Capacity Building Grants for Non-Land Grant Colleges of Agriculture (NLGCA) Program

FY 2017 Request for Applications (RFA)

APPLICATION DEADLINE: September 15, 2017

ELIGIBILITY: See Part III, A of RFA



United States Department of Agriculture

National Institute of Food and Agriculture

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE; U.S. DEPARTMENT OF AGRICULTURE

CAPACITY BUILDING GRANTS FOR NON-LAND GRANT COLLEGES OF AGRICULTURE PROGRAM (NLGCA)

INITIAL ANNOUNCEMENT

CATALOG OF FEDERAL DOMESTIC ASSISTANCE: This program is listed in the Catalog of Federal Domestic Assistance under 10.326.

DATES: Applications must be received by **5:00 p.m. Eastern Time** on **September 15, 2017**. Applications received after this deadline will normally not be considered for funding. Comments regarding this request for applications (RFA) are requested within six months from the issuance of this notice. Comments received after that date will be considered to the extent practicable.

STAKEHOLDER INPUT: We at the National Institute of Food and Agriculture (NIFA) seek your comments about this RFA. We will consider the comments when we develop the next RFA for the program, if applicable, and we'll use them to 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)). Submit written stakeholder comments by the deadline set forth in the DATES portion of this Notice via e-mail to: Policy@nifa.usda.gov. (This e-mail address is only for receiving comments regarding this RFA and *not* requesting information or forms.) In your comments, please state that you are responding to the Capacity Building Grants for Non-Land Grant Colleges of Agriculture Program (NLGCA) RFA.

EXECUTIVE SUMMARY: NIFA requests applications for the Capacity Building Grants for Non-Land Grant Colleges of Agriculture Program (NLGCA) for fiscal year (FY) 2017 to make competitive grants to Non-land Grant Colleges of Agriculture (NLGCA) Institutions to assist the NLGCA Institutions in maintaining and expanding the capacity to conduct education, research, and outreach/extension activities relating to agriculture, renewable resources, and other similar disciplines. The anticipated amount available for grants in FY 2017 is approximately $4.7 million.

This notice identifies the objectives for **NLGCA** projects, deadline dates, funding information, eligibility criteria, and application forms with associated instructions that are needed to apply for a NLGCA grant.

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PART I—FUNDING OPPORTUNITY DESCRIPTION

A. Legislative Authority and Background

This program is administered under the provisions of Section 1473F of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA), as added by Section 7138 of the Food, Conservation, and Energy Act of 2008, (7 USC 3319i).

B. Purpose and Priorities

The Department of Agriculture is designated as the lead Federal Agency that supports higher education in the food and agricultural sciences. In this context, NIFA has specific responsibility to initiate and support projects to strengthen higher education teaching programs in the food and agricultural sciences.

NIFA is soliciting applications for the NLGCA Program that will align to the mission and goals of the following:

(1) USDA Strategic Plan (http://nifa.usda.gov/resource/usda-strategic-plan-fy-2014-2018), specifically addressing Goal 1.
(2) USDA Research, Education and Economics (REE) Action Plan (March 2014 version), specifically addressing Goal 6.
(3) NIFA Strategic Plan (2014-2018) (http://nifa.usda.gov/sites/default/files/resource/NIFA%20Strategic%20Plan%20FY2014-FY2018.pdf), specifically addressing Strategic Goal No. 1.

As legislatively reauthorized, the purpose of this program is to assist the NLGCA Institutions in maintaining and expanding their capacity to conduct education, research, and outreach/extension activities relating to agriculture, renewable resources, and other similar disciplines. NLGCA Institutions may use the funds to maintain and expand capacity:

(A) to successfully compete for funds from Federal grants and other sources to carry out educational, research, and outreach/extension activities that address priority concerns of national, regional, State, and local interest;
(B) to disseminate information relating to priority concerns to: (i) interested members of the agriculture, renewable resources, and other relevant communities; (ii) the public; and (iii) any other interested entity;
(C) to encourage members of the agriculture, renewable resources, and other relevant communities to participate in priority education, research, and outreach/extension activities by providing matching funding to leverage grant funds; and

(D) through (i) the purchase or other acquisition of equipment and other infrastructure (not including alteration, repair, renovation, or construction of buildings); (ii) the professional growth and development of the faculty of the NLGCA Institution; and (iii) the development of graduate assistantships.

In efforts to carry out education, applied research, and outreach/extension, the NLGCA Program aligns its purpose and priorities with recommendations from the following reports: (i) National Research Council's publication: "How People Learn," available at: http://books.nap.edu/catalog.php?record_id=9853; and (ii) the National Research Council's 2009 report, Transforming Agricultural Education for a Changing World, which recommends that academic institutions should broaden the undergraduate student experience by integrating opportunities to participate in research, education, and extension. Furthermore, in 2012, the President's Council of Advisors on Science and Technology (PCAST) Report attested: "At the baccalaureate level, a comprehensive array of undergraduate programs relevant to agriculture and the food industry, as well as applied social and natural sciences, must remain strong and well-supported". The full PCAST report is available at: http://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast_agriculture_20121207.pdf. Increasingly, the leadership in the scientific community embraces multi-disciplinary efforts that integrate biological and social sciences. The incorporation of social sciences would result in successful and powerful academic foundations toward needed expertise and relevant professional skills employers anticipate and value; for example, in government, nonprofits, social services, education institutions, and businesses.

C. Program Area Description

Applications that address the national challenge to increase the number and diversity (i.e., having an agricultural sciences workforce representative of the Nation's population) of students entering food and agriculture-related science, technology, engineering, and mathematics (STEM) disciplines are encouraged.

Applicants are encouraged to submit applications that will result in building linkages with other institutions (including other colleges and universities, units of State governments, and private sector entities) having a significant ongoing commitment to the food and agricultural sciences generally and to the specific Need Area(s) for which a grant is requested (see below). The goals of such joint initiative should include maximizing the development and use of limited resources (including faculty, facilities, and equipment) by generating a critical mass of expertise and activity focused on a targeted Need Area(s); increasing cost-effectiveness through achieving economies of scale; strengthening the scope and quality of a project's impact; and promoting coalition building likely to transcend the project's lifetime and lead to future ventures.

Leadership Skills Development

The development of leadership skills, knowledge, and qualities are necessary to prepare students for agricultural related careers in private sector, government, and academia. NLGCA teaching applications must demonstrably incorporate a leadership development component to equip students with technical and leadership abilities upon graduation.

Specific activities may include:

- Developing practical applications to increase understanding of leadership roles, including critical thinking, problem solving, and communication skills; ethics and professionalism; and working in teams;

- Connecting the academic classroom experience with daily leadership roles and organizational activities;

- Providing opportunities for mentoring and shadowing; and,

- Organizing leadership academies, workshops, trainings, etc.

Incorporation of Social Sciences and Enhancing Impacts

The NLGCA Program supports social and behavioral science disciplines. NLGCA projects that integrate social and biological sciences to provide experiential learning opportunities for students in applied research, and related community development programs are encouraged. Incorporation of social and behavioral sciences is important for addressing many of the challenges facing agriculture and rural communities, such as increasing global demand for food production in the face of limited natural resources; improving health and reducing obesity by engaging in heathy diets; and alleviating poverty by fostering economic opportunity.

NLGCA encourages, but does not require, projects that develop content suitable for delivery through eXtension (https://extension.org/).

PART II—AWARD INFORMATION

A. Available Funding

The anticipated amount available for NLGCA grants in FY 2017 is approximately $4.7 million. The funds will be awarded through a grant. There is no commitment by USDA to fund any particular application or to make a specific number of awards.

The Automated Standard Applications for Payment System (ASAP), operated by the Department of Treasury's Bureau of the Fiscal Service, is the designated payment system for awards resulting from this RFA. For more information see https://www.fiscal.treasury.gov/fsservices/gov/pmt/asap/asap_home.htm.

B. Types of Applications

In FY 2017, you may submit applications to the NLGCA Program as one of the following grant types of requests:

(1) New application. This is a project application that has not been previously submitted to the NLGCA Program. We will review all new applications competitively using the screening for administrative requirements, review panel evaluation of proposals using evaluation criteria and selection process described in Part V—Application Review Requirements.

(2) Resubmitted application. This is a project application that had previously been submitted to the NLGCA Program but not funded. Project Directors (PDs) must respond to the previous review panel summary (see Response to Previous Review, Part IV). We must receive resubmitted applications by the relevant due dates. We will evaluate resubmitted applications in competition with other pending applications in the appropriate area to which they are assigned and review them according to the same evaluation criteria (Part V, B) as new applications.

C. Project Types

The four activities, (A) through (D) noted in Part I, B. can be undertaken through a variety of mechanisms, approaches, or strategies, any of which shall be part of an applicant's response to addressing one or more Project Types (i.e., education/teaching, research, outreach/extension or integrated) described below in this subpart. While addressing the legislative intent of this grant program, an applicant may include, but is not limited to, the following activities (as discussed in Part I, B.):

a) Successfully compete for funds from other sources:
By using NLGCA funds, grantees can -
- Develop pilot projects that may provide preliminary findings to support a full proposal;
- Build partnerships in order to develop collaborative projects that may be competitive for other funding sources;
- Leverage funds to support students and faculty time to work on developing new projects or instructional materials or tools; or

- Pursue other, similar activities to address this category.

b) Disseminate information to relevant groups:
NLGCA funds can be used to reach the relevant communities to increase awareness and participation in activities of high priority to agriculture and renewable resources through:
- Workshops, website development, or on-line discussions/forums, etc., that highlight community practices relevant to promoting partner engagement that advances food and agricultural sciences education, research and outreach/extension opportunities; or
- Pursue other, similar activities to address this category.

c) Encourage relevant groups or communities to participate in education, research and outreach/extension activities:
NLGCA institutions may use funds that will encourage communication, interaction, and participation in activities that will engage various communities and increase their interest in agriculture education, research and outreach/extension through:
- Building partnerships with local communities;
- Building partnerships with land-grant institutions;
- Reaching out to underrepresented and underserved groups including women and minorities in rural areas; or
- Pursuing other, similar activities to address this category.

d) Increase NLGCA infrastructure capacity:
Grant funds can be used to support the capacity building of NLGCA institutions through:
- Purchasing equipment that may be used for research or instructional materials;
- Building library collections (including on-line subscriptions) to keep content knowledge of faculty and build research background of students;
- Supporting professional development for faculty through research sabbaticals, exchange or visiting scientists programs, etc.; or
- Pursuing other, similar activities to address this category.

The NLGCA Program encourages **Integrated Project Types**, which are projects with at least two (2) of the three (3) components of research, education, or outreach/extension. An Integrated Project should include activities that are interwoven throughout the life of the project that complement and reinforce each other. Authorizing language for this grants program encourages "…members of the agriculture, renewable resources, and other relevant communities to participate in priority education, research, and outreach/extension activities…," therefore, Integrated Projects are expected to strengthen the capacity of NLGCA Institutions through close collaboration among one or more of the communities/partners as mentioned above. Although Integrated Project Types are encouraged, NLGCA is also accepting applications that will focus on single function Project Types. Therefore, applications may be submitted for one of the four Project Types (i.e., education, research, outreach/extension or integrated).

1. <u>Education/Teaching Projects</u>:

Applications with an education/teaching focus must address at least one of the following six **Education Need Areas** (C. 1. a- f) listed directly below. Applications must demonstrate how this

chosen Need Area will support the legislatively authorized purpose of this program, listed in Part I, B. Proposed education-focused activities shall support for-credit coursework (academic curriculum), leading to a degree within the broadly defined *food and agricultural sciences* disciplines. Projects shall address a documented issue/problem/challenge in education of national, regional, State, or local interest; be innovative; have potential for adoption by other academic institutions; exhibit broad-based applicability beyond a single course or an individual instructor; have a strong potential for institutionalization; and must be supported by evidence- based studies, publications, or practices.

Education Need Areas:

a) Curriculum Design, Materials Development, Library Resources and Instruction Delivery Systems

This Need Area promotes developing new (or adapting existing) curricula and related instructional materials and library resources to meet changes anticipated within the food and agricultural sciences system. Projects shall encourage integration and be multidisciplinary. Learner-centered instructional techniques, or other improvements in teaching and student learning are encouraged, and 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.

The purpose of this Need Area is to enhance the NLGCA Institution's capacity to promote new and improved curricula, instructional materials, and other learning resources to increase the quality of, and continuously renew, curricula in order to attract, recruit, and retain students in the food and agricultural sciences fields. The overall objective is to stimulate the development and use of exemplary education models and materials incorporating the most recent advances in subject matter and research on teaching and learning theory. Projects may emphasize, but are not limited to: the development of courses of study, degree programs, and instructional materials; incorporating alternative instructional methodologies that respond to differences in student learning styles; inter-institutional collaborations that deliver instruction in ways that maximize program quality and reduce unnecessary duplication; the use of new approaches to the study of traditional subjects; the introduction of new subjects, or new applications of knowledge pertaining to agriscience and agribusiness content. The end goal is to have these activities fully institutionalized so they can be sustained and not just a one-time activity, in order to show impacts on the institution's educational capacity.

The choice for which strategy to employ must be based on the most current research or studies and references must be included. Examples of eligible projects in this Education Need Area may include, but are not limited to, the following strategies:

- Designing course content around overarching and unifying concepts, skills and competencies, including innovative ways to integrate scientific research experiences, within the postsecondary curricula;

- Creating model curricula, laboratory, or student research experiences, especially activities that expand students' career interests in the food and agricultural sciences through mentoring or professional shadowing activities, internships or practicums including

international learning experiences, visiting lecturers, or other similar experiential learning activities such as hands-on, remote, and virtual laboratories;

- Developing internet-based approaches and systems for multi-institutional delivery and sharing of curriculum content to improve effectiveness and efficiencies; and

- Implementing other approaches to achieve the legislatively authorized purpose of the NLGCA program.

b) Scientific Instrumentation for Teaching and Research

The purpose of this Need Area is to provide students and faculty in science-oriented courses with suitable, up- to-date equipment in order to involve them in work essential to scientific understanding and progress. Applications may emphasize, but are not limited to acquiring new, state-of-the-art instructional, laboratory, classroom, and research scientific equipment to help assure the achievement and maintenance of outstanding food and agricultural sciences education programs, upgrading existing equipment, or replacing non-functional or obsolete equipment.

c) Student Recruitment, Retention, and Educational Equity

The purpose of this Need Area is to enhance educational equity for under-represented students, and to strengthen student recruitment and retention programs in order to promote the future strength of the Nation's specific, professional, and technical workforce in the food and agricultural sciences. Applications may emphasize, but are not limited to: initiating new projects or supplementing current efforts to attract increased number of students from under-represented groups, or communities/ collaborators/partners to engage in a robust exchange of ideas on more effective use of the full breadth of the Nation's intellectual resources; agricultural and science literacy program at high school level to attract students to college and careers in the food and agricultural sciences; and, mentoring programs and other initiatives for student retention.

d) Experiential Learning

The purpose of this Need Area is to further the development of student scientific and professional competencies through experiential learning programs including but not limited to:

- Fostering student experiential learning opportunities where students are placed in team-oriented, problem-solving, decision-making situations in the context of real-world situations. Experiential learning in laboratory research or field-based internships is encouraged, but any activity shall expose students to experiences directly supporting topics within the food and agricultural sciences. Such experiences must: (1) demonstrate how the experience will help meet students' career goals or produce 'society-ready' graduates, and (2) contain an evaluation process—involving the faculty and/or employer or mentor to assure that students meet project objectives.

- Establishing and promoting instructional methodologies to improve students' retention of subject content, develop students' analytical, interpersonal, leadership, communications, problem-solving, computational, and decision-making skills and abilities. These may take the form of undergraduate research opportunities, service learning, case studies, or other experiential learning activities.

- Creating career placement or higher education academic counseling activities, with the

expected outcome of encouraging postsecondary graduates to pursue higher degrees, especially those that support the food and agricultural sciences. Also refer to Leadership Skills Development mentioned above.

e) Professional Development for Faculty Members

This Need Area promotes postsecondary-focused activities that improve faculty members' teaching competencies and subject matter expertise in order to address emerging student demographic composition and learning styles. Developmental activities may include both formal training and informal continuing education.

The purpose of this Need Area is to enhance the NLGCA Institution's capacity to advance faculty development in the areas of teaching competency and leadership, subject matter expertise, or student recruitment and advising skills, in order to better advise and provide students the experience or knowledge that will encourage them to pursue advanced postsecondary degrees in the food and agricultural sciences, or prepare them for the food and agricultural sciences workforce. Training of targeted faculty recipients shall be intentional and relevant to the identified educational needs of the students, who will be the beneficiaries of such faculty development. Proposals may emphasize, but are not limited to: obtaining experience with recent developments and new applications in a discipline supporting the food and agricultural sciences, expanding competence using innovative technologies and new methods of instructional delivery, or in improving student advising skills.

Any faculty recipient of support must meet the requirements of an eligible participant. The choice for which strategy to employ shall be based on the most current research or studies and references must be included. Examples of eligible projects in this Education Need Area may include, but are not limited to, the following strategies:

- Developing a self-sustaining model for faculty professional development that better prepares new faculty for teaching careers, or provides retraining for experienced faculty;

- Promoting teaching and advising strategies to increase faculty understanding of how to recruit and retain students, especially within populations and cultures traditionally underrepresented in the food and agricultural sciences workforce;

- Developing faculty awareness of the importance of increasing the number, quality and diversity of postsecondary-level students enrolled in agricultural education degree programs, and engaging these students (and/or existing faculty in agricultural education) to more effectively interact with K-14 programs, especially to increase food and agriculture sciences education and career awareness among secondary and two-year postsecondary students and teachers;

- Creating assessments that document student learning outcomes, or that identify conceptual areas or skills particularly challenging to students, followed by appropriate changes in instructional approaches to effectively address these issues;

- Establishing systems that improve student learning across a curriculum, and identifying ways to redesign curricula to meet goals for achieving improved student learning and

competencies;

- Integrating current science and pedagogy into the teacher preparation curriculum or professional development program (this may involve actual hands-on research experiences for teachers, and as applicable, may be gained from partner institutions with strong research infrastructure and carried out as a summer sabbatical);

- Exploring Internet-based approaches for faculty professional development; or

- Supporting other approaches to achieve the legislatively authorized purpose of the NLGCA program.

f) Collaborative Interaction with Other Academic Institutions

This Need Area promotes postsecondary-focused activities and linkages between secondary, two-year postsecondary, and/or baccalaureate degree-granting institutions to maximize the development and use of resources supporting instruction within the food and agricultural sciences.

The purpose of this Need Area is to enhance the NLGCA institution's capacity to promote partnerships with secondary, two-year postsecondary, or other postsecondary academic institutions to support postsecondary instruction (i.e., providing coursework targeted at undergraduate students, but that may also be available for advanced placement credit for secondary students; for transfer credit from associate-degree programs into baccalaureate-level programs; or for postsecondary faculty development that includes research sabbaticals). The intent of these activities is to encourage and facilitate transfer and matriculation into postsecondary programs within the food and agricultural sciences. Emphasis between secondary and higher education institutions may focus on, but is not limited to, the development and use of articulation agreements, 2+2 or 2+2+2 arrangements, advanced placement credit transfer, or the sharing of faculty and facilities. Partnerships, collaborative arrangements and shared resources between institutions (including course credit sharing arrangements) are encouraged.

Projects must contribute to the academic community's understanding about how new strategies are transferred to diverse settings and about how they impact student learning. Evaluation plans shall explore opportunities for adapting new strategies in diverse educational settings. Projects that specifically address challenges to achieving widespread adoption of proven practice are especially encouraged.

The choice for which strategy to employ shall be based on the most current research or studies and references must be included. Examples of eligible projects in this Education Need Area may include, but are not limited to, the following strategies:

a. A project that focuses on developing and implementing comprehensive, multi-institutional practices proven to recruit and retain K-14 level graduates, with a focus on cultivating those students to pursue a postsecondary degree (**Note: NLGCA grant funding <u>may not</u> be used to provide student scholarships or other tuition-remission activity**);

b. A collaborative project between faculty from K-12, two-year postsecondary, and

baccalaureate-level schools that develops a functional plan facilitating seamless transfer of course credit between institutions;

c. An activity promoting faculty exchanges to help update course content or to encourage increased, hands-on student research experiences;

d. A pilot project that explores the practical aspects of using remote laboratories; moving research into the classroom; or instruction among several institutions;

e. A program to reduce duplication of similar educational resources across institutions and to increase instructional efficiencies. Examples may include multi-institutional or interstate approaches to curriculum development, faculty sharing, cross enrollments, joint degrees, regionalization of academic programs, regional and national workshops and symposia, and similar methodologies;

f. A project to establish and implement programs or procedures (faculty sharing, articulation agreements, electronic exchange of coursework, etc.) to disseminate curricula, instructional methods, or training practices to faculty across the state or region; or

g. Other approaches to achieve the legislatively authorized purpose of this program.

2. <u>Research Projects</u>:

Applications with a research focus must address at least one of the following two **Research Need Areas** (C. 2. a-b) listed directly below. Applications must demonstrate how this chosen Need Area will support the legislatively authorized purpose of this program, listed in Part I. B. Projects must address a demonstrated and/or documented issue/problem/challenge in research of national, regional, State, or local interest within the broadly defined food and agricultural sciences.

Both **Research Need Areas** may encourage graduate assistantships. Such student learning opportunities must emphasize team-oriented, problem-solving, decision-making situations in the context of addressing real-world research 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. Projects addressing graduate assistantships must: (1) demonstrate how the experience will produce qualified and well trained graduates; (2) contain an evaluation process involving both the faculty or mentor to assure that students meet project objectives; and (3) document that the field of science under consideration is experiencing a shortage of scientific and professional personnel, and how the project plans to address this deficiency. Individual students may be supported under this experiential learning opportunity for up to three (3) years (including summers, semesters, or semester breaks). Requested grant funds may be used as stipends for students while they are working in research/field settings. (**However, a NLGCA grant <u>may not</u> fund student scholarships or other tuition-remission activity**). Students will be required to prepare written and oral summaries of the experiential learning gained through this opportunity. To attract high-caliber students, stipends should be competitive with alternative employment options. A modest amount of funds may be requested for materials/supplies to facilitate a student's broad exposure to

research/field techniques and methodologies. Grant recipients are encouraged to take advantage of any related paid internship opportunities provided by County, State, Federal, business and industry sources.

Research Need Areas:

a) Studies and Experimentation in Food and Agricultural Sciences

The purpose of this Need Area (or initiative) is to advance the body of knowledge within the food and agricultural sciences. Projects addressing this Need Area are encouraged to focus on multidisciplinary and interdisciplinary research activities addressing critical issues rather than single, discipline-specific research studies.

Examples of studies and experiments considering integrated or multidisciplinary and/or interdisciplinary research activities that address this Research Need Area include, but not limited to:

- Conceiving, designing, and evaluating new bio-processing techniques for eliminating undesirable constituents from, or adding desirable ones to, food products;
- Developing bioenergy/fuel alternatives;
- Conducting plant or animal breeding programs to develop higher yielding and improved quality products and improved disease resistance;
- Proposing and evaluating methods to enhance utilization of the capabilities and resources of food and agricultural institutions to promote rural development (e.g., exploitation of new technologies by small rural businesses);
- Identifying control factors that influence consumer demand for agricultural products;
- Analyzing social, economic, and physiological aspects of nutrition and health, food choices, and life-style choices, and community strategies for meeting the changing needs of different population groups;
- Advancing the body of knowledge in highly important scientific, food and agriculture program areas such as human nutrition, food safety, sustainable agriculture, global climate change, natural resources management and the environment, biotechnology and genomics, newly developed research areas such as proteomics, metabolomics, nanotechnology, pharmaceutical qualities of medicinal plants, agribusiness management and marketing, integrated pest management, conventional and organic food production systems, and the human sciences; and
- Addressing other research areas of critical need within the food and agricultural sciences.

b) Centralized Research Support Systems

The purpose of this Need Area is to establish centralized research support systems that: (1) meet national needs or serve regions of NLGCA institutions; or (2) provide research support more economically, thereby freeing up resources for other research uses. Examples of projects that address this Research Need Area include, but are not limited to:

- Storing, maintaining, characterizing, evaluating, and enhancing germplasm for use by animal and plant breeders, including those using the techniques of biotechnology;
- Establishing digital databases of important scientific information (e.g., human nutrition, epidemiological, demographic, weather, economic, crop yields);
- Establishing expert service centers for sophisticated and highly specialized methodologies (e.g., evaluation of organoleptic and nutritional quality of foods,

toxicology, taxonomic identifications, consumer preferences demographics, and efficacy of medicinal plants);
- Enhancing technology and instrumentation for research and instruction; and
- Supporting other approaches to achieve the legislatively authorized purpose of this program.

3. <u>Outreach/Extension or Applied Projects</u>:

In addition to the Education/Teaching and Research Need Areas, applications may choose to develop studies that have relevancy and application within the communities that these institutions serve. Outreach/Extension or Applied Projects must demonstrate how this chosen Need Area will support the legislatively authorized purpose of this program, listed in Part I. B.

a) Applied Studies in the Food and Agricultural Sciences

The purpose of this Need Area is to apply the body of knowledge in those natural and social sciences that comprise the food and agricultural sciences to address real-world problems, including applied research activities focusing on community and economic development issues related to food, nutrition, conservation, and renewable natural resources. Illustrative examples, include, but are not limited to:

- Conducting plant or animal breeding programs to develop better crops, forests, or livestock (e.g., more disease resistant, more productive, yielding higher quality products);
- Conceiving, designing, and evaluating new bio-processing techniques for eliminating undesirable constituents from or adding desirable ones to food products;
- Proposing and evaluating ways to enhance utilization of the capabilities and resources of NLGCA institutions to promote rural development (e.g. exploitation of new technologies by small rural businesses);
- Identifying control factors influencing consumer demand for agricultural products;
- Analyzing social, economic, and physiological aspects of nutrition, housing, and lifestyle choices, and of community strategies for meeting the changing needs of different population groups; and,
- Studying other identified State, regional, community, national and global problems such as human nutrition and obesity prevention, sustainable agriculture, bioenergy, climate change, food safety, food security, biotechnology, conventional and organic food production systems, agribusiness management and marketing, and aquaculture (see Part I.B on areas of priorities).

b) Applied Research Support Systems

The purpose of this Need Area is to establish centralized support systems to meet State, regional, or community needs, or serve clientele that cannot otherwise afford or does not have ready access to the support in question, or to provide such support more economically thereby freeing up resources for other applied research uses. Examples include, but are not limited to:

- Storage, maintenance, characterization, evaluation, and enhancement of germplasm for use by animal and plant breeders (including those using the techniques of biotechnology);

- Establishment of digital databases to store and track important scientific information (e.g., epidemiological, demographic, nutrition, weather, economic, crop yields, animal migration patterns); and,

- Development, implementation, and maintenance of expert service centers for sophisticated and highly specialized methodologies (e.g., evaluation of nutritional quality of foods, toxicology, taxonomic identifications, consumer preferences and demographics).

c) Technology-based Information Delivery Systems
The purpose of this Need Area is to promote innovations and improvements in the delivery of benefits of food and agricultural sciences to producers and consumers, particularly those who are currently disproportionately low in receipt of such benefits. Examples include, but are not limited to:

- Computer-based decision support systems to assist small-scale farmers, ranchers, herders, or fishermen to take advantage of relevant technologies, programs, policies, etc.; and,

- Efficacious delivery systems for nutrition information or for resource management assistance for low income families and individuals.

d) Other Applied Research and Community Development Applications
The purpose of this Need Area is to encourage other creative projects, outside areas previously outlined, that are designed to provide needed enhancement to the capacity of NLGCA institutions to conduct applied research and related community development projects.

***Outreach/Extension Need Areas**:*

Applications with an outreach/extension focus must address at least one of the following six **Outreach/Extension Need Areas** (C. 3. a-f) listed directly below, and applications must demonstrate how this chosen Need Area will support legislatively authorized purpose of this program listed in Part I. B. Outreach/Extension -focused projects generally result in a primary, target beneficiary consisting of individuals and communities outside of a formal, academic program setting. Projects must address a demonstrated, documented issue/problem/challenge in outreach/extension of national, regional, State, or local interest within the broadly defined food and agricultural sciences.

a) 4-H, or Other, Similar Youth Development Activity
The purpose of this Need Area is to cultivate important life skills in youth that build character and assist them in making appropriate life and career choices. At-risk youth targeted in such projects shall be encouraged to participate in academic retention and enrichment programs.

b) Food and Agricultural Sciences
The purpose of this Need Area is to: 1) increase research and educational programs that help individuals learn new ways to produce income through alternative enterprises; 2) improve marketing strategies and management skills; and 3) assist farmers, ranchers, and foresters to

improve productivity through sound resource management strategies, including controlling crop pests, soil testing, livestock production practices, and marketing.

c) Leadership Development
The purpose of this Need Area is to train outreach/extension professionals and volunteers to deliver programs in agriculture, gardening, health and safety, family and consumer issues; and to support Agriculture in the Classroom, 4-H youth development, or other similar programs that encourage greater involvement and leadership roles within the community.

d) Natural Resources
The purpose of this Need Area is to inform landowners and homeowners how to use natural resources wisely and to protect the environment with educational programs in water quality, timber management, composting, lawn waste management, and recycling.

e) Human, Family and Consumer Sciences
The purpose of this Need Area is to help families become resilient and healthy by teaching nutrition, food preparation skills, positive child care, parenting, family communication, financial management, and health care strategies.

f) Community and Economic Development
The purpose of this Need Area is to assist local governments, community, and non-profit organizations to investigate and create viable options for economic and community development, such as improved job creation and retention, small- and medium-sized business development, effective and coordinated emergency response, solid waste disposal, tourism development, workforce education, and land-use planning, as well as to help with the development of small family-owned businesses.

4. <u>Integrated Projects</u>:

An Integrated Project includes at least two of the three functions of the agricultural knowledge system (i.e., education/teaching, research, and outreach/extension) within a project. The functions addressed in the project must be focused around a problem or issue and must be interwoven throughout the life of the project to complement and reinforce one another. The functions should be interdependent and necessary for the success of the project and no more than two-thirds of the project's budget may be focused on a single component.

For Integrated projects that include an Education/Teaching component, note that routine use of graduate and postdoctoral students as personnel on research projects is not considered education for the purposes of this program. Only students actively engaged in the scholarship of research or outreach/extension projects are considered as education. Actively engaged students may contribute to presentations, articles, posters, and other expressions of scholarship that reflect their own work on the PD's project.

For Integrated projects that include an Outreach/Extension component, activities will synthesize and incorporate a wide range of relevant research results. However, research-related activities such as publication of papers or speaking at scientific meetings are not considered "Outreach/Extension" for the purpose of an Integrated project.

D. Grant Types

Applicants may submit one of the following four types of grants:

1. Planning Activity/Conference Grant

Applicants in this Grant Type may request up to $30,000 (total conference, not per year) to facilitate strategic planning session(s) required of faculty, industry, professional association, community leaders, or other necessary participants for the specific purpose of developing a formal plan leading to a subsequent submission of either a Joint, or a Large-scale (state or regional) comprehensive initiatives (LCI), Project Proposal, as described directly below in C.3. or C.4. **A Planning Activity/Conference/Planning grant application may not be submitted in the same year for which a Joint or LCI application for the same project is also submitted.**

2. Regular Grant (Single Institution/Organization)

Regular Grant supports targeted original scientific Research, Education/Teaching, Outreach/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 applicant executes the project without the requirement of sharing grant funds with other project partners. NLGCA applicants may request up to $150,000 (total, not per year) for a Regular Grant.

3. Collaborative Grants

Collaborative Grant supports projects with at least one additional partner or a multi-partner approach to enhance education/teaching programs. Collaborative Grants should build linkages to generate a critical mass of expertise, skill and technology to address education/teaching programs related to the food, agricultural, and natural resources, and human sciences. Grants can reduce duplication of efforts and/or build capacity and should be organized and led by a strong applicant with documented project management knowledge and skills to organize and carry out the initiative. Collaborative Grants are expected to be larger than Regular Grants and should not exceed $3 million. The partners must share grant funds (see explanation of required funds distribution percentage among partners in the definition).

a. Joint Grants (Applicant + One or more Partners)

Applicants may request up to $300,000 (total, not per year) for a Joint Project Proposal. In a Joint Grant, the applicant executes the project with assistance from at least one additional partner. The partner(s) must share grant funds (see explanation of required funds distribution percentage among partners in the definition of a Joint Project Proposal in Part VIII, E.).

b. Large-scale (state or regional) comprehensive initiatives (LCI) (Applicant + Two or more Partners)

Applicants may request up to $750,000 (total, not per year) for a large-scale (state or regional) comprehensive initiative (LCI) Project Proposal. In an LCI Project Proposal, the applicant

executes the project with assistance from at least two additional partners. Additional partners must share grant funds (see explanation of required funds distribution percentage among partners in the definition of a LCI Project Proposal in Part VIII, E.). An LCI project differs from a *Joint Project Proposal* in project scope and impact. LCI Project Proposals must support a multi-partner approach to solving a major state or regional challenge facing the agricultural sciences at the postsecondary level. LCI Project Proposals are characterized by multiple partners (each providing a specific expertise) organized and led by a strong applicant with documented project management ability to organize and carry out the initiative.

Note: LCI Projects must include both the R&R Budget and the R&R Subaward Budget Attachment Forms. The forms shall clearly identify the total grant funding anticipated for the applicant and each partner to demonstrate the required sharing percentage. All expenditures for the applicant and all partners shall be further itemized in the Budget Justification. LCI Project Proposal funds do not have to be divided equally among project years, nor do they need to be divided equally among project partners.

Impacts for all LCI Projects: In addition to addressing the Evaluation Plan section of this program expected impacts from a LCI Project must include, but are not limited to:

- An assessment of significant progress toward addressing the national challenge of increasing the number of under-represented students and the diversity of food and agriculture sciences graduates, while addressing the specific state or regional opportunity defined in the grant application;

- Documented expansion of the number of students who enroll in postsecondary courses in the food or agricultural sciences disciplines;

- Documented enhanced retention rates of students exposed to LCI Project activities;

- A comprehensive project evaluation, with indicators and methods defined in this grants program, which informs the undergraduate food and agriculture sciences community and others about the effectiveness of this LCI Project. (Please refer to Part V.B. for specific details regarding Evaluation Criteria and the Part VIII.F – Logic Model.);

- A description of completed or ongoing activities supported by this LCI Project, and a description of those same activities that will be sustained once grant funds end; and

- A description of any related activities expected to occur as an outgrowth of this funded project.

E. Project Duration

Project periods may range from twenty-four (24) to thirty-six (36) months. Projects shall conclude no sooner than twenty-four (24) months after the award start date to allow the applicant sufficient

time to evaluate the results and report the impacts. LCI projects are expected to use the full 36-month period. Conference projects may range between 24 and 36 months.

F. Number and Size of Grant Awards

The number of grants awarded in FY 2017 will depend on the number and type of meritorious applications submitted in response to this notice. Based on the project scope and budget of all applications selected for awards, the actual, individual grant amounts awarded by NIFA under this grants program may differ from the funds requested by the applicant. In such cases, applicants may be required by NIFA to submit revised budgets and revised plans of work before an award is made.

G. Application Submission & Award Limitations

NLGCA applicants may submit (as the lead applicant) any number of applications in response to this RFA; however, your institution will be limited to a maximum of two (2) grant awards as the lead (applicant) institution. Your institution may participate in any number of NLGCA-funded projects as a partner institution in any given year. However, a Project Director is limited to one funded-project, for which they are the lead Project Director.

H. Responsible and Ethical Conduct of Research

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 shall, upon request, make available to NIFA the policies, procedures, and documentation to support the conduct of the training. See **http://nifa.usda.gov/responsible-and-ethical-conduct-research** for more information.

PART III—ELIGIBILITY INFORMATION

A. Eligible Applicants

Applications may only be submitted by a Non-Land Grant College of Agriculture (NLGCAs) certified as such by the National Institute of Food and Agriculture. In order for an institution to qualify as a NLGCA, it must be a public college or university offering a baccalaureate or higher degree in the study of food and agricultural sciences, as defined in 7 U.S.C. 3103(9). A list of NLGCA's certified by NIFA can be found on the NIFA website. Award recipients may subcontract to organizations not eligible to apply to this grants program, providing such organizations are necessary for the conduct of the project.

Section 7101 of the Agricultural Act of 2014 required NIFA to establish a process through which institutions may apply for designation as a NLGCA. To request that NIFA provide certification of NLGCA status, an Authorized Representative must go to: http://www.nifa.usda.gov/webform/request-non-land-grant-university-designation and complete a web-based form indicating the institution meets the qualifications. Within 30 days of submission, NIFA will provide the administrative point of contact specified on the request, with a certification of NLGCA designation or a response indicating why the request for certification is being denied. **You must attach this certification to your application in order to be eligible to apply (see Part IV, B, 3. Field 12).**

Additionally, section 7101 of the Agricultural Act of 2014 (Public Law 113-79), amended 7 U.S.C. 3103 to allow Hispanic-serving Agricultural Colleges and Universities (HSACUs) and State-certified non-land-grant institutions eligible to receive funds under the McIntire-Stennis Cooperative Forestry Act of 1962 to opt out of their respective designation to qualify as Non-Land Grant Colleges of Agriculture. Please see the Federal Register Notice published on May 22, 2014 for more information.

Institutions that are eligible to receive funds under the McIntire-Stennis Cooperative Forestry Program and did not opt out of that status by October 13, 2015, will not be eligible to request designation as NLGCA and submit applications in response to this RFA.

For the purposes of this program, the individual branches of a college or university that are separately accredited as degree-granting institutions as indicated per the Official List of Certified Non-Land Grant Colleges of Agriculture are treated as separate institutions, and are therefore eligible to apply for NLGCA Program awards. Separate branches or campuses of a college or university that are not individually accredited as degree-granting institutions are not treated as separate institutions, and are therefore not eligible to submit an application. Accreditation must be conferred by an agency or association recognized by the Secretary of the U.S. Department of Education.

Failure to meet an eligibility criterion by the application deadline may result in the application being excluded from consideration or, even though an application may be reviewed, will preclude NIFA from making an award.

B. Cost Sharing or Matching

NIFA does not require matching support for this grants program and matching resources will not be factored into the review process as evaluation criteria.

PART IV—APPLICATION AND SUBMISSION INFORMATION

A. Electronic Application Package

Only electronic applications may be submitted via Grants.gov to NIFA in response to this RFA. We urge you to submit early to the Grants.gov system. For information about the pre-award phase of the grant lifecycle see http://www.grants.gov/web/grants/learn-grants/grants-101/pre-award-phase.html.

New Users of Grants.gov

Prior to preparing an application, we recommend that the Project Director/Principal Investigator PD/PI first contact an Authorized Representative (AR, also referred to as Authorized Organizational Representative or AOR) to determine if the organization is prepared to submit electronic applications through Grants.gov. If not (e.g., the institution/organization is new to the electronic grant application process through Grants.gov), then the one-time registration process must be completed **PRIOR** to submitting an application. It can take as long as 2 weeks to complete the registration process so it is critical to begin as soon as possible. In such situations, the AR should go to **"Register" in the top right corner of the Grants.gov web page (or go to** http://www.grants.gov/web/grants/register.html**) for information on registering the institution/organization with Grants.gov.** Part II.1.of the NIFA Grants.gov Application Guide contains additional explanatory language regarding the registration process. Refer to item 2.below to locate the "NIFA Grants.gov Application Guide".

Steps to Obtain Application Package Materials

To receive application materials:

1. You must download and install a version of Adobe Reader compatible with Grants.gov to access, complete, and submit applications. For basic system requirements and download instructions, http://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html. Grants.gov has a test package that will help you determine whether your current version of Adobe Reader is compatible.

2. To obtain the application package from Grants.gov, go to http://www.grants.gov/web/grants/applicants/download-application-package.html and enter the funding opportunity number.

   Funding Opportunity Number: USDA-NIFA-NLGCA-006361

   From the search result, click "Select Package" to access the application package. A Grant Application Package is tied to a particular funding opportunity. You may submit an application ONLY to the particular funding opportunity to which the Grant Application is associated.

   Contained within the application package is the "NIFA Grants.gov Application Guide". This guide contains an introduction and general Grants.gov instructions, information about how to use a Grant Application Package in Grants.gov, and instructions on how to complete the application forms.

If you require assistance to access the application package (e.g., downloading or navigating Adobe forms) **or submitting the application,** refer to resources available on the Grants.gov website (http://www.grants.gov/web/grants/applicants/applicant-tools-and-tips.html). Grants.gov assistance is also available at:

Grants.gov customer support
800-518-4726 Toll-Free or 606-545-5035
Business Hours: 24 hours a day, 7 days a week. Closed on federal holidays.
Email: support@grants.gov

Grants.gov iPortal (see https://grants-portal.psc.gov/Welcome.aspx?pt=Grants): Top 10 requested help topics (FAQs), Searchable knowledge base, self-service ticketing and ticket status, and live web chat (available 7 a.m. - 9 p.m. EST).
Have the following information available when contacting Grants.gov:

- Funding Opportunity Number (FON)
- Name of agency you are applying to
- Specific area of concern

B. Content and Form of Application Submission

You should prepare electronic applications following Parts V and VI of the NIFA Grants.gov Application Guide. This guide is part of the corresponding application package (see Section A. of this Part). The following is **additional information** needed to prepare an application in response to this RFA. **If there is discrepancy between the two documents, the information contained in this RFA is overriding.**

Note the attachment requirements (e.g., PDF) in Part III section 3. of the guide. ANY PROPOSALS THAT ARE NON-COMPLIANT WITH THE REQUIREMENTS (e.g., content format, PDF file format, file name restrictions, and no password protected files) WILL BE AT RISK OF BEING EXCLUDED FROM NIFA REVIEW. Grants.gov does not check for NIFA required attachments or that attachments are in PDF format; see Part III section 6.1 of the guide for how to check the manifest of submitted files. Partial applications will be excluded from NIFA review. We will accept subsequent submissions of an application until close of business on the closing date in the RFA (see Part V, 2.1 of the NIFA Grants.gov Application Guide for further information).

For any questions related to the preparation of an application, review the NIFA Grants.gov Application Guide and the applicable RFA. If assistance is still needed for preparing application forms content, contact:

- Email: electronic@nifa.usda.gov
- Phone: 202-401-5048
- Business hours: Monday through Friday, 7 a.m. – 5 p.m. ET, excluding federal holidays.

1. SF 424 (R&R) Cover Sheet

Information related to the questions on this form is dealt with in detail in Part V. 2.of the NIFA Grants.gov Application Guide. See Part V, Section 2.18 of the NIFA Grants.gov Application Guide for the required certification and assurances (e.g., Prohibition Against Entities Requiring Certain Internal Confidentiality Agreements).

2. SF 424 R & R Project/Performance Site Location(s)

Detailed information related to the questions on this form is dealt with in detail in Part V, 3. Of the NIFA Grants.gov Application Guide.

3. R & R Other Project Information Form

Detailed information related to the questions on this form is dealt with in Part V, 4. Of the NIFA Grants.gov Application Guide.

a. Field 7. Project Summary/Abstract.

The summary should also include the relevance of the project to the goals of NLGCA. See Part V. 4.7 of the NIFA Grants.gov Application Guide for further instructions and a link to a suggested template.

b. Field 8. Project Narrative.

NOTE: The Project Narrative must not exceed 20 pages of written text, regardless of whether it is single- or double-spaced, and up to five additional pages for figures and tables. We have established this maximum (25 pages) to ensure fair and equitable competition. The Project Narrative must include all of the following:

a. Introduction: Include a clear statement of the long-term goal(s) and supporting objectives of the proposed activities. Summarize the body of knowledge or other past activities that substantiate the need for the proposed project. Describe ongoing or recently completed significant activities that relate to the proposed project including the work of key project personnel. Include preliminary data/information on the following, when applicable:

(1) Estimates of the magnitude of the issues and their relevance to stakeholders and to ongoing state-federal food and agricultural research, education and extension program.
(2) The role of stakeholders in problem identification, planning, implementation, and evaluation as appropriate.
(3) Reasons for performing the work at the proposing institution.

b. Objectives: All applications must include a statement(s) of specific aims of the proposed effort in clear, concise, complete and logically arranged terms.

c. Methods: Explicitly state the procedures or methodology you will apply to the proposed effort. This section should include but is not limited to, descriptions of:

(1) Stakeholder involvement in problem identification, planning, and implementation;
(2) Proposed project activities, listed sequentially;
(3) Techniques to be employed in this project, including their feasibility and rationale;
(4) Expected results;
(5) How extension and education activities will be evaluated;
(6) How data will be analyzed or interpreted;

(7) Plans to communicate results to stakeholders and the public;
(8) Pitfalls that might be encountered; and,
(9) Limitations to proposed procedures.

d. Project Timetable: The proposal should outline all important phases as a function of time, year to year, for the entire project, including periods beyond the grant funding period.

1. R & R Senior/Key Person Profile (Expanded)

Detailed information related to the questions on this form is available in Part V, 5. of the NIFA Grants.gov Application Guide. This section of the guide includes instructions about senior/key person profile requirements, and details about the biographical sketch and the current and pending support, including a link to a suggested template for the current and pending support.

2. R &R Personal Data

As noted in Part V, 6 of the NIFA Grants.gov Application Guide, the submission of this information is voluntary and is not a precondition of award. Part V, 6 also notes the importance and use of the information.

3. R & R Budget

Detailed information related to the questions on this form is dealt with in detail in Part V, 7 of the NIFA Grants.gov Application Guide.

(a) Budgets for each project year do NOT have to be the same from year to year. However, detailed budget information (budget and narrative) must be submitted for each year of the proposed project and, in the case of a Consortium Grant application, yearly budgets and narratives must be supplied for each institution in accordance with the instructions.
(b) During the tenure of a grant, PDs must attend at least one National Project Director's meeting, if offered, in Washington DC, or any other announced location. The purpose of the meeting will be to discuss project and grant management, opportunities for collaborative efforts, future directions for education reform, and opportunities to enhance dissemination of exemplary end products/results of the projects. Reasonable travel expenses to attend this meeting may be included in the application's budget under travel expenses.

4. Supplemental Information

Detailed information related to the questions on this form is dealt with in detail in Part VI, 1 of the NIFA Grants.gov Application Guide.

a. Field 2. Program to which you are applying. Enter the program code name (i.e. "Capacity Building Grants for Non-Land Grant Colleges of Agriculture (i.e. "NLGCA"). Note that accurate entry of the program code is very important for proper and timely processing of an application.

b. Field 8. Conflict of Interest List. See Part VI, 1.8 of the NIFA Grants.gov Application Guide for further instructions and a link to a suggested template.

C. Submission Date and Time

We recommend that you conduct an administrative review of the application before submission of

it via Grants.gov to ensure it complies with all preparation instructions. An application checklist is include in Part VII of the NIFA Grants.gov Application Guide to assist with this review. The application should be checked for the following required items that might be overlooked (this is not an exhaustive list):

- Logic Model
- Current and Pending Support

Instructions for submitting an application are included in Part IV, Section 1.9 of the NIFA Grants.gov Application Guide.

Applications must be received by Grants.gov by **5:00 p.m. Eastern Time** on **September 15, 2017**. Applications received after this deadline will normally not be considered for funding.

If you have trouble submitting an application to Grants.gov, you should FIRST contact the Grants.gov Help Desk to resolve any problems. Keep a record of any such correspondence. See Part IV. A. for Grants.gov contact information.

We send email correspondence to the AR regarding the status of submitted applications. We strongly encourage you to provide accurate e-mail addresses, where designated, on the SF-424 R&R Application for Federal Assistance.

If the AR has not received a correspondence message **from NIFA** regarding a submitted application within 30 days of the established deadline, please contact the Agency Contact identified in Part VII of the applicable RFA and request the proposal number assigned to the application. **Failure to do so may result in the application not being considered for funding by the peer review panel. Once the application has been assigned a proposal number, this number should be cited on all future correspondence.**

D. Funding Restrictions

Section 713 of the Consolidated and Further Continuing Appropriations Act, 2016 (Pub. L. 114-113) limits indirect costs to 30 percent of the total Federal funds provided (or 42.857 percent of total indirect costs) under each award. Similar language may be included in the FY 2017 appropriation, therefore, when preparing budgets, you should limit your request for the recovery of indirect costs to the lesser of your institution's official negotiated indirect cost rate or the equivalent of 30 percent of total Federal funds awarded. See Part V section 7.9 of the NIFA Grants.gov Application Guide for further indirect cost information. See webpage at http://nifa.usda.gov/indirect-costs for indirect cost options.

Funds made available for grants under the NLGCA program must comply with the legislative authority."

The use of grant funds to plan, acquire, or construct a building or facility is not allowed under this program. With prior approval, and in accordance with the cost principles set forth in 2 CRF part 200, some grant funds may be used for minor alterations, renovations, or repairs deemed necessary to retrofit existing teaching or research spaces in order to carry out a funded project. However, requests to use grant funds for such purposes must demonstrate that the work is essential to

achieving the major purpose of the project. Grant funds may not be used for endowment investing."

Consistent with other competitive grant programs, NIFA has determined that grant funds awarded under this authority may not be used for student tuition remission, on-campus room and board, academic fees or other financial assistance (no scholarships or fellowships). Further, promotional items (e.g., T-shirts and other give-a-ways) and food functions (e.g., cookouts or other social meal gatherings) are considered 'entertainment' expenses, and are, therefore, also not allowed under NLGCA.

Faculty and students receiving Federal funds from this grants program for developmental activities or educational costs must be an eligible participant as defined in Part VIII, D – Definitions).

E. Other Submission Requirements

You should follow the submission requirements noted in Part IV, Section 1.9 in the document entitled "NIFA Grants.gov Application Guide".

For information about the **status of a submitted application**, see Part III, Section 6 of the NIFA Grants.gov Application Guide.

Applications should include elements of a logic model detailing the activities, outputs, and outcomes of the proposed project. This information may be provided as a narrative or formatted into a logic model chart. The logic model planning process is a tool that should be used in developing projects before writing the proposal. Two additional pages are allowed for this information. More information and resources related to the logic model planning process are provided at https://nifa.usda.gov/resource/logic-model-planning-process.

Expected Outcomes – PDF Attachment
Title the attachment "Expected Outcomes" in the document header and save the file as "ExpectedOutcomes". Use a format similar to what is provided below ***(Recommended Format for Submitting Expected Outcomes*)** to submit expected impacts and attach it as the last page of the application.

Primary Project Function: (Choose one)		
EDUCATION: ☐	**EXTENSION/EXTENSION :** ☐	**RESEARCH:** ☐

DATA FOR HEC, SPECA, NLGCA, WAMS, etc.	
Total expected impact during entire grant period	**Expected Number**
1. Number of products to be developed through grant funds during the grant period (i.e., curricula, academic programs, recruitment/retention programs, materials, experiential learning opportunities)	
2. Number of faculty supported by this grant for professional development during the grant period: participation in sabbaticals, workshops, conferences, etc.	
3. 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).	

Evaluation Plan

All projects, regardless of the scope or program component they address, must have an evaluation plan as part of the Project Narrative (see Part IV, B.3., Field 8, 2.d.). The evaluation plan must include both a strategy for monitoring the project as it evolves (to provide feedback to guide these efforts), as well as a strategy for evaluating the effectiveness of the project in achieving its goals and for identifying positive and negative findings when the project is completed.

a) Legislatively authorized purpose of this program. An evaluation plan that only indicates a desire to develop assessment measures once the project is underway, and an eventual description of resulting project activities and outcomes, would be considered a poorly prepared and inadequate evaluation plan.

b) The project budget shall contain funding to either hire an outside project evaluator, or to present convincing evidence that an appropriate evaluator is already on staff and available to provide assistance with assessment and evaluation throughout the life of the project. As a guide, up to 10 percent of grant funds may be used to support this purpose. The following activities are examples of items that may be included in the Evaluation Plan: project objectives that lend themselves most readily to measurement and evaluation, baseline assessment data and a planned collection process from a possible comparison or control group, possible measurement instruments (surveys, student journals, standardized tests, interviews, focus groups, analysis of e-portfolios or capstone projects, cost-benefit analyses, etc.), a strategy for what assessment measures will be a part of the annual and final Project Performance Reports (Part VI. D.), and how this information will eventually be disseminated to interested parties and to the public.

c) The Evaluation Plan itself shall contain measures of: 1. Student/faculty or other stakeholder learning and engagement; and 2. The number of students/faculty or other stakeholders impacted by your project as a result of the proposed activities, either directly (through stipends, experiential learning opportunities, workshops, teaching experiences, etc.) or indirectly (through taking a developed course or program, or participating in a recruitment or retention program). In addition, the Evaluation Plan must specify metrics summarizing who benefited the most (and the least) from your project, an explanation of what revisions, improvements, or enhancements you would make, funding permitting, to increase the value of this project in the future, and ideas about how to make projects like yours more cost-effective. The evaluation results will be reported both annually and in the final performance report (Part VI. D.).

PART V—APPLICATION REVIEW REQUIREMENTS

A. General

We evaluate each application in a 2-part process. First, we screen each application to ensure that it meets the administrative requirements as set forth in this RFA. Second, a technical review panel will evaluate applications that meet the administrative requirements.

We select reviewers 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 as reviewers 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 of reviewers 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 **NLGCA** will recommend that the project be approved for support from currently available funds or be declined due to insufficient funds or unfavorable review.

NLGCA reserves the right to negotiate with the PD/PI and/or with 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.

B. Evaluation Criteria

We will use the evaluation criteria below to review applications submitted in response to this RFA:

1. Potential for Advancing Quality of Education, Research or Outreach/Extension /Significance of the Problem (25 points). This criterion is used to assess the likelihood that the project will have an impact upon and advance the quality of food and agricultural sciences education, research or outreach/extension by strengthening institutional capacities to meet clearly delineated needs. Elements considered include institutional long-range goals, identification of a problem or opportunity to be addressed, justification for the project, innovation, advancing multidisciplinary and/or problem- based focus, and potential for adoption by other institutions and contribution to current body of knowledge in areas addressed. The proposed project must also show how it will contribute to the legislatively authorized purpose of this program. Potential

project impacts must be stated.

2. Proposed Approach and Cooperative Linkages (30 points). This criterion evaluates the soundness of the proposed approach including objectives, methodology, plan of operation, timetable, expected products and results, project evaluation, and dissemination plans. The project evaluation plan will be reviewed to determine the appropriateness of the methodologies to be used in assessing the accomplishment of stated products, results and measurable outcomes from the project. The proposed approach will be evaluated based on the soundness of the research concepts and educational principles, which may be documented through background literature or actual institutional data. Emphasis is placed on the quality of education, research or outreach/extension support provided to the applicant institution/organization through its partnerships and collaborative initiatives, and on the potential cooperative linkages likely to evolve as a result of this project. The application will also be reviewed to assess the effectiveness in addressing any perceived pitfalls and alternative strategies or approaches

3. Institutional Capability and Capacity-Building (20 points). This criterion relates to the institution's capability to perform the project and the degree to which the project will strengthen its teaching, research or outreach/extension capacity. Elements considered 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 or research enhancement, and plans for project continuation or expansion beyond the period of USDA support. Level of institutional data provided to show the institution's ability to support the proposed project.

4. Key Personnel (15 points). This criterion relates to the adequacy of the number, qualifications and expertise of key persons who will develop and carry out the project, and the qualifications of project personnel who will provide for the assessment of project results and impacts and the dissemination of these findings.

5. Budget and Cost-Effectiveness (10 points). 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 value for the dollar, achieves economies of scale, leverages additional funds, and focuses expertise and activity on high-priority education, research or outreach/extension .

C. Conflicts of Interest and Confidentiality

During the peer evaluation process, we take extreme care to prevent any actual or perceived conflicts of interest that may impact review or evaluation. See http://www.nifa.usda.gov/business/competitive_peer_review.html for further information about conflicts of interest and confidentiality as related to the peer review process.

D. Organizational Management Information

Specific management information relating to an applicant shall be submitted on a one-time basis,

with updates on an as needed basis. This requirement is part of the responsibility determination prior to the award of a grant identified under this RFA, if such information has not been provided previously under this or another NIFA program. We will provide you copies of forms recommended for use in fulfilling these requirements as part of the pre-award process. Although an applicant may be eligible based on its status as one of these entities, 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 involved or a determination that an applicant is not responsible based on submitted organizational management information).

E. Application Disposition

An application may be withdrawn at any time before a final decision is made regarding the application. Each application that is not selected for funding, including those that are withdrawn, will be retained by NIFA for a period of three years.

PART VI—AWARD ADMINISTRATION

A. General

Within the limit of funds available for such purpose, the NIFA awarding official shall make grants to those responsible, 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 shall 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 at 7 CFR part 3430, subparts A through E.

B. Award Notice

The award document will provide pertinent instructions and information including, at a minimum, the information described in 2 CFR 200.210.

See http://www.nifa.usda.gov/business/awards/awardterms.html to view current NIFA award terms and conditions.

C. Administrative and National Policy Requirements

Several federal statutes and regulations apply to grant applications considered for review and to project grants awarded under this program. These include, but are not limited to the ones listed to, the ones listed on the NIFA web page – http://nifa.usda.gov/federal-regulations.

NIFA Federal Assistance Policy Guide – a compendium of basic NIFA policies and procedures that apply to all NIFA awards, unless there are statutory, regulatory, or award-specific requirements to the contrary is available at: http://nifa.usda.gov/policy-guide.

Responsible and Ethical Conduct of Research

Please refer to Part II, D for more information.

D. Expected Program Outputs and Reporting Requirements

The output and reporting requirements are included in the award terms and conditions (see http://www.nifa.usda.gov/business/awards/awardterms.html for information about NIFA award terms). If there are any program or award-specific award terms, those, if any, will be identified in the award.

E. Project Directors Meeting

During the tenure of a grant, Project Director(s) may be invited to attend at least one national Project Directors meeting, if offered, in Washington, D.C., or any other announced location. The purpose of the meeting will be to discuss project and grant management, opportunities for collaborative efforts, future directions for education reform, and opportunities to enhance dissemination of exemplary end products/results. Reasonable travel expenses to attend this meeting may be included in your proposal's travel expenses.

PART VII - AGENCY CONTACTS

Applicants and other interested parties are encouraged to contact:

Programmatic Contact –

Dr. Edwin Lewis; National Program Leader; Division of Community and Education; National Institute of Food and Agriculture; STOP 2251; 1400 Independence Ave, SW; Washington, DC 20250-2251; Telephone: (202) 486-2773; Fax: (202) 720-2030; E-mail: elewis@nifa.usda.gov.

Administrative/Business Contacts –

Adriene Woodin; Branch Chief, Office of Grants and Financial Management; National Institute of Food and Agriculture; 1400 Independence Avenue SW, Stop 2201 Washington, DC 20250-2201; telephone: (202) 401-4326; fax: (202) 401-1804; Email: awoodin@nifa.usda.gov.

Rochelle McCrea; Team Leader, Team I; Office of Grants and Financial Management; National Institute of Food and Agriculture; 1400 Independence Ave., SW; STOP 2271 Washington, DC 20250-2271; telephone: (202) 401-2880; fax: (202) 401-6271; email: rmccrea@nifa.usda.gov.

PART VIII—OTHER INFORMATION

A. Use of Funds; Changes

1. 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.

2. 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:

(i) Change in the scope or the objective of the project or program (even if there is no associated budge revision requiring prior written approval);

(ii) Change in a key person specified in the application or the federal award.

(iii) The disengagement from the project for more than three months, or a 25 percent reduction in time devoted to the project, by the approved project director or principal investigator.

(iv) The inclusion, unless waived by the federal awarding agency, of costs that require prior approval in accordance with 2 CFR 200 Subpart E – Cost Principles of this part 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 Part 31, "Contract Cost Principles and Procedures", as applicable.

(v) The transfer of funds budgeted for participant support costs as defined in 200.75 Participant support costs to other categories of expense.

(vi) Unless described in the application and funded in the approved federal awards, the subawarding, transferring or contracting out of any work under a federal award, included fixed amount subawards as described in 200.332 Fixed amount subawards. This provision does not apply to the acquisition of supplies, material, equipment, or general support services.

(vii) Changes in the approved cost-sharing or matching provided by the non-federal entity.

(viii) The need arises for additional federal funds to complete the project.

The awardee will be subject to the terms and conditions identified in the award. See http://www.nifa.usda.gov/business/awards/awardterms.html for information about NIFA award terms.

B. Confidential Aspects of Applications and Awards

When an application results in an award, it becomes a part of the record of NIFA transactions, available to the public upon specific request. Information that the Secretary determines to be of a confidential, privileged, or proprietary nature will be held in confidence to the extent permitted by law. Therefore, any information that the applicant wishes to have considered as confidential,

privileged, or proprietary should be clearly marked within the application. We will retain for three years a copy of an application that does not result in an award. Such an application will be released only with the consent of the applicant or to the extent required by law. An application may be withdrawn at any time prior to the final action thereon.

C. Regulatory Information

For the reasons set forth in the final Rule related Notice for 2 CFR Part 415, Subpart C, this program is excluded from the scope of the 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.

D. Definitions

Please refer to 7 CFR 3430, Competitive and Noncompetitive Non-formula Federal Assistance Programs--General Award Administrative Provisions, for the applicable definitions for this NIFA grant program. The following are additional definitions that apply to this program:

Agriculture, renewable resources, and other similar disciplines means specifically for this NLGCA Program- those **food and agricultural sciences** topical areas defined below.

Capacity Building means enhancing and strengthening the quality and depth of an institution's research and academic 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, and organizational structures and reward systems for attracting and retaining first-rate research and teaching faculty or students.

Citizen or national of the United States means (1) a citizen or native resident of a State; or, (2) a person defined in the Immigration and Nationality Act, 8 U.S.C. 1101(a) (22), who, though not a citizen of the United States, owes permanent allegiance to the United States.

"College" and "university" – From 7 U.S.C. 3103, mean an educational institution in any State which: (i) admits as regular students only persons having a certificate of graduation from a school providing secondary education, or the recognized equivalent of such a certificate, (ii) is legally authorized within such State to provide a program of *education* beyond secondary education, (iii) provides an educational program for which a bachelor's degree or any other higher degree is awarded, (iv) is a public or other nonprofit institution, and (v) is accredited by a nationally recognized accrediting agency or association. Inclusions: The terms "college" and "university" include research foundations maintained by a college or university.

Education – See 'Teaching", below.

Eligible institution means a NLGCA institution (non-land-grant college of agriculture), as

defined in this Section below.

Eligible participant means an individual who is a citizen or national of the United States as defined in this section.

Food and agricultural sciences – From 7 USC Section 3103, means basic, applied, and developmental research, extension, and teaching activities in food and fiber, agricultural, renewable energy and natural resources, forestry, and physical and social sciences, including activities relating to the following:

(a) Animal health, production, and well-being.
(b) Plant health and production.
(c) Animal and plant germ plasm collection and preservation.
(d) Aquaculture.
(e) Food safety.
(f) Soil, water, and related resource conservation and improvement.
(g) Forestry, horticulture, and range management.
(h) Nutritional sciences and promotion.
(i) Farm enhancement, including financial management, input efficiency, and profitability.
(j) Home economics (Family and Consumer Sciences).
(k) Rural human ecology.
(l) Youth development and agricultural education, including 4-H clubs.
(m) Expansion of domestic and international markets for agricultural commodities and products, including agricultural trade barrier identification and analysis.
(n) Information management and technology transfer related to agriculture.
(o) Biotechnology related to agriculture.
(p) The processing, distributing, marketing, and utilization of food and agricultural products.

Joint grant means an application for a project: (1) which will involve the applicant institution working in cooperation with one or more other entities not legally affiliated with the applicant institution, including other schools, colleges, universities, community colleges, junior colleges, units of State government, private sector organizations, or a consortium of institutions; and (2) where the applicant institution and each cooperating entity will assume a significant role in the conduct of the proposed project. To demonstrate a substantial involvement with the project, the applicant institution/organization submitting a joint project proposal must **retain at least 30 percent but not more than 70 percent of the awarded funds and no cooperating entity may receive less than 10 percent of awarded funds.** Only the applicant institution must meet the definition of an *eligible institution*/organization as specified in this RFA; other entities participating in a joint project proposal are not required to meet the definition of an *eligible institution*/organization.

Large-scale, Comprehensive Initiative (LCI) grant means an application for a project: (1) which will involve the applicant institution/organization working in cooperation with **two or more** other entities not legally affiliated with the applicant institution, including other schools, *college*s, *universities*, community colleges, junior colleges, units of State government, private sector organizations, or a consortium of institutions; and (2) where the applicant institution and each cooperating entity will assume a significant role in the conduct of the proposed project. To demonstrate a substantial involvement with the project, **the applicant institution/organization submitting a LCI proposal must retain at least 30 percent but not more than 70 percent of**

the awarded funds and no cooperating entity may receive less than 10 percent of awarded funds. Only the applicant institution must meet the definition of an *eligible institution* as specified in this RFA; other entities participating in a *joint project proposal* are not required to meet the definition of an *eligible institution*. LCI Project Proposals must support a multi-partner approach to solving a major state or regional challenge in agricultural sciences education at the postsecondary level. LCI Project Proposals are characterized by multiple partners (each providing a specific expertise) organized and led by a strong applicant with documented project management ability to organize and carry out the initiative.

NLGCA institution (non-land-grant college of agriculture) – From 7 U.S.C. Section 3103, means a public *college* or *university* offering a baccalaureate or higher degree in the study of agriculture or forestry. **Exclusions - The terms "NLGCA Institution" and "non-land grant college of agriculture" do not include** (and, therefore, the following institutions **are not eligible to apply** to this grants program):

1. Hispanic-serving agricultural colleges and universities:
The list of the institutions certified and therefore eligible to apply as HSACUs for grants under FY 2017 RFAs, including this RFA, is available at http://nifa.usda.gov/resource/official-list- hispanic-serving-agricultural-colleges-and-universities-hsacu. Institutions appearing on this list are granted HSACU certification by the Secretary for the period starting October 1, 2016, and ending September 30, 2017. Certifications are valid for FY 2017 only. Additional questions on HSACU eligibility can be addressed to Lisa Read, Policy Analyst, by email at ldepaolo@nifa.usda.gov or phone at (202) 731-1366; or

2. Any institution designated under:
    a. the Act of July 2, 1862 (commonly known as the "First Morrill Act"; 7 U.S.C. 301 et seq., or the '1862 Land-Grants');
    b. the Act of August 30, 1890 (commonly known as the "Second Morrill Act") (7 U.S.C. 321 et seq., or the '1890 Land-Grants');
    c. the Equity in Educational Land-Grant Status Act of 1994 (Public Law 103-382; 7 U.S.C. 301 note, or the '1994 or Tribal Colleges Land-Grants'); or
    d. Public Law 87-788 (commonly known as the "McIntire-Stennis Cooperative Forestry Act") (16 U.S.C. 582a et seq.).

Outcomes means specific, measurable project results and benefits that, when assessed and reported; indicate the project's plan of operation has been achieved. Measurable outcomes include:

- 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");
- 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
- Impacts are a measure of the results by comparing what might have happened in the absence of the funded project, (e.g., "…an observed, overall increase in student learning based upon 8% higher average test scores of those students who both attended class and used the supplemental, Web-based course materials".)

Regular grant means a proposal for a project: (1) where the applicant institution will be the sole entity involved in the execution of the project; or (2) which will involve the applicant institution and one or more other entities, but where the involvement of the other entity or entities does not meet the requirements for a *joint project proposal* as defined in this section.

Sustainable Agriculture. From 7 USC Section 3103, means an integrated system of plant and animal production practices having a site-specific application that will, over the long-term: (A) satisfy human food and fiber needs; (B) enhance environmental quality and the natural resource base upon which the agriculture economy depends; (C) make the most efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls; (D) sustain the economic viability of farm operations; and (E) enhance the quality of life for farmers and society as a whole.

Teaching and education - From 7 USC Section 3103, means formal classroom instruction, laboratory instruction, and practicum experience in the food and agricultural sciences and matters relating 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.

Underrepresented means proportionate representation as measured by degree recipients that is less than the proportionate representation in the general population: (i) As indicated by (A) The most current edition of the Department of Education's Digest of Education Statistics; (B) The National Research Council's Doctorate Recipients from United States Universities; or (C) Other standard statistical references, as documented by national survey data submitted to and accepted by the Secretary on a case-by-case basis.