



United States
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Agriculture

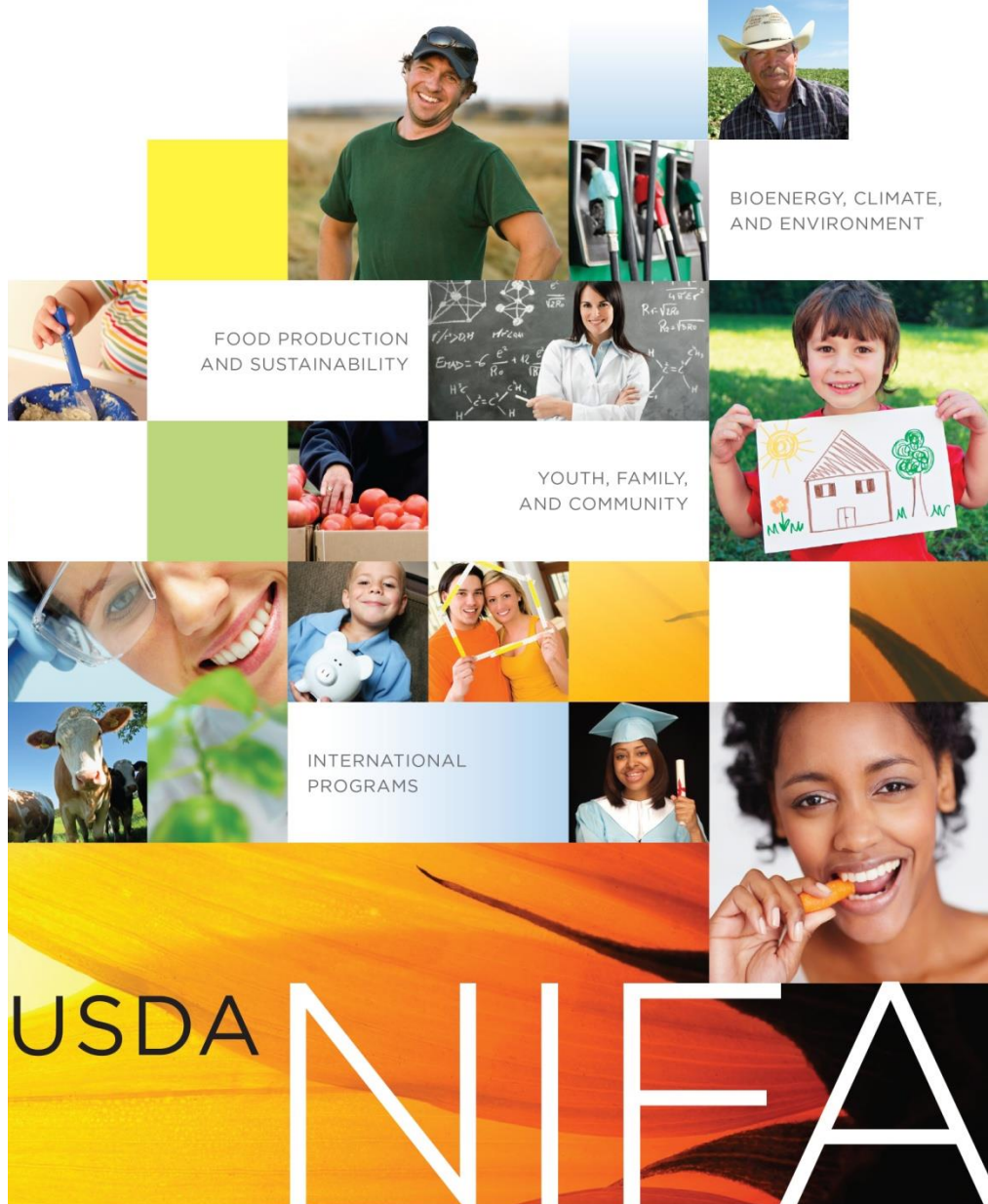
National Institute
of Food
and Agriculture

Funding Opportunities at NIFA/USDA

Developing Partnerships

March 28, 2022

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202.531-0633



NATIONAL INSTITUTE OF FOOD AND AGRICULTURE



Outline of Presentation

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- NIFA/USDA Overview
- Highlight Key Funding Opportunities
 - HSIs Program at USDA
 - Other Education Programs
 - Farmers Assistance
- Tips for Success in Grant Writing
- Questions and Answers

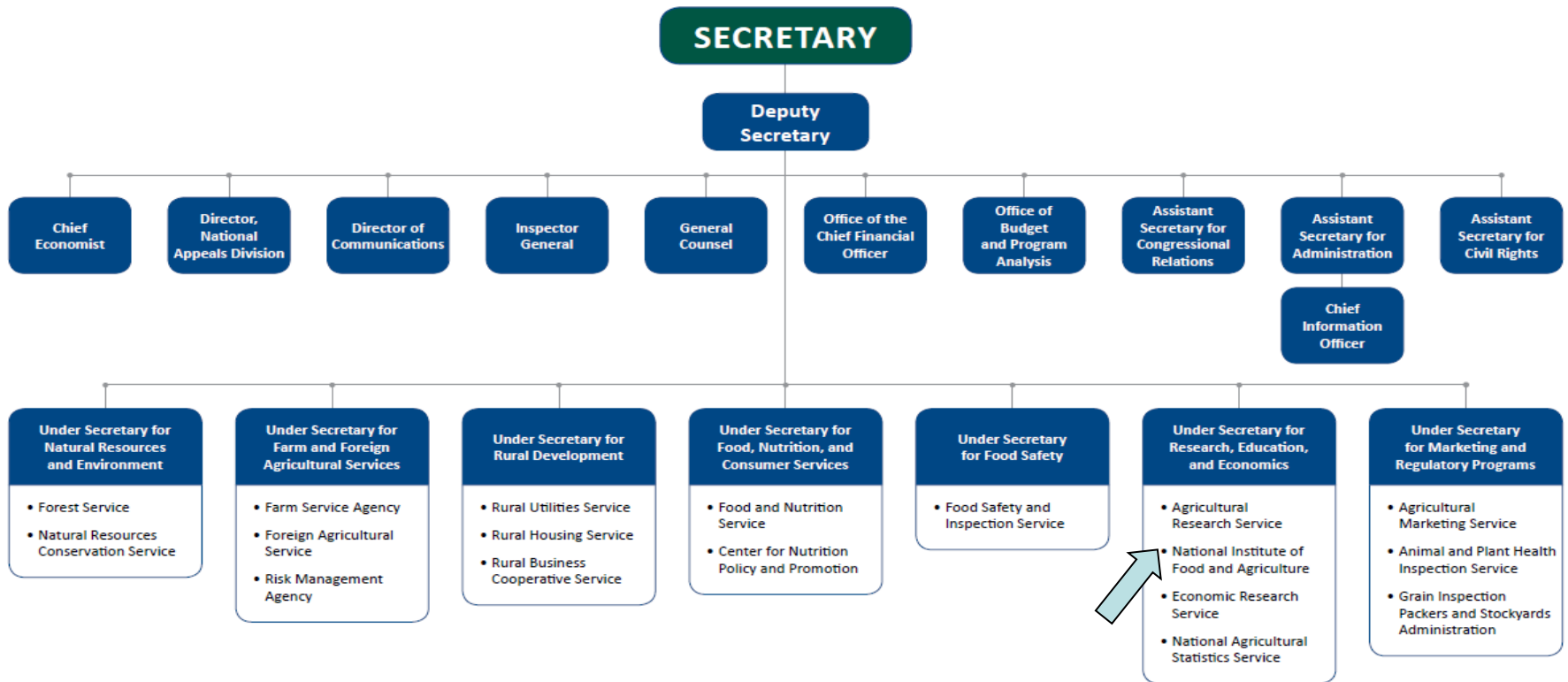


U.S. Department of Agriculture



- NIFA is one of many agencies in USDA and Offices
- Mission: Invest in and advance agricultural research, education and extension to solve societal challenges.
- NIFA doesn't perform actual **research**, **education**, and **extension** but rather helps fund it at the state and local level and provides program leadership in these areas.

USDA Organization Chart



This organization chart displays the names of USDA offices, agencies, and mission areas. Each office, agency, and mission area is placed within a cell connected by lines to show the structure and hierarchy (Under Secretary, Deputy Secretary, or Secretary) for which they fall under. An HTML version that lists [USDA Agencies and Offices](#) and [USDA Mission Areas](#) is also available on [usda.gov](#).



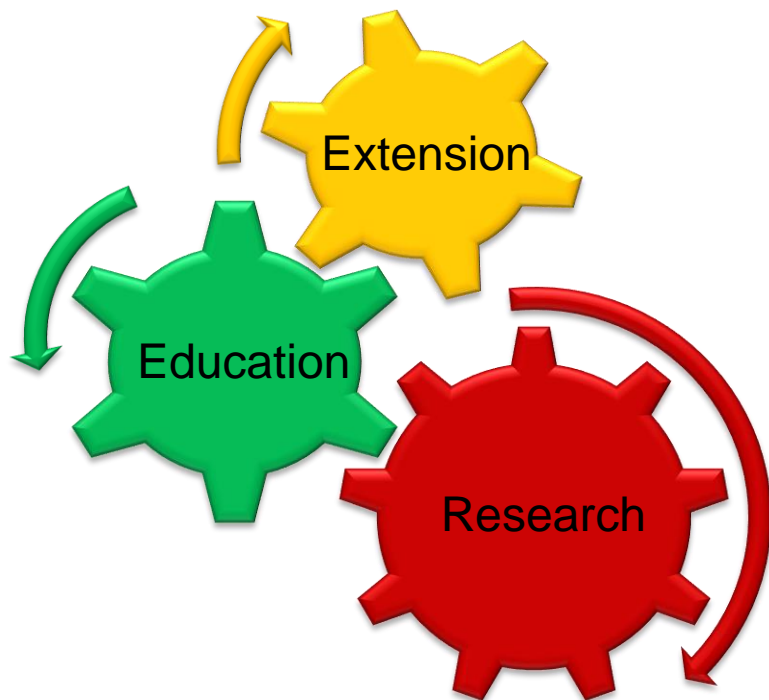
USDA Agencies

- Agricultural Research Service
- Forest Service
- National Resources Conservation Service
- APHIS
- FSIS
- NASS
- Others
- National Ag Library
- National Institute of Food and Agriculture
- Food and Nutrition Service (FNS)
- Foreign Ag Service
- Economic Research Service



Our Mission

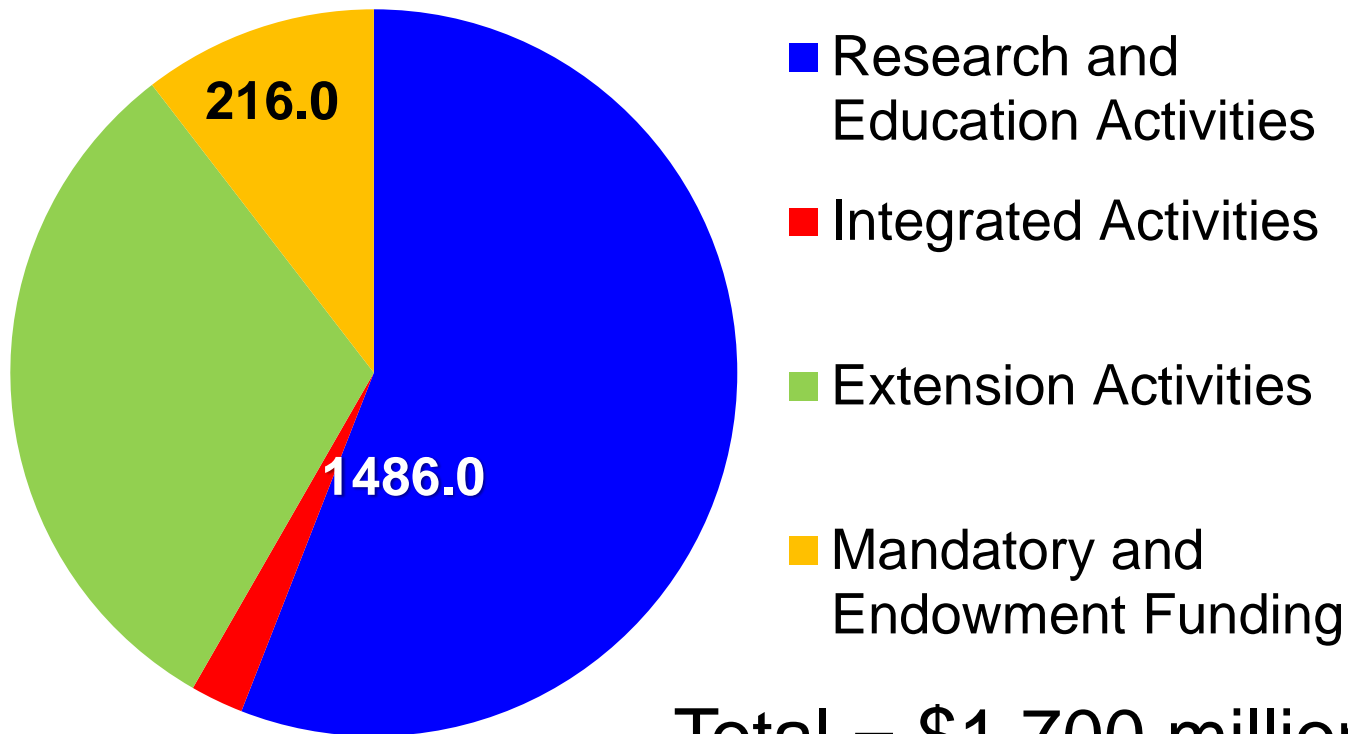
USDA's primary extramural agency to advance food & agricultural sciences



- **Research** - Provide answers to complex societal issues
- **Education** - Support schools and universities in training the agricultural workforce
- **Extension** - Provide knowledge gained through research to agricultural workforce; theory to practice



NIFA's 2021 Budget (million dollars)



Total = \$1,700 million

FY 2022 = \$2,000+ million



NIFA Programs Cover Many Topics



Advanced Technologies

- Bioenergy
- Biotechnology
- Nanotechnology



Education

- Minority Serving Institutions
- Teaching and Learning
- Workforce Development



Food Science

- Food Quality
- Food Safety



Animals

- Animal Breeding
- Animal Health
- Animal Production
- Aquaculture



Environment

- Climate Change
- Ecosystems
- Invasive Pests and Diseases



Health

- Nutrition
- Obesity
- Wellness



Business and Economics

- Markets and Trade
- Natural Resource Economics
- Small Business



Farming and Ranching

- Agricultural Safety
- Agriculture Technology
- Farmer Education
- Organic Agriculture
- Small and Family Farms



International

- Global Engagement
- Global Food Security



Natural Resources

- Air
- Forests
- Grasslands and Rangelands
- Soil
- Water



People

- Community Vitality
- Family Well-Being
- Youth



Plants

- Crop Production
- Pest Management
- Plant Breeding
- Plant Health



NIFA's Four Science Institutes

- **Institute of Bioenergy, Climate, and Environment**
 - Enhance sustainable bio-based energy systems and products
 - Enhance adaptive agro-ecosystems in response to climate variability and change
- ***Institute of Food Production and Sustainability***
 - Enhance global food security through productive and sustainable agricultural systems
- **Institute of Food Safety and Nutrition**
 - Ensure safe food supply; improve citizens' health through nutrition; reduce childhood obesity; and improve food quality
- **Institute of Youth, Family, and Community**
 - Enable vibrant and resilient communities; enhance youth development
 - Prepare the next generation of scientists
 - Enhance science capacity in minority serving institutions



Hispanic-Serving Institutions Education Grants Program

FY 2022 HSI RFA -- \$14 million

3 Levels of Funding

LEVEL 1. Regular Project up to \$250K

LEVEL 2. Collaboration Project—2 + HSIs

Priority Oriented-\$250K/yr/4yrs

Will result on **FIFTEEN B.S.** and **TEN M.S.** per priority

Plant Sciences

Animal Science

Microbiology

Food Science/Nutrition

Forestry

Natural Resources

Nanotechnology/Other

LEVEL 3. Conference Up to \$50,000



Locations of Current HSI Award Recipients until 2020





NEED AREAS we fund

1. **Curricula** Design, Materials Development and Library Resources
2. **Faculty** Preparation and Enhancement for Teaching
3. Instruction **Delivery** Systems
4. Scientific **Instrumentation** for Teaching
5. Student **Experiential** Learning
6. Student **Recruitment** and Retention



Academic Disciplines

- **Entomology - Plant**
- **Human Nutrition**
- **General Food & Agricultural Sciences**
- **Aquaculture**
- **Veterinary Medicine/Science**
- **Watershed Management)**
- **Agricultural/Biological Engineering**
- **Economics**
- **Ag Economics**
- **Entomology - Animal**
- **Environmental Sciences/Management**
- **Animal Sciences**
- **Soil Sciences**
- **Family & Consumer Sciences**
- **International Education/Research**
- **Plant Sciences and Horticulture (including Turf Sciences)**



Level 1. Regular Projects

- For the FY 2020 program, an applicant may request up to **\$250,000 (total, not per year)**, including indirect costs.
- An additional up to **\$25,000** may be requested by the applicant to take advantage of their position as an HSI to recruit and support one underrepresented student.
- Address the severe underrepresentation of Hispanics in the Federal government.
- The total maximum for a regular grant award size is **\$275,000** including indirect costs. Indirect costs are capped the negotiated rate up to 30 percent.
- **Bridge grants.** Applicant institutions must have not previously received USDA HSI funds.
- No limit on Regular applications per institution.



Level 2. Collaboration Projects

- To build capacity at HSIs to support 20 underrepresented students
- Recruit at least 15 B.S. and 10 M.S./Ph.D. totaling 25 students
- There are competitive projects for up to \$250,000 a year for up to 4 years for a **\$1,000,000** total.
- Proposal for a project in which a group of **two or three** HSI's, universities and community colleges, form a cooperative arrangement for the purpose of carrying out a common purpose.
- Limit of two applications per lead institution, only one could be funded..



POTENTIAL TRACKS FOR LEVEL 2 PROJECTS -- COLLABORATIONS

- Plant Sciences
- Forestry
- Natural Resources
- Renewable Energy, Natural Resources and the Environment
- Animal Sciences
- Agricultural Systems and Technology
- Food Safety and Food Science
- Nutrition and Childhood Obesity Prevention
- Food Security
- Ag Economics
- Other

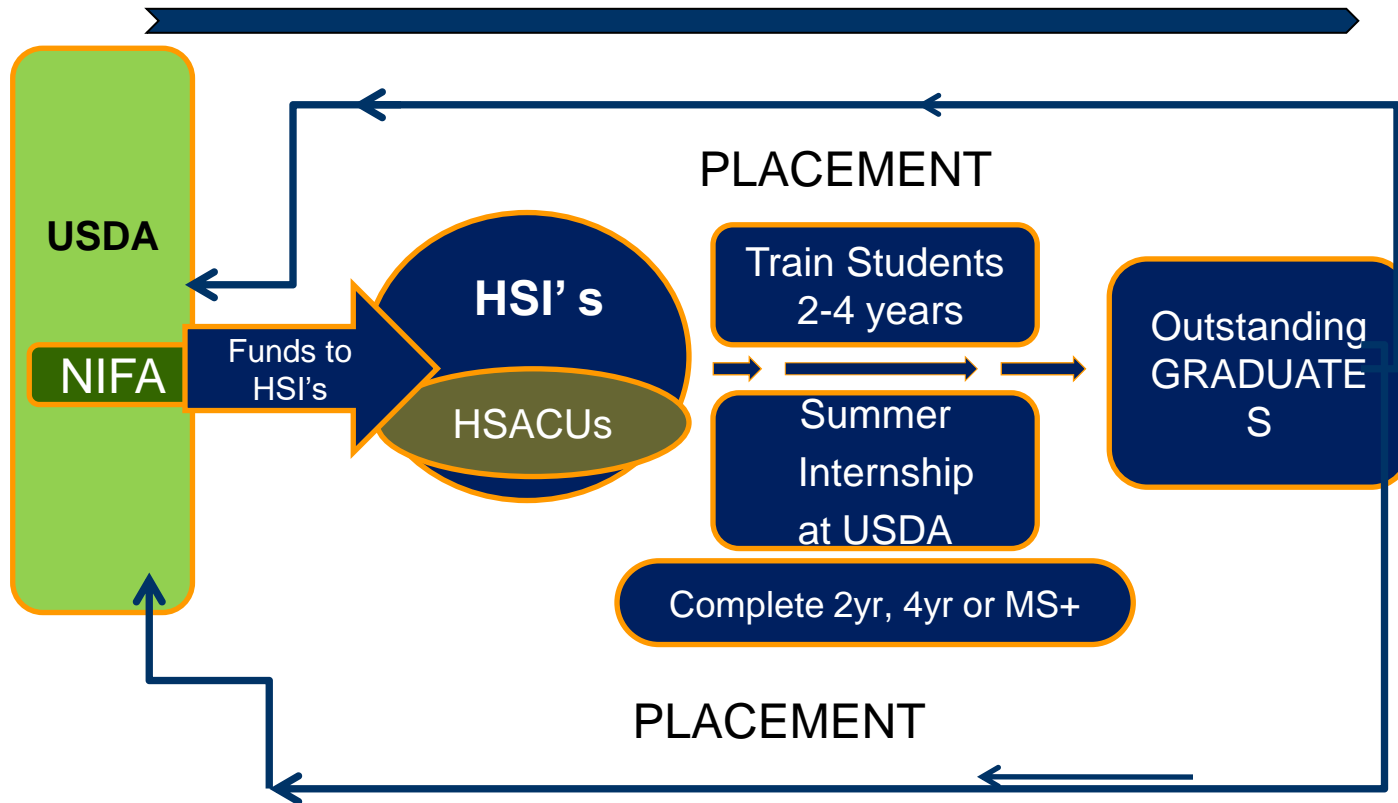


USDA Office of Human Capital Management has identified 20 Mission Critical Occupations (MCO's) in its FY 2008 Federal Equal Opportunity Recruitment Program Plan

- General Biological Scientists
- Biological Science Technician
- Soil Conservation Specialist
- Forestry Specialist
- Forestry Technician
- Dietician/Nutritionist Specialist
- Soil Science Specialist
- Veterinary Medical Officer
- Soil Conservation Technician
- Consumer Safety Inspection
- Consumer Safety Inspection
- Fore/Agricultural Commodity Grader
- Consumer Safety Specialist
- Food Inspection Specialist
- Economics and Ag Economics



A Simple Model





Example Job Opportunities at Foreign Agricultural Service GS-9/11/12



**IMAGINE YOUR
FUTURE...**

- Living and working overseas
- Learning new languages and cultures
- Being part of a diverse team
- Solving problems to help tackle trade barriers, food insecurity, and climate change
- Having pride in your work and making a difference in service to U.S. agriculture

...as a Foreign Service officer with the USDA Foreign Agricultural Service (FAS)

Virtual Info Sessions:

April 5, 8:30-10:00 a.m. EDT
May 3, 1:00-2:30 p.m. EDT

**Are you intrigued by the possibilities?
Learn how to make them a reality.**

#ExploreFAS

**JOIN US TO
DISCOVER...**

- Job opportunities opening this May
- Education and work experience requirements
- Federal pay, benefits, and retirement
- Our commitment to diversity, equity, inclusion, and accessibility
- How to apply using USAJobs



Explore, Email, Follow

www.fas.usda.gov
FASForeignService@usda.gov
[@USDAForeignAg](https://twitter.com/USDAForeignAg)

USDA Foreign Agricultural Service
U.S. DEPARTMENT OF AGRICULTURE



Project Duration -- 4 years

- The statutory time limit for these grants is **five (5) years**.
- All funds must be spent and withdrawn within 5 years.
- **Indirect Costs up to 30 percent**
 - Use negotiated rate
- **NO Matching Requirements**



Project Narrative

- The full application must not exceed the total page limit of 25.
- The total page limit will include both the *double-spaced* pages of written text, figures, and tables.
- The font size for tables should be no smaller than 11 points, Times New Roman.
- Tables could be single-spaced.
- The page limits outlined here ensure fair and equitable competition.
- Appendices to the Project Narrative are allowed if they are directly germane to the proposed project. Do not add appendices to circumvent the page limit.



Five Evaluation Factors (Total 100 points)

- **Potential for advancing education quality** **30**
- **Approach and cooperative linkages** **25**
- **Institutional commitment and resources** **20**
- **Key personnel** **15**
- **Budget and cost-effectiveness** **10**



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Hispanic-Serving Institutions Education Grants Program (HSI)

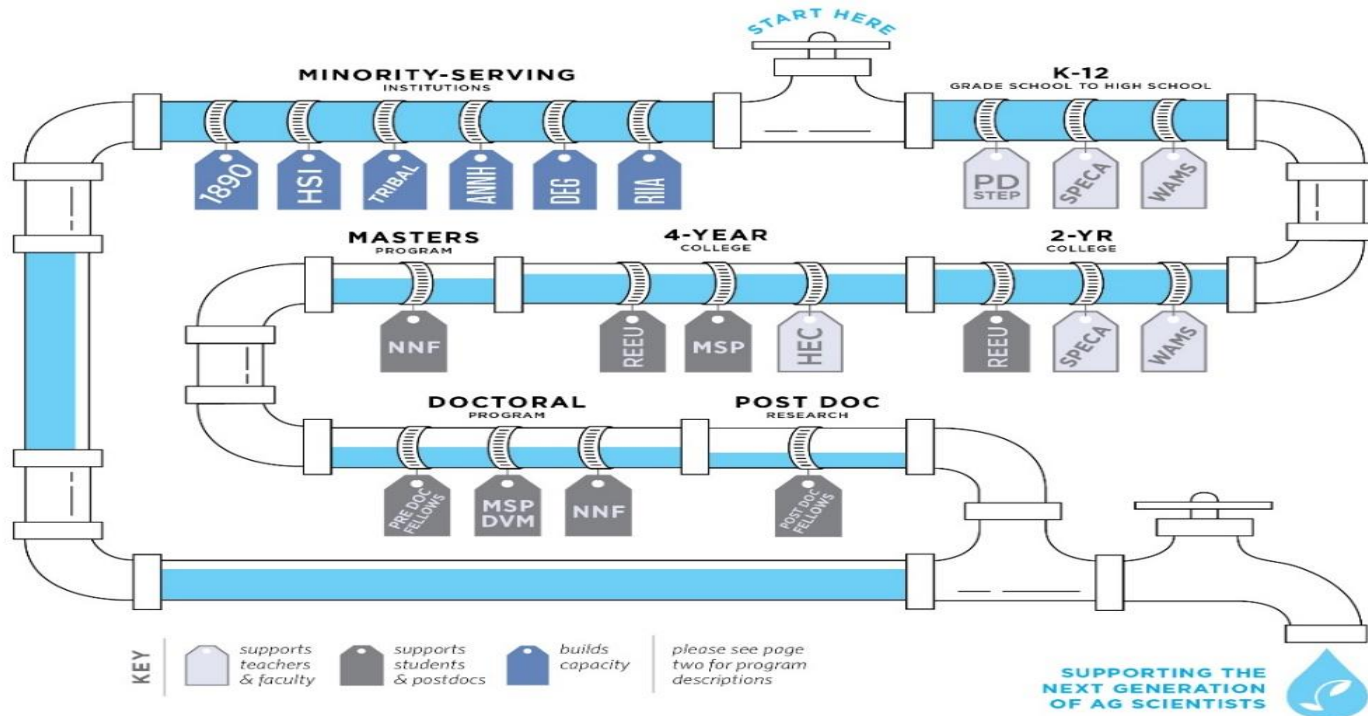
We Need Your Help to Connect HSI Students to USDA

- HACU Internships
- USDA Student Pathways Programs
- Presidential Management Fellows Program
- Be aware of other activities on the same area/topic
- Coordinate efforts with feeder initiatives and follow-up initiatives
- Duplicate/adapt successful initiatives
- Address barriers
- Involve students in network
- Duplicate yourself
- Make sure students meet the requirements for the jobs



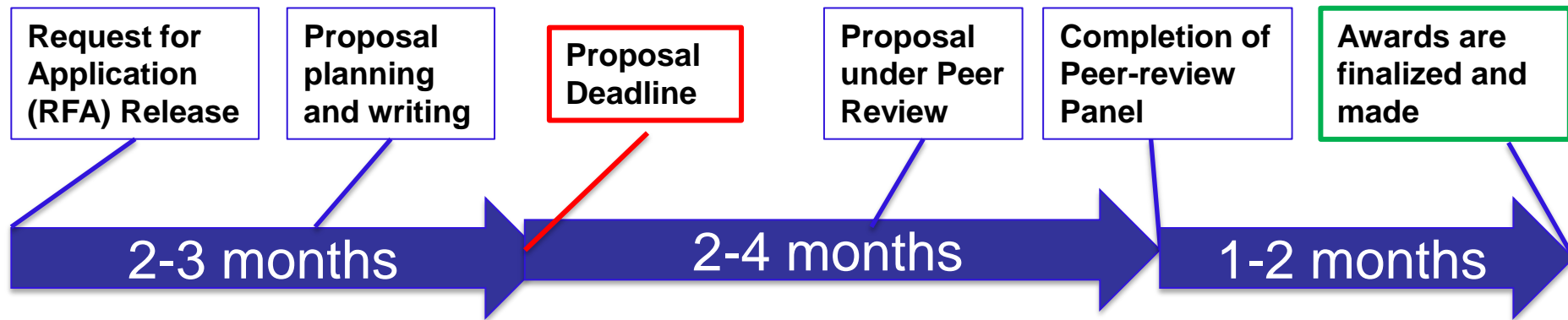
Education and MSI Grants

NIFA administers about 25+ Education & Capacity Building programs with about \$225+ million in annual appropriations





Timeline of Competitive Programs



It takes about 5-9 months from RFA release to an award



NIFA Undergraduate Fellows (REEU)



- Research and extension based experiential learning for undergraduates such that upon graduation they may enter the agriculture workforce with exceptional skills;
- Provides opportunities for students from underrepresented and economically disadvantaged groups at minority-serving institutions, community colleges, and four-year colleges and universities to obtain hands-on experience and training at larger universities and USDA laboratories.
- Eligible institutions include colleges and universities.

Award Max: \$500,000 Contact: ray.ali@usda.gov
FY2022 Deadline: **August 18, 2022**



Multicultural Scholars (MSP)

- Scholarships (undergraduate) to encourage students from groups that are historically underrepresented to pursue and complete **baccalaureate degrees** in the Food, Agricultural, Natural Resources, and Human Sciences, **or achieve a D.V.M.**
- Any combination of 2-, 3-, and/or 4-year scholarships
- \$6,500 /student/year, for up to four years + \$2,500 /student/year for cost of education allowance
- Student Experiential Learning (SEL) – One-time \$4,000 for each eligible USDA MSP Scholar
- Grants are given to Colleges and Universities.

Award Max: \$200,000

FY2022 Deadline: March 23, 2022

Contact: MSP@usda.gov



Multicultural Scholars (MSP)

- Scholarships (undergraduate) to encourage students from groups that are historically underrepresented to pursue and complete **baccalaureate degrees** in the Food, Agricultural, Natural Resources, and Human Sciences, **or achieve a D.V.M.**
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- Student Experiential Learning (SEL) – One-time \$4,000 for each eligible USDA MSP Scholar
- Grants are given to Colleges and Universities.

Award Max: \$200,000

Contact: ray.ali@usda.gov

FY2022 Deadline: **Check RFA**



Higher Education Challenge

****RFA to be released soon****

- Grants to colleges and universities to improve:
 - Food, agricultural, natural resources, and human sciences education
 - **baccalaureate or master's degree** level
 - Professional degree-level education in **veterinary medicine (DVM)**.
- Curriculum development, instructional delivery systems and expanding student career opportunities
- Faculty preparation and enhancement for teaching.
- Facilitating interaction with other academic institutions
- \$ about 5 million available in 2022

Award Max: \$30,000 to \$ 750,000
FY 2022 Deadline: TBD

Contact: ilawrence@usda.gov



National Needs Fellows

Deadline April 26, 2022

- Fellowships for **MS & Doctoral** level students in areas of specified, national need
 - MS - \$18,500 /student/year, for 2 years
 - PhD - \$24,500 /student/year, for 3 years
- Special (supplemental) International Study Stipend for current fellow up to \$4,500 /MS student and \$8,000 /PhD student
- Grants are given to Colleges and Universities.
- \$3.1 million available

Award Max: \$262,500

FY2022 Deadline: April 26, 2022

Contact: ray.ali@usda.gov



NIFA Pre-Doctoral and Post-Doctoral Fellows

- Pre-doctoral and post-doctoral fellowships to prepare the next generation of research, education, and extension professionals.
 - Technical and functional competence for pre-doctoral students
 - The research independence and teaching credentials of postdoctoral students
- Grants are normally provided to the pre-doctoral/postdoctoral scholar through the respective institution (e.g. colleges and universities).
- There is a small institutional allowance in addition to student stipend, fees and tuition, travel, supplies, etc.

Award Max Pre Doc: \$120,000
Contact: Ray.Ali@usda.gov

Award Max Post Doc: \$165,000
FY2022 Deadline: Oct 27, 2022



Agricultural Workforce Training (AWT) **AL 10.310**

- Develop industry ready workforce within the food and agricultural sciences
 - Develop or update curriculum for training at:
 - Community, junior, and technical colleges/institutes.
 - Workforce related certificates, or other industry accepted credentials
 - Provide apprenticeships, on-the-job simulations, etc
- Partnership with industry is expected
- \$500,000 total for project periods of up to 5 years.
- **<https://nifa.usda.gov/sites/default/files/2022-03/FY22-AFRI-EWD-RFA-508.pdf>**

Award Max: \$500,000

Contact: Carlos.Ortiz@usda.gov

FY 2022 Deadline: Check RFA



Women and Minorities in Science, Technology, Engineering, and Mathematics (WAMS) Fields Program



- Eligibility very broad
- Approximately \$400,000 available each year.
- Increase, to the maximum extent practicable, participation by rural women and underrepresented minorities from rural areas in science, technology, engineering, and mathematics (STEM) fields from grade levels K-14.

Award Max: varies
FY 2022 Deadline: March 31, 2022

Contact: TBD



Professional Development for Agricultural Literacy (PDAL)



- Develop and Strengthen pathways for FANH instruction at K-14 levels.
 - Improve how educators deliver academic instruction
- Encourage self-sustaining models
 - Identify and address skill gaps
 - Integrates innovations in science and pedagogy
 - Immersive learning experiences in non-formal education
- \$300,000 total for project periods of up to 4 years.
- Limit of one award per host institution

Award Max: varies

Contact: carlos.Ortiz@usda.gov

FY 2022 Deadline: September 1, 2022



Beginning Farmers and Ranchers Development Program (BFRDP)

- In FY 2022, **\$19 million** was available for funding.
- Funds for education, training, outreach and mentoring of beginning farmers and ranchers
 - Entering, establishing, building and managing successful farm and ranch enterprises.
- 25% match required

DEADLINE: May 19, 2022

CONTACT: Denis.Ebodaghe@usda.gov



Lessons Learned

What works...

- Local contact at Site
- Select two or more students (cohort)
- Regular meetings and gatherings
- Technical Training and Guidance
- Back up plan if first match does not work
- Mentorship and group interaction
- Assistance with housing including funding
- Salaries



PRODUCTS AND RESULTS

Strategic Area	Indicators	Level
Curriculum Development	# students enrolled	60
	# courses	15 – 20
Faculty Development	# faculty	5
	Professional meetings (days)	10
Equip/edu. materials-- student training	Supplies/printed materials (\$)	\$10,000
	Lap equipment (\$)	\$20,000
Instructional delivery	# faculty	10-15
	Technology use (hours)	500 – 1000
Experiential Learning	# hours/day	2
	# days	150
Recruitment	# students	60-65
	# school visits	10
Retention	# students enrolled	60
	# advisor hours	Variable
Degrees – level of Support	# BS degree	46
	# Masters	4
	# PhD	1
Students Stipends	# supported during the grant period	51 - 60
	# supported per year	51-60
About the students Served	# undergraduates	46
	# under-represented minority	40
K-12 Outreach	# students participation	1000
	# teachers participation	30



Hispanic Farmworkers

- More than half the hired farmworkers (51%) are Hispanic, compared to about one-fifth (19%) of the national workforce.
- Sixty-four (64) percent of Hispanic workers are classified as laborers and Hispanics account for thirty (30) percent of farm managers, inspectors, and supervisors.
- Hispanic farmworkers have traditionally been referred to as “migrant” workers; however, USDA’s Agricultural Workers Survey suggests that migrant workers who follow the crop are actually a rather small portion of the labor force.
- Well over three-quarters of farmworkers are “Nonmigrant: settled” and only about five percent of workers “follow the crop.” An interesting group of workers is the “shuttlers”



Beginning Farmers and Ranchers Development Program (BFRDP)




Grant recipient must be a collaborative state, tribal, local, or regionally-based network or partnership of public or private entities, may include:

- State cooperative extension service;
- Federal, State or tribal agency;
- College or University (including an institution awarding an associate's degree);
- Foundation or any other appropriate partner, as determined by the Secretary.
- Priority given to Community-based and nongovernmental organization with expertise in new agricultural producer training and outreach



Beginning Farmers and Ranchers Development Program (BFRDP)



Standard Projects - to provide local and regional training, education, outreach and technical assistance

✓ Up to \$250,000 per year for up to 3 years

- Financial management training
- Whole farm planning
- Conservation assistance
- Diversification and marketing strategies
- Curriculum development
- Other subject areas of use to beginning farmers or ranchers (see the BFR program page).



The Bottom Line

You Could Make a Difference and Help to Connect Students to USDA

- HACU Internships
- USDA Student Pathways Programs
- Presidential Internship Program
- Be aware of other activities on the same area/topic
- Coordinate efforts with feeder initiatives and follow-up initiatives
- Duplicate/adapt successful initiatives
- Address barriers
- Involve students in network
- Duplicate or ‘clone” yourself
- Make sure students meet the requirements for the jobs



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To do list...

1. Take Action!
2. Work Together in Partnership
3. Leverage Resources
4. Get Results!!





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What to Do if You Have Questions ?

Contact

Program Staff!!!



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[@USDA_NIFA](https://twitter.com/USDA_NIFA)

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Questions?

ilawrence@usda.gov





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Grant Writing Tips for Success

“Ten Things You Must Do”



Ten Things You Must Do

1. Find the right program for you and your idea

- ◆ Main purpose of program (funding priorities) – does idea fit in mainstream or on the fringe?
- ◆ Don't waste time applying to the wrong program... square pegs don't fit in round holes!
- ◆ Eligibility restrictions?



Ten Things You Must Do

2A. Assemble an Effective Team and Develop the Proposal Together

- ◆ Include ALL Expertise necessary to complete the project
- ◆ Don't start writing until all team members are identified.
- ◆ Share responsibility of writing, but edit into a single voice



Ten Things You Must Do

2B. Assemble an Effective Team and Develop the Proposal Together

- ◆ Who will be responsible for project activities?
- ◆ If the project involves extension activities:
 - ◆ Who are the stakeholders?
 - ◆ What roles will they play in project development and implementation?
- ◆ Who will evaluate the project?



Ten Things You Must Do

2C. Have team members develop two (or three) PowerPoint slides that describe:

- ◆ What activities (and responsibilities) they will undertake
- ◆ How they connect to other components of the project
- ◆ What resources they will require to succeed
- ◆ Use these slides to develop the proposal outline



Ten Things You Must Do

3. Become a “student” of the RFA

- ◆ Understand the main goals of the program
- ◆ Understand the instructions outlined in the RFA on how to assemble the proposal
- ◆ Read the RFA !!!
- ◆ **Read the RFA !!!**



Ten Things You Must Do

4. Develop a timeline for proposal preparation

- ◆ Develop timeline that allows for completion of proposal
 - ◆ 2 weeks before submission deadline
- ◆ If you rush preparation of the proposal, it will show - reviewers will notice and not be kind



Ten Things You Must Do

5. Understand criteria for evaluating proposals

- ◆ RFA normally contains the criteria that will be used by reviewers to evaluate your proposal
- ◆ Understand these criteria BEFORE you begin preparing your proposal - provides better understanding of where to put greatest efforts during proposal preparation



Ten Things You Must Do

6. Understand review process and reviewers

- ◆ Reviewer may be assigned 10 to 20 proposals
- ◆ Following directions in RFA helps reviewers; not following directions makes them work hard
- ◆ Preparing proposal logically and clearly helps reviewers; not doing so makes them work hard





Ten Things You Must Do

7. Write the proposal logically and clearly

- ◆ Organize proposal according to outline in RFA or evaluation criteria, whichever is most logical
- ◆ Following the prescribed format makes reviewers happy and more generous
- ◆ Making reviewers work harder hurts you



Ten Things You Must Do

8. Prepare budget with a strong justification

- ◆ Unreasonable budgets hurt proposals – create skeptics within reviewer ranks
- ◆ Keep budgets within guidelines in the RFA – they are judged on degree of reasonableness
- ◆ Being very under budget does not increase your chances!!



Ten Things You Must Do

9. Obtain critical input from experienced and successful colleagues. Someone who....

- ◆ Talks frankly, bluntly and clearly – don't want someone who beats around the bush
- ◆ Has little sympathy for your ego
- ◆ Has been successful in obtaining grants



Ten Things You Must Do

10. Allow time for intramural administrative requirements – submit on time

- ◆ All Documents must be in PDF
- ◆ 5:00 pm Eastern Time
- ◆ A deadline is a deadline is a deadline!



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How are Proposals Reviewed?





Successful Proposals

- Excite the reviewers
- Excite the reviewers!!!!
- Are easy to read and understand
- Have clear rationale & objectives that fit program priorities
- Clearly stated hypotheses or research questions – for research proposals

<https://nifa.usda.gov/resource/general-grant-writing-tips-success>



Successful Proposals

- Clearly stated learning objectives and expected outcomes/impacts
 - What will be different as a result of the proposed work?
- Have specific objectives, methods, work plan, plan for dissemination of results ,etc.
- Have well-communicated importance of the topic and potential contributions of work
- Appropriate expertise of the Project Director(s)



Successful Proposals

- Contain a detailed project description - methods, sample selection, analysis, educational program delivery, instructional materials development, etc.
- Address potential pitfalls, including shortcomings of data and alternative plans
- Follow the submission rules!!!



Reasons for Non-compliant Proposals

- Exceed
 - Page, budget, or duration limits
- Files are not in proper format (pdf)
- Do not fit the program priorities
- Project of little or no relevance to NIFA mission and/or program priorities



Reasons for Lower Ratings

- Insufficient preliminary data or evidence from literature
- Poorly written, unclear objectives or hypotheses, spelling errors or typos
- Poor record of results (e.g., publications) from previous funding
- Project Director(s) not qualified



Reasons for Lower Ratings

- Low scientific merit, basic flaws in logic, demonstrates lack of scientific understanding
 - Experiments or objectives not cohesive, inappropriate, too vague, or not integrated
 - No hypotheses, research questions, or learning objectives
 - Not innovative, little new information gained
- Not as exciting as other proposals (*i.e.*, worth funding, but ran out of funds)