and post-doctorate levels.
Resubmitted Application	A project application that was previously submitted to a program, but the application was not funded.
Resubmitted Renewal Application	A project application that requests additional funding for a project beyond the period that was approved in the original award. This is an application that had previously been submitted for renewal to but not funded.
Teaching	Means formal classroom instruction, laboratory instruction, and practicum experience in the <b>food and agricultural</b> sciences and matters related thereto (such as faculty development, student recruitment and services, curriculum development, instructional materials and equipment, and innovative teaching methodologies) conducted by colleges and universities offering baccalaureate or higher degrees.
Teaching/Education Application	Means an application that addresses one or more of the Teaching/Education Need Areas or specific subject matter/emphasis areas identified in the annual Request for Applications and addressed by the applicant's proposal. (also see Teaching/Education Need Area)
Teaching capacity	Means the quality and depth of an institution's academic programs infrastructure.
Teaching/Education Need Area	Means the specific area(s) of educational focus identified in the annual Request for Applications and addressed by the applicant's proposal. (also see Teaching/Education application)
Underrepresented	Means those whose representation among food and agricultural professionals is disproportionately less than their proportion in the general population as indicated in standard statistical references, or as documented on a case- by-case basis by national survey data (e.g. the U.S. Department of Education's Digest of Education Statistics, U.S. Department of Agriculture's Food and Agricultural Education Information Systems, etc.).

USDA Agency Cooperator	Means any agency or office of the Department which has reviewed and endorsed an applicant's request for support, and indicates a willingness to make available non- monetary resources or technical assistance throughout the life of a project to ensure the accomplishment of the objectives of a grant awarded under this program.
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