



National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE

A complex, layered collage of agricultural images. It includes a central image of a tractor in a field, surrounded by various fruits like oranges, raspberries, and blueberries, and other scenes of farm equipment and produce. The collage is overlaid with a large, semi-transparent diamond shape.

USDA NIFA

APPLICATION DEVELOPMENT GUIDE

ABOUT THIS GUIDE

This guidebook is designed as a tool to help prospective USDA National Institute of Food and Agriculture (NIFA) grantees develop complete and accurate application packages. Grant writing tips for success have been carefully crafted to help applicants in structuring their application packages. However, NIFA has many grant programs with different eligibility and program requirements, and it is the applicant's responsibility to read the Request for Applications (RFA) and do the necessary research to understand and meet all requirements. Information in the funding legislation and the RFA have precedence to what is included in this guidebook.

Please note: In this guidebook, there are several references to different sections of an RFA to help you to understand how programs differ in their priorities and requirements, eligibility-related or otherwise. Please follow the requirements of the active RFA for the program to which you wish to apply.

OUR MISSION IS TO

“Invest in and advance agricultural research, education, and extension to solve societal challenges.”

OUR VISION IS TO

“Catalyze transformative discoveries, education, and engagement to address agricultural challenges.”

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PART ONE: PROGRAMS AND PRIORITIES

1. WHAT DOES NIFA FUND?

NIFA funds research, education, and outreach/extension applications on many topics in food, agriculture, natural resources, human sciences, forestry, rural development, etc.

Some of the topics (www.nifa.usda.gov/topics) NIFA supports are:



ADVANCED TECHNOLOGIES

Bioenergy; Biotechnology;
Nanotechnology



FARMING AND RANCHING

Agriculture Safety & Technology; Farmer
Education; Organic & Family Farms



ANIMALS

Animal Breeding; Animal Health; Animal
Production; Aquaculture



HUMAN SCIENCES

Community Vitality; Family Well-Being;
Youth



BUSINESS AND ECONOMY

Markets and Trade; Natural Resource
Economics; Small Business



FOOD SCIENCE

Food Quality; Food Safety



NATURAL RESOURCES

Forests; Grassland and Rangeland; Soil,
Water, and Air



FOOD AND NUTRITION SECURITY

Nutrition; Obesity; Wellness



EDUCATION

Minority Serving Institutions; Teaching
and Learning; Workforce Development



INTERNATIONAL

Global Engagement; Global Food
Security



ENVIRONMENT

Climate Change; Ecosystems; Invasive
Pests and Diseases



PLANTS

Crop Production; Pest Management;
Plant Breeding; Plant Health

These topics are linked to Program pages with detailed information about the program, its priorities and corresponding staff contact information.

2. DOES YOUR APPLICATION FIT NIFA PRIORITIES?

As indicated, program areas are broadly defined and provide opportunities for many different types of applications. However, each program has its own priorities (given in Part I of every RFA) as well as its own applicant eligibility requirements (Part III of every RFA). Hence, the answer to whether your application fits the priorities depends on:

1. whether the program(s) you identified covers the topics and priorities of your work and interests
2. whether you are eligible to apply for the program.

Some examples of eligibility are also given in Part 5 of this guidebook.

Select a few programs of interest to you and find the names and contact information of the corresponding National Program Leaders (NPLs are responsible for administering the program). You may contact NPLs for in-depth understanding of the program and its priorities and eligibilities.

Links to the RFAs for [NIFA's competitive programs](#) can be found on the NIFA website. For NIFA-related news/information, subscribe to [NIFA Update](#).

3. HOW DO I APPLY FOR A GRANT?

a. Learn about available funding opportunities on Grants.gov.

NIFA's Requests for Applications are always published in [Grants.gov](#) and the opportunities are broadly disseminated. Select the 'Search for Grants' tab at the top of the home screen to search for available funding opportunities. Filter search results for National Institute of Food and Agriculture.

You can register for an account in [Grants.gov](#) and identify keywords (e.g., program name, discipline, topic, audience) to be notified when an RFA of interest is published. [The NIFA Grants Application Guide](#) is a useful resource with rich detail about the process. This [short presentation](#) can serve as a handy tool to understand the process for first-time applicants.

b. Attend grants writing events.

NIFA periodically conducts grants writing events, such as webinars, to explain the ABCs of writing applications and the diverse opportunities available to obtain federal funding. [Attend an event](#) or [review a recent webinar](#) and learn more about what is available at NIFA and whether it interests you. The current workshop will be recorded and posted for future viewing.

c. Attend a Request for Application (RFA) Announcement /Technical Assistance Webinar.

NIFA often conducts an informational/technical assistance webinar as soon as an RFA is published. Information about the webinar can be found on the same webpage (Funding Opportunity page) where the RFA is posted. Attending these webinars provides you with an opportunity to learn more about the program, ask questions and meet with NIFA staff. Visit the NIFA website to learn more about [open funding opportunities](#).

d. Still uncertain? Contact program staff and clarify any doubts.

After conducting your research, if you still need more clarification on the relevance of the program for the application that you have in mind, contact program staff. Often it is preferable to send a one-page concept by email to the NPL before making a phone call. Be prepared for the conversation, invite your partners or your Project Director, ask all your questions at one time rather than making multiple calls.

e. Apply to be a reviewer.

Whether this is the first time you are writing a NIFA application or you want to better understand the NIFA peer review process, you may inquire about serving as a panel reviewer. Reviewing other applications before you write your own can help you understand the basics of putting an application together with correct documents.

4. READY TO APPLY?

a. Register your entity on SAM.gov and Grants.gov.

- Before an application can be submitted through Grants.gov, you must obtain a Unique Entity ID (UEI) number at [SAM.gov](https://sam.gov) to register your entity. Completing the entity registration step may take 10 business days or longer depending on whether issues are encountered with the registration process.
- Complete your entity registration at [Grants.gov](https://grants.gov) and setup the Grants.gov workspace. Instructions on [completing registration](#) and [setting up the workspace](#) can be found on Grants.gov.

b. Find the funding opportunity of interest.

You can visit the [NIFA Funding Opportunities page](#) and find the opportunity of interest. Review and download the Request for Applications (RFA) by clicking on the “Download RFA” button. You can download the application guide by clicking on “Apply for Grant” button, which will take you to Grants.gov. Click the “Package” tab and locate the “Preview” button. This will allow you to see and download the NIFA Grants Application Guide and the required forms applicable to the funding opportunity.

Note: The guidance and instructions in the RFA supersede the general instructions in the NIFA Grants Application Guide.

c. Confirm your institution’s eligibility to apply for funding.

Eligibility for a grant program is determined by legislation and is identified in Part III(A) of all RFAs. It is important that you read and understand your eligibility before you write the application. If you are uncertain of your eligibility, please consult your institution or NIFA program staff directly.

d. Assess your award management needs.

Consider if your institution has the capacity to manage this award. Will you need to engage a program manager, partner institutions, additional staff, or an accountant? This is important if you are a small institution or a small business and will rely on hired expertise for grant management and compliance.

PART TWO: GRANT WRITING PLANNING

What are some pre-application strategies?

1. RFAS ARE OFTEN LENGTHY AND COMPLEX.

- Read and become an expert on the RFA. This might take several readings but invest your time in understanding the RFA.
- Make a list of the content and form of the application (Part III of the RFA), application evaluation criteria (Part V(B) of the RFA), budget and time constraints.

2. WORK WITH YOUR OFFICE OF SPONSORED PROGRAMS AND/OR EXPERIENCED GRANT WRITERS.

- Clarify the key requirements and constraints of the RFA.
- Identify a strong, qualified team to develop your application.
- Identify available resources to enhance a component of the application.
- Create a checklist of the necessary components which may include a timeline for preparing the application.
- Understand the criteria for evaluating the application. Prior experience in serving on a review panel will help tremendously in writing an application. You may volunteer to serve on a **review panel** for a program that covers your area of expertise but for which you have not submitted an application. Understanding the review criteria helps to determine where and what to emphasize in the application.

3. ENGAGE YOUR PARTNERS AND PROJECT TEAM.

- Determine project partnership/collaboration strategies and how to best work together for the grant purposes.
- Conceptualize how these collaborations will support the overall project design.
- Identify project team members and their roles.
- Include all expertise necessary to complete the project.
- If the project involves Extension/outreach activities, who are the stakeholders and how will they be involved?
- Identify the project evaluator and how they will operate.
- The problem your project intends to solve should be clearly identified and stated.

4. JOIN US IN ADVANCING DIVERSITY, EQUITY, INCLUSION, AND ACCESSIBILITY (DEIA).

Since Fiscal Year 2022, NIFA RFAs require that applications address issues of diversity, inclusion, equity, and access. Consider the following:

- **How does your application include traditionally underserved communities?** Consider how your project involves these communities in processes, activities, and decision/policymaking in a way that meaningfully shares power.

- **How does your application seek to address systemic injustice, inequity, or oppression?** NIFA encourages applications that engage diverse communities and have broad impacts through research, education, extension, and integrated activities to address current and future challenges. One way of grounding your application in DEIA is to include partners who have established networks in meaningful leadership roles in your project and involve them from the beginning, including in the writing of the application.
- **How can you further deepen partner collaboration?** Although partnerships and collaborations are not required in all programs, NIFA encourages applicants to collaborate with required participants for the successful completion of the project. Partners may include 1862 Land-grant Universities, certified Non-Land-grant Colleges of Agriculture (NLGCA), Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities, community colleges, technical and vocational schools and other accredited academic institutions with food, agriculture, natural resources, and human sciences programs including nutrition, rural sociology, public policy or public administration and allied disciplines, as appropriate and beneficial to meeting the objectives of proposed projects.

In addition, partners may include community-based organizations, nongovernmental organizations, state agencies, small businesses, etc. It is relevant to note that some programs require applications to be submitted only by, or require partnerships with, community-based organizations, nongovernmental organizations, state agencies, small businesses, etc.

- All NIFA RFAs include the language given below and may require you to develop strong networks and collaborations.

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

PART THREE: GRANT APPLICATION WRITING STRATEGIES

1. DEVELOP A PLAN OF WORK.

A clearly defined Plan of Work will provide the structure to your application needed to define activities and measurable outcomes. One tool that helps you do this in a systematic way is the SMART approach.

Using SMART to Define Objectives

- **Specific:** What exactly are we going to do for whom? Lay out what population you are going to serve and identify specific actions you will use to help that population.
- **Measurable:** Is it quantifiable and can we measure it? Can you count the results?
- **Achievable:** Can we get it done in the time allotted with the resources we have available? The objective needs to be realistic given the constraints.
- **Relevant:** Will this objective have an effect on the desired goal or strategy? Make sure your objectives and methods have a clear, intuitive relationship.
- **Time-bound:** When will this objective be accomplished, and/or how will we know we are done? Specify a hard date for the end of project. Stipulate which, if any, outcomes would cause your project to come to a premature end, with all outcomes having been achieved.

2. IDENTIFY AND LIST YOUR OBJECTIVES.

Under each objective, list 1-2 top priority activities that your team will perform or complete to accomplish the objectives. An example of how to structure goals and objectives is given below.

GOAL 1: BIG GOAL

OBJECTIVES	ACTIVITIES	OUTCOMES
Follow SMART rules	What we do to achieve objectives/ goals	Short-, medium-, and long-term desired results of activities, including impacts
1. First SMART objective	1.1 First activity related to first objective 1.2 Second activity related to first objective	1.1 First projected outcome related to first objective 1.2 Second projected outcome related to first objective
2. Second SMART objective	2.1 First activity related to second objective 2.2 Second activity related to second objective	2.1 First projected outcome related to second objective 2.2 Second projected outcome related to second objective

GOAL 2: BIG GOAL AND SO ON....

3. BUILD YOUR LOGIC MODEL AND IDENTIFY THE RIGHT PERFORMANCE METRICS.

a. Logic models can help your application succeed.

While they may not be required by all programs, logic models help to develop an application logically and clearly. Preparing applications logically and clearly helps reviewers. Failing to write an application logically and clearly makes reviewers work harder and may make them be harder on their grading. It is helpful to review the elements of a logic model and reacquaint yourself with these components. [The Logic Model Planning Process](#) by NIFA is well defined and we encourage you to use the [generic logic model](#) as your planning tool.

b. Understand and describe impacts as a performance metric.

Impact statements demonstrate the results of the solution you are proposing to a problem you are identifying in your application. Clearly described impacts play a big role in understanding your application. [This presentation](#) is useful for understanding the impacts.

4. APPLICATION STRUCTURING STRATEGIES

- Establish a timeline to develop your application and secure the resources you'll need.
- Identify a project implementation timeline.
- Establish project evaluation plans.
- Create a checklist of required application elements.

a. Write the Project Narrative logically and clearly.

It is critical to lay out your project narrative in the order of 1) stating a problem; 2) discussing why it's an issue worth investigating; 3) describing your proposed solutions; and 4) outlining how your application will make an impact. Poorly crafted applications don't relay the intent clearly, which makes it harder for the reviewer to understand the relevance and utility. Pay attention to the font type and size, margins, and page number limit given in the RFA. Cramping space by reducing font size is not viewed in positive light by the reviewers. Instead use simple language to describe the application.

b. Develop a Data Management Plan.

Check your RFA to determine the requirement for Data Management Plan (DMP). An example (example 11) is provided as sample in Part 5 of this guidebook.

c. Prepare application budgets and justifications.

Never exceed the grant duration and the maximum grant amount stated in Part I, Table 2 of the RFA.

- Some things to consider during budget allocation (see example 10) are:
 - ◇ Personnel and Salaries
 - ◇ Travel
 - ◇ Supplies
 - ◇ Education and Extension related activities
 - ◇ Overhead

- Create a Budget Justification that is compliant with program guidelines. Especially check the Cost-Sharing or Matching Requirement section in Part III(C) of your RFA; AND Part V(7) of the [NIFA Grants Application Guide](#).
- Budgets for each year of the grant and a cumulative budget, along with a Budget Justification for each year, are required. Collaborating institutions with sub-awards are also required to submit the same.
- Convert your Budget and Budget Justification documents into the required format.

d. Organize documents in a logical order.

- **Do not make reviewers work harder.** Organize the application according to the RFA outline or the prescribed format. Following the prescribed format helps in administrative review to check for document accuracy. It also makes the reviewers' job easy, which could prompt generosity with review ratings.

e. Proofread your application and use your checklist.

The purpose of proofreading is to:

- Validate that all requested information is included within the Project Narrative.
- Improve clarity, flow, and style.
- Ensure that, if multiple people have written the document, it reflects a single voice.
- Achieve a grammatically correct and professionally polished document that adheres to formatting requirements.

Finally, check off the items on the checklist you created for all application documents.

PART FOUR: DOCUMENTS AND TEMPLATES

Documents are the building blocks of your application. Pay close attention to the RFA so that you understand what documents are required and prepare the documents in support of your application. Incomplete or missing documents may impact your application's merit review. Some documents have a predefined template; others can be prepared in MS Word but need to be converted into PDF format before submission.

Below is a list of commonly needed documents. Items in italics indicates that they are forms. Please follow the RFA to have the complete list for the program to which you wish to apply.

- Project Summary Abstract: 1 page, 250 words
- Project Narrative: page limit differs for different programs
- Bibliography
- PD and Co-PD biosketch
- Current and pending support
- *SF424 (R & R) [V5.0]*
- *NIFA Supplemental Information [V1.2]*
- *Project/Performance Site Location(s) [V4.0]*
- *Research & Related Budget [V3.0]*
- *Research & Related Personal Data [V1.2]*
- *Research & Related Other Project Information [V1.4]*
- *Research & Related Senior/Key Person Profile (Expanded) [V4.0]*
- *R & R Subaward Budget Attachment(s) Form 5 YR 30 ATT [V3.0]*
- *USDA AD-3030 [V2.0]*

PART FIVE: SELECTED EXAMPLES

1. ELIGIBILITY

The Agriculture and Food Research Initiative (**AFRI**) **Strengthening Grants** are limited to:

- Small and mid-sized or minority-serving degree-granting institutions that previously had limited institutional success for receiving federal funds; or
- State Agricultural Experiment Stations or degree-granting institutions eligible for USDA Experimental Program to Stimulate Competitive Research (EPSCoR) funding and are eligible for reserved strengthening funds for Research, Education, Extension, and Integrated Project grants.

Some other examples of eligibility are:

- 1862 Land-grant Institutions
- 1890 Land-grant Institutions
- 1994 Land-grant Institutions
- For-profit organizations other than small businesses
- Hispanic-serving Institutions
- Nonprofits with 501(c)(3) IRS status, other than institutions of higher education
- Nonprofits without 501(c)(3) IRS status, other than institutions of higher education
- Small businesses
- State Agricultural Experiment Stations
- State-controlled institutions of higher education

The eligibility of one of more institution is dependent on the program.

2. PROJECT ALIGNMENT

“This project is aligned with the USDA’s strategic plan #4: Facilitate Rural Prosperity and Economic Development. The specific objectives for this application are to: Objective #1: Develop a mentoring and support system to recruit and retain five American students (scholars) from communities; Objective #2: Train scholars in key technical skills, increase industry exposure, and promote the development of essential skills through the creation of an internship experience; Objective #3: Broaden critical thinking and problem-solving skills through scholar participation in course-based undergraduate research experiences; Objective #4: Enhance - scholars’ leadership skills through scholar-created outreach programming and delivery for high school students; Objective #5: Develop - scholars’ intercultural competence through the creation of international and on-campus opportunities.”

3. ABSTRACT

a. Example 1

“Clean and safe water, healthy soils and air quality are very crucial for human health, sustainable agricultural and food production, healthy ecosystems, and prosperous industries. There is need to commercialize innovative technologies that are developed with the purpose to conserve, monitor, improve and/or protect the quality and/or quantity of natural resources. The X fertilizer is an essential nutrient to meet global agricultural demand, but its excessive domestic production and use endangers freshwater bodies and rock reserves (citation). Deterioration of these natural resources poses downstream risks to our national and economic security and access to food and water that could materialize as soon as 2060 (citation). To mitigate these threats, U.S. farmers need technologies that allow them to reduce their application of X fertilizer without compromising crop yield (citation). There is a growing need to provide exposure to and opportunities within the agriculture industry and to promote skills needed to be successful in the industry. The goal of this project is a create a filtration system that separates harmful biproducts of chemical X production and the harmful

residues can be collected in solid form. The adaptation of this innovation into commercial applications will be beneficial for human health, sustainable agricultural and food production, healthy ecosystems, and prosperous industries.”

b. Example 2

“Agriculture plays a key role in the U.S. and global economy, supplying food, feed, fiber, and fuel to meet the demands of an ever-growing population. Maximizing crop production in the face of climate change, declining fertilizer reserves, and the global spread of pests and diseases is a challenge that can only be met through a well-prepared, innovative workforce (citation). The U.S. Bureau of Labor Statistics projected a faster-than-average growth in employment of agricultural and food scientists from 2019 to 2029. Despite a steady growth in undergraduate enrollment over the last decade, the number of earned associate’s and bachelor’s degrees in agricultural sciences has lagged behind many other STEM fields (citation). Accordingly, a recent study projected a 39% shortfall in college graduates versus employment demand in agriscience between 2020 and 2025 (citation). Two potential barriers to entry are that undergraduates are not well informed about post-graduate education and career opportunities in agriscience, and they lack compelling agricultural research and/or extension experiences to envision themselves as competent and valuable members of the agriscience community.”

4. OBJECTIVES

“This project aims to build teaching capacity to enhance learning opportunities in artificial intelligence (AI) technologies in food and agriculture for undergraduate and graduate students in the biological engineering and natural resources departments at Beta University.

The target audience will be undergraduate students in biological engineering and graduate students who will conduct AI-based research in the proposed disciplinary fields toward their theses and dissertations.

The project will promote collaborative learning among undergraduate and graduate students to increase the efficiency and effectiveness of learning and teaching about sophisticated AI tools and technologies with limited time and resources.

Teaching through lectures, learner-centered, hands-on learning activities, and the use of AI laboratory exercises and course projects will help learners design appropriate AI-based solutions applied to the agricultural, food and bio-manufacturing industries. As a result, students will be better prepared to compete for jobs in the emerging AI field and revolutionize the agricultural and food production systems. Materials developed will include lectures, laboratory exercises, semester-long projects, AI hardware and software, materials and supplies for the projects, videos, PowerPoint presentations, and reading resources. The AI laboratory units will also increase the visibility of modern instruments and engineering tools in our research labs to assist with student recruitment and facilitate industrial collaboration.

Project goals will be accomplished through three specific objectives: 1) Create AI-based computer imaging and remote sensing and automation laboratory units to enhance hands-on training; 2) Develop and implement course materials of AI-based lectures and corresponding laboratory exercises for two junior-level courses; and 3) Develop and implement AI-based course projects for three senior-level courses to enhance the collaborative learning of AI-based solutions for sustainable agricultural and food production and bio-manufacturing.”

5. PROJECT TYPES

a. Example 1: Single function

“During the summer between junior and senior year, scholars will participate in a paid 10-week internship program with a Bravo company (see support letters). Scholars will be placed with a company based on their interests and professional goals. The internships will allow scholars opportunities to engage with industry professionals and to better understand the complexity of the agricultural manufacturing process. The project team will work closely with each internship supervisor to establish objectives for the experience. Scholars will be required to submit weekly reflections during the experience and will have bimonthly meetings with one of the project directors. Additionally, a project director will visit the internship location once during the program to meet with the scholar and supervisor. The goal of this visit is to

give the scholar an opportunity to share and demonstrate what they are learning. This process builds confidence and also shows scholars that the team cares about what they are learning and experiencing. This approach also promotes public relations between the companies and the university. During the following fall semester, the scholars will share presentations about their experiences with students in Introduction to Agricultural Manufacturing.”

b. Example 2: Integrated functions

“This project will develop germplasm with value added traits and innovative management practices for production and utilization of turfgrass across variable climates. The team will develop diverse turfgrass germplasm with value-added traits for drought tolerance and reduced water use in the region. This research is a collaboration among academic researchers in State 1, State 2, State 3, and industry partners. Using molecular and physiological tools the team will identify elite germplasm for breeding and development of regionally adapted turfgrass varieties with improved drought tolerance and reduced water use. Elite germplasm will be trialed on farm by Extension program leads and industry partners to provide evaluation data to the breeding programs. The team will further implement extension efforts using a combination of hands-on field days and grower meetings educate practitioners about the new germplasm and production practices. Finally, knowledge gained through the research efforts will be used to educate undergraduate students and prepare them for exciting career opportunities in agriculture. The project will provide summer internships for undergraduates to participate in a coordinated research experience. The internships will allow scholars opportunities to engage with academic and industry professionals and to better understand the complexity of working on large transdisciplinary teams. Interns will be mentored by team members on specific projects associated with the research objectives described above. The program will include frequent meetings with the research team and regular opportunities for professional development.”

6. EXPECTED OUTCOMES

a. Example 1

The table format is not required in all programs.

TOTAL EXPECTED OUTPUTS DURING GRANT PERIOD	EXPECTED NUMBER
1. Number of male students to be directly supported by this grant (i.e., scholarships, fellowships, assistantships, internships included as a cost in your project budget) for undergraduate education	23
2. Number of underrepresented male students to be supported during the grant period (Provide the best estimate based on past experience)	20
3. Number of female students to be directly supported by this grant (i.e., scholarships, fellowships, assistantships, internships included as a cost in your project budget) for undergraduate education	23
4. Number of underrepresented female students to be supported during the grant period (Provide the best estimate based on past experience)	20
5. Number of students supported by this grant (i.e., scholarships, fellowships, assistantships) who are pursuing:	
5a. Two-year or other certificates	5
5b. Four-year undergraduate degrees	41
6. Number of students who will be supported by this grant on:	
6a. Domestic experiences with a government or non-governmental organization that is not affiliated with your university	0
6b. International experiences including study abroad, educational travel longer than a month, etc.	0

b. Example 2

Both formative and summative evaluations will be conducted to ensure the quality and effectiveness of the program’s processes and outcomes (Table X). We will ask several questions to determine the success of the - program: (1) is the program successful at recruiting and retaining underserved students in Animal Sciences; (2) is the program effective at generating interest and awareness of the poultry industry; (3) does the program develop students self-awareness, self-motivation, and essential skills (such as communication, problem-solving, empathy, efficient work habits, teamwork, professionalism, and leadership); (4) are - program graduates more likely to obtain careers in the agricultural industry; and (5) do scholars see value in the program.

7. TIMELINE

This table DOES NOT represent a table in any NIFA RFA but does provide an example of how this information may be submitted. As you use tables to make your content more understandable, be creative and follow the submission guidelines. This table is not necessarily sized to follow RFA guidelines.

Please see RFA for all required information for creating tables.

i. Management Plan with Timeline:

TABLE 2. Project timetable and milestones: August (A) to July (J) calendar year

YEAR 1	A	S	O	N	D	J	F	M	A	M	J	J
Recruitment plan develop and implement			x	x	x	x	x					
Mentors identified and trained										x	x	x
YEAR 2	A	S	O	N	D	J	F	M	A	M	J	J
Scholars arrive on campus	x											
Industry tour #1			x									
YEAR 3	A	S	O	N	D	J	F	M	A	M	J	J
Scholars complete CURE course	x	x	x	x	x							
Industry Tour #2			x									
Scholars prepare and submit abstracts						x	x	x				
Scholars attend professional conference												x
PD attend project directors meeting												
YEAR 4	A	S	O	N	D	J	F	M	A	M	J	J
Industry Tour #3			x									
Scholars develop and implement high school program						x	x	x	x	x		
Study abroad experience									x			
Scholars complete internships										x	x	
PD attend project directors meeting												
YEAR 5	A	S	O	N	D	J	F	M	A	M	J	J
Industry Tour #4			x									
Scholars graduate with B.S.										x		
Final Program Evaluation							x	x	x	x		
Publications/Dissemination										x	x	x

8. KEY PERSONNEL

Dr. The Project Director (PD) (effort = 0.1 summer months) will be responsible for the overall project management as well as serving as Primary Mentor. The Project Director will be responsible for serving as a liaison with USDA-NIFA, Graduate Studies, and Hotel institutions' Administration, faculty, and staff. The PI will also manage the budget.

Dr. Strange, Co-PD, (effort = 0.1 summer months) will share the responsibility of overseeing the overall project management as well as serving as a mentor.

Dr. Jekyll, Co-PD, (effort = 0.2 summer months) will share the responsibility of overseeing the overall project management as well as serving as a mentor.

Other Personnel:

Mr. T, (Project Management Specialist), (effort = 1 calendar month) will be responsible for supporting the PI in the management of the project including budget management and helping in the coordination of the summer program.”

9. PARTNERSHIP COMMITMENT LETTER

A Partnership Commitment Letter to solidify the collaboration is highly encouraged and could be provided as an attachment to the narrative application. A basic example of such a letter would include the following:

Example body of a partnership letter of commitment:

Dear [Project Director]:

[Optional short introduction describing the partnering organization's mission and its interest in BFR development.]

The purpose is to ...

We commit to participating in and supporting the 2022 NEXTGEN USDA application entitled [Project Title], for the time period of [include dates of commitment within proposed project period] in the following way:

Person1 will (describe role: what the person will do, time commitment)

Person2 will (describe role: what the person will do, time commitment)

The individuals and our organization agree to abide by the Management Plan contained in the application.

Sincerely,

[signature of AR]

Name of AR (Authorized Representative)

AR's Title (e.g., Executive Director)

Address and telephone number if that information is not on the letterhead

10. BUDGET JUSTIFICATION

a. Salary and fringe benefits

Support for 10% of Dr. A 9-month salary for project years 1 and 2 (\$20,000) and 30 % of Dr. A's 3-month summer salary for year 3 (\$11,787) is requested to support project direction and research. Request is based on 20XX-20XY annual salary and 3% cost of a living increase each year for years 2 and 3.

b. Travel

The project director will travel to the national project meeting. The total estimated cost for PD to travel for this meeting is \$1,500, including Airfare (\$800), 3-night hotel stay (\$600@200/day), Ground Transportation \$100.

c. Other direct Costs: Supplies

Funds are requested to support site needs, including educational materials \$2000.

11. DATA MANAGEMENT PLAN

Expected Data Types

Data generated for Goal 1 will be in two forms; digital secondary data for nationwide analysis and digitized primary data from field research in our partner communities. All data will be collected and maintained in digital formats. Data collected for Goal 1, Objective 1 will be existing secondary data sources from publicly available sources (e.g. U.S. Bureau of Census County Business Patterns, Population estimated Program, etc.). All nationwide data will be collected at the county level. Secondary aggregate statistics, including data summaries, tables and graphs, and statistical software outputs will be stored in digital formats (e.g. .xlsx, .dta, .docx, .pdf).

Data collected for Goal 1, Objectives 2 and 3 will be in the form of: 1) digital audio recordings of field interviews in each partner community and focus-group interviews, with selected interviews transcribed; 2) field notes from asset assessments and collaborative governance meeting notes; and 3) primary documents related to collaborative governance in each partner community. Audio files will be stored in digital formats (.mp3, .m4a, etc.). Data collected for Goal 2 includes all meeting materials with partner sites, evaluations of programming, including the documents associated with the ripple Effect Mapping. All of the following will be digitally stored in Microsoft Word or PDF formats; transcribed interviews, typed field notes, and primary source documents, including web page captures, online documents, and scanned original documents. Photographs collected during site visits – with permission of subject people if applicable – will be stored as .jpg files.

Data Formats

Nationwide secondary data collected for Goal 1, Objective 1 will be maintained in a machine readable format that can be directly imported into statistical analysis software (e.g. STATA .dta file format, SAS .bdat format, Matlab .mat format etc.). Computer codes and output logs will be also stored in the corresponding formats. Summary statistics and outputs to be used in presentations, manuscripts and other types of communication will be saved in spreadsheet format, or in other appropriate Microsoft Office formats.

Aside from photographs, which will be maintained as .jpg files, primary data collected from our partner communities for Goal 1, Objectives 2 and 3 will be maintained in both Microsoft Word files and PDF formats so that they can be easily imported into qualitative analysis software (e.g. NVivo). Qualitative analysis codes generated from source interviews, field notes, and documents will be stored using NVivo data files (.nvp). Note that this data – aside from otherwise publicly available primary source documents – will not be directly available outside of the project as they are not publicly available.

Data Storage and Preservation

Digital primary data files will be stored using ABS University's cloud storage service which is protected by two-factor authentication security. Compiled secondary data will be published online for public access by researchers and practitioners (see below) and also stored in cloud. Text-based data files developed in Microsoft Word (e.g. transcripts, field notes, etc.) will be preserved in both their original Microsoft Word file formats and stable PDF formats. ABS University has a Data Management Specialist and Data Management Services Librarian that will assist the project team in troubleshooting any data management and/or data repository issues. We do not anticipate requiring any additional resources for data management.

Data Sharing, Protection, and Public Access

Nationwide secondary data will be compiled and made publicly available through the U.S. agricultural eXtension electronic community of practice (eCoP), Local Food Economics website for other scholars to use. In addition to this compiled dataset, we will publish detailed descriptions of additional metrics of rural wealth, identified through our field work, that need to be collected nationwide. Our hope is that this dataset and its associated descriptions of additional metrics to be collected, can inform and advance research, policy, and extension practice related to rural wealth creation.

Aside from existing publicly available documents, primary data from our partner communities will be stored by ABS University to be used by members of the research team. Primary data sources collected by the team – including field notes and interviews/transcripts – will not be made publicly available.

Research and extension publications produced from these data will be published as soon as possible. While many of these publications may be in chargeable publication venues (such as subscription-only journal publications), we have included funding in our request (\$6,000) to fund open-access publications for at least two publications. Further, because ABS University is a shareholder of the Journal of Agriculture, Food Systems, and Community Development, the team can publish open access materials at no cost.

Roles and Responsibilities

Project Director (PD) will be responsible for the collection, maintenance, and distribution of data related to the project, including both compiled nationwide secondary data and primary partner community data. They will be assisted by Co-PIs. Co-PI 1 will support collection and maintenance of nationwide secondary data and both Co-PI 2 and Co-PI 3 will support the collection and maintenance of primary data collected in our partner communities.

In the event that PD leaves the project, Co-PI 2 will assume PD's data management responsibilities in collaboration with Co-PI 1. If Co-PIs 1 and 2 leave the project, Co-PI 3 will support the PD with data management responsibilities.



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