

United States National Institute Department of of Food Agriculture and Agriculture

# Funding Opportunities at NIFA

#### HACU Conference Atlanta

**October 8th**, 2018

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE

INVESTING IN SCIENCE | SECURING OUR FUTURE | WWW.NIFA.USDA.GOV

YOUTH, FAMILY.

AND COMMUNITY

FOOD PRODUCTION

INTERNATIONAL

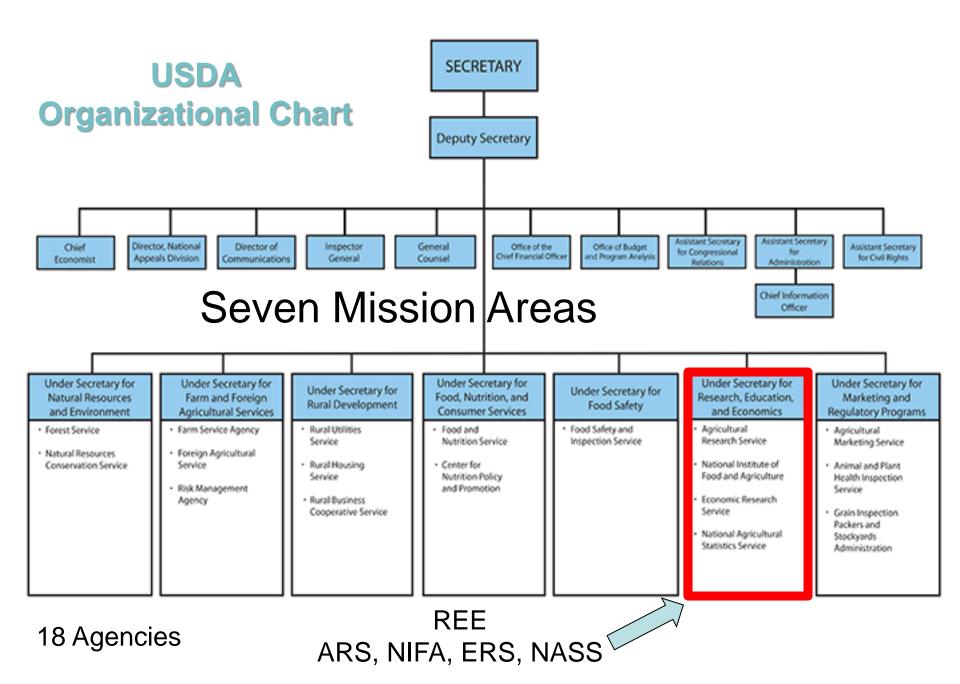
PROGRAMS

USDA

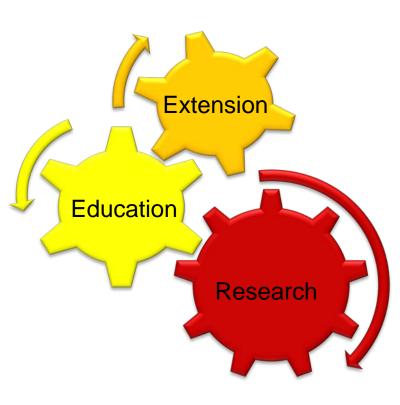
BIOENERGY, CLIMATE, AND ENVIRONMENT

# **Outline of Presentation**

- NIFA Overview
- Highlight Key Funding Opportunities
  - ➢ Agriculture and Food Research Initiative (AFRI)
  - Education Programs
  - ≻HSINP
  - ≻FS
  - International Engagement
- Tips for Success in Grant Writing



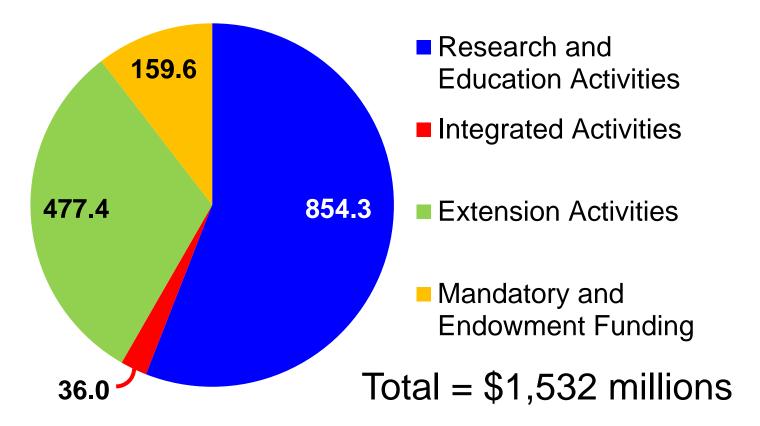
## NIFA's Mission



### **Extramural Funding**

- 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 2018 Budget (million dollars)



#### **NIFA Programs Cover Many Topics**



#### Food Science

- Food Quality
- Food Safety



#### Health

- Nutrition
- · Obesity
- Wellness



#### International

- Global Engagement
- Global Food Security



#### Plants

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

#### **Natural Resources**

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



#### People

- Community Vitality
- Family Well-Being
- Youth



# **NIFA's Four Science Institutes**

#### • Institute of Bioenergy, Climate, and Environment

- Enhance sustainable biobased 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

#### Center for International Programs

# The Agriculture and Food Research Initiative (AFRI)

- USDA's largest competitive grant program
- Addresses the 6 Farm Bill priorities for AFRI
  - Plant health and production and plant products
  - Animal health and production, animal products
  - Food safety, nutrition, and health
  - Bioenergy, natural resources, environment
  - Agriculture systems and technology
  - Agriculture economics and rural communities

# Funding Mechanisms at NIFA Competitive Grant Funding

- Research Programs
- Education Programs
- Extension Programs
- Integrated Programs combine research, education and/or extension at program or project level (Multi-function)

>30 programs with broad eligibility

# I. AFRI Grant Types

- Standard Grants
- Coordinated Agricultural Projects (CAPs)
- Conference Grants
- Food and Agricultural Science Enhancement (FASE) Grants
  - Pre- and Postdoctoral Fellowships
  - New Investigator Grants
  - Strengthening Grants several types

## 1. Sustainable Agricultural Systems (\$A\$)

- \$80 million in funding available
- New RFA for 2018 in the Agricultural and Food Research Initiative
- Progression of the Challenge Areas to new multi-disciplinary systemslevel work
- Funding for large integrative projects that address major challenges in agricultural systems
- SAS is soliciting creative and visionary project applications that:
  - use transdisciplinary approaches
  - integrate research, education, and extension activities
  - promote convergence of science and technology
  - solve present and future food and agricultural production system challenges
  - result in societal benefits.

### **Sustainable Agricultural Systems**

- Up to \$10 million per systems-level project
- Periods of up to five years.
- Integrated Projects only (must include <u>all three</u>: Research, Education, and Extension)
- Letter of Intent required-deadline: Wednesday, June 27, 2018 at 5pm Eastern Time
- FASE Food and Agriculture Science Enhancement
  - > Again, LOI is required—June 2018
- Deadline: Wednesday, October 10, 2018 at 5pm Eastern Time

#### nifa.usda.gov/program/afri-sas

## **Sustainable Agricultural Systems**

#### GOALS

- Applications must address <u>one or more</u> 25-year goals:
  - Increase agricultural total factor productivity growth from the current 1.5 percent to 2 percent per year and agricultural production by 2 percent annually in all U.S. regions, providing models for similar agro-ecological niches;
  - Improve water and nitrogen and phosphorus nutrient use efficiency by 50 percent;
  - Reduce crop losses due to environmental stress and pests, or diseases by 20 percent;
  - Produce 50 billion gallons of biofuels and 50 billion pounds of biobased chemicals and bioproducts; and
  - Reduce food-borne illnesses down to 8.5 cases per 100,000.

## 2. Small Business Innovation Research (SBIR)

- Phase 1 & 2 \$25 million for both phases
- 10 research areas;

Plant Related Research areas:

- Forests and Related resources
- Plant Production and Protection—Biology
- Plant Production and Protection—Engineering
- Biofuels and Biobased Products
- Contact: Scott Dockum, sdockum@nifa.usda.gov 202-720-6346
- Phase I RFA is typically released in July of each year with an early October deadline

# 3. FASE Food and Agricultural Science Enhancement Grants

### Goals:

- Strengthen science capabilities in research, education and/or extension
- Help institutions increase competitiveness
- Attract new scientists into careers in high-priority areas of national need



## Special Opportunities in FASE Grants

- USDA Established Program to Stimulate Competitive Research (**EPSCoR**) entities
- Small and mid-sized academic institutions with limited institutional success
- Minority-serving institutions
- New Investigators
- Pre- and Postdoctoral scholars

# **EPSCoR** Eligibility

EPSCoR (Established Program to Stimulate Competitive Research):

- States with AFRI funding ≤38th percentile of all states from AFRI during previous 3 years (19 states)
- U.S. territories and possessions included
- EPSCoR states recalculated each year states can move on or off of list depending on their previous success receiving AFRI awards

## 2017 EPSCoR States

FY 2017 USDA EPSCoR States			Other Entities Eligible for USDA EPSCoR Funds	
Alaska	New Hampshire	South Dakota	American Samoa	Northern Mariana Islands
Idaho	New Jersey	Utah	District of Columbia	Puerto Rico
Louisiana	New Mexico	Vermont	Guam	Virgin Islands of the U.S.
Maine	North Dakota	West Virginia	Micronesia	
Mississippi	Oklahoma	Wyoming		
Montana	Rhode Island			
Nevada	South Carolina			

### **New Investigator Grants**

- No funding set-aside, mechanism to support new investigators below the funding line
- Eligibility
  - First 5 years of first career-track position
  - Limited publication record
  - No previous Federal funding other than a pre- or postdoctoral fellowship or AFRI seed grant
- PDs apply to programs offering <u>Standard</u> Grants

# Strengthening Grant Eligibility

Degree granting institutions

- Located in EPSCoR states
- Small to mid-size institutions with limited institutional success
- Minority-serving institutions with limited institutional success

# Strengthening Grant Eligibility

Small and Mid-sized institutions:

• Current total enrollment of <17,500

## Minority-serving:

• Minority enrollment >50% of total enrollment

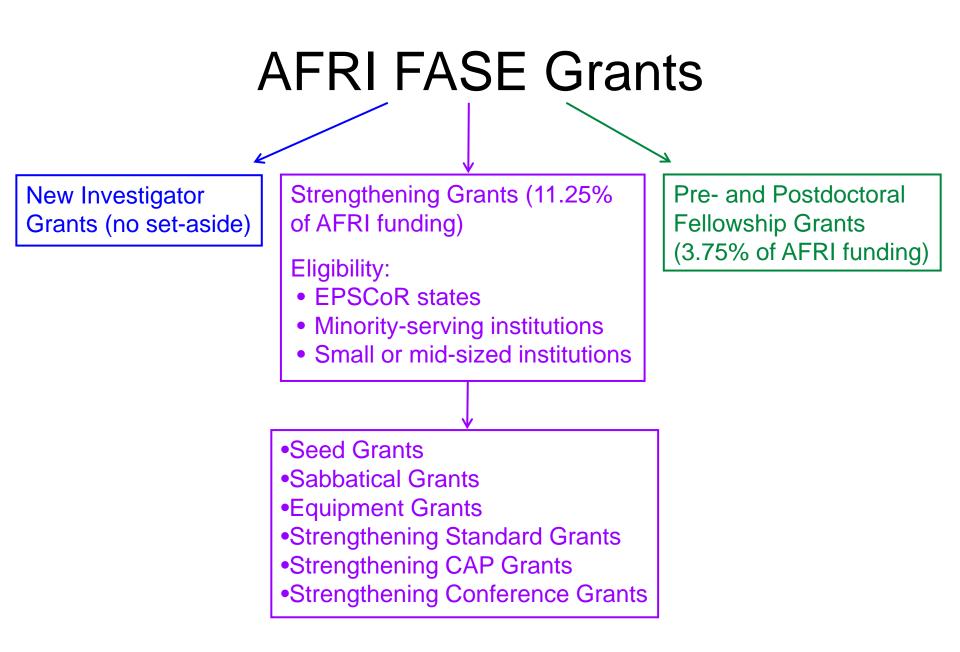
### Limited institutional success:

 Not among most successful universities and colleges receiving Federal funds for science and engineering R&D (Table 1 in RFA)

# **FASE Grant Types**

### Strengthening Grants – 11.25% set-aside:

- Seed Grants
- Sabbatical Grants
- Equipment Grants
- Strengthening Standard Grants
- Strengthening CAPs
- Strengthening Conference Grants



## Strengthening Grant Types

Seed Grants (\$150,000 for 2 years)

- Collect preliminary data for future AFRI funding
- Single function research, education or extension

### Sabbatical Grants

- Up to one year of salary, travel funds, supplies
- mini-sabbaticals also appropriate

**Equipment Grants** 

## **Strengthening Grant Types**

Strengthening Standard Grants (and CAPs)

- Identical to Standard Grant application except project type box checked indicating eligibility
- No specific RFA
  - applicants submit to AFRI program of interest by program's deadline
  - Strengthening Standard Grant applications reviewed with Standard Grant applications in same panel

### Pre- and Post-doctoral Fellowships:

- 3.75% funding set-aside (\$4 million plus)
- Eligibility
  - Citizens, nationals, permanent residents
  - Progress toward or time from completion of degree
- Programs are in Education and Workforce Development RFA

# **Strengthening Grant Types**

### **Equipment Grants**

- 50% of cost or \$50,000 (whichever is less)
- Requires non-Federal matching waivers of ≤\$25,000 are available

### > No specific RFA for these 3 grant types:

→ applicants submit to AFRI program of interest by program's deadline

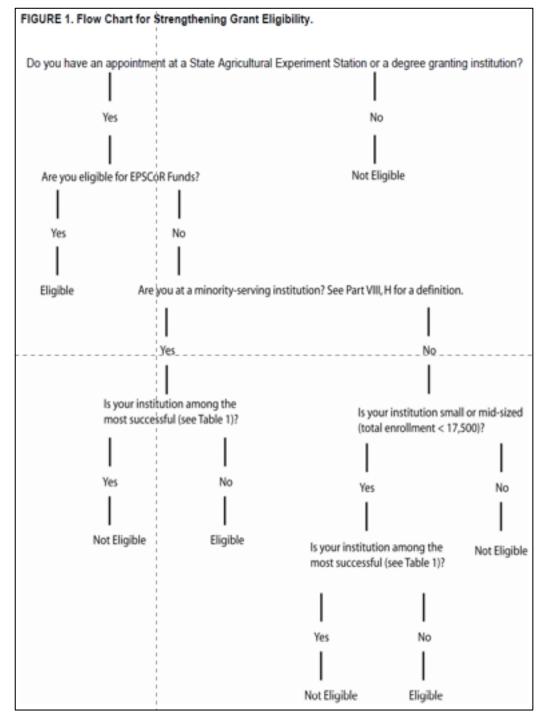
# Sound Confusing?

Great News... there is a flow chart...



United States National Institute Department of of Food Agriculture and Agriculture

### Helpful eligibility flow chart on last page of AFRI RFAs

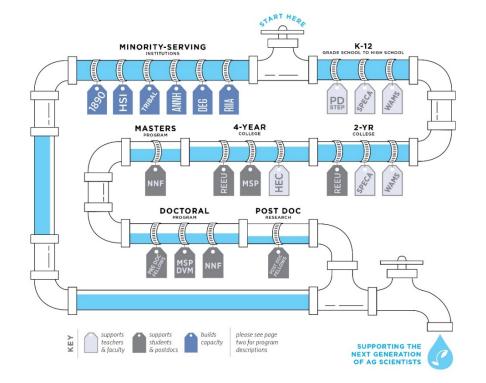


## **Education and MSI Grants**

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

Goals:

- Workforce Development
- Learning & Engagement
- Capacity Building for eligible MSIs and NLGCA



## **Workforce Development Programs**

Grant programs that directly support students and prepares them for the workforce in STEM fields related to the USDA Mission.

## **Multicultural Scholars**

- Available Funding: **\$945,000**
- 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 Contact: Dr. Ray Ali rali@nifa.usda.gov <u>% Funded</u>: 24% FY2018 Deadline: Passed (202) 720-2727

# **NIFA Undergraduate Fellows (REEU)**

- Available Funding: **\$7,279,105 in FY 2018**
- 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.
   <u>Award Max</u>: \$ 300,000
   <u>Contact</u>: Ariela Zyche

Ariela.Zycherman@nifa.usda.gov

<u>Contact</u>: Ariela Zycherman 202-720-0384

## **National Needs Fellows**

- 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.

Award Max: \$262,500 Contact: Dr. Ray Ali rali@nifa.usda.gov <u>% Funded</u>: 21% FY2018 Deadline: Passed (202) 720-2727

### **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 predoctoral students
  - The research independence and teaching credentials of postdoctoral students
- Grants are normally provided to the predoctoral/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.

<u>Award Max Pre Doc</u>: **\$120,000** <u>Contact:</u> Ray Ali rali@nifa.usda.gov

Award Max Post Doc :\$165,000 FY2018 Deadline: Passed (202) 720-2727

### **Higher Education Challenge**

- Available Funding: **\$4,800,000**
- 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

Award Max: \$ 750,000 Contact: Dr. Antonio McLaren antonio.a.mclaren@nifa.usda.gov Funded: 20% Deadline: TBD (202) 720 - 0742

### 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: variesFunded:Contact: Dr. Victoria LebeauxFY 2018 Deadline: TBDVictoria.S.LeBeaux@nifa.usda.gov202-578-4139

### Secondary, Postsecondary Ag Education Challenge (PD STEP)

- Available Funding: **\$800,000**
- Innovative teaching enhancements
  - Improve how faculty deliver academic instruction
- Emphasis is on encouraging students
  - transfer to higher education institutions
  - complete advanced degrees
- \$150,000 total for project periods of up to 3 years.
- Limit of one award per host institution
- Any single institution can submit a maximum of three proposals

Award Max: varies Contact: Dr. Victoria Lebeaux Funded: 21% FY 2018 Deadline: TBD

## **MSI Programs**

- 1890 LGUs
- Tribal Colleges (1994 LGUs)
- Hispanic-Serving Institutions
- Alaskan Native/Native Hawaiian
- Insular Area

### Hispanic-Serving Institutions Education Grants Program

### • FY2018: \$8.8 million available for funding

- Grants to HSIs to improve:
  - Curricula Design, Materials Development and Library Resources
  - Faculty Preparation and Enhancement for Teaching
  - Instruction Delivery Systems
  - Scientific Instrumentation for Teaching
  - Student Experiential Learning
  - Student Recruitment and Retention
- Grant Types: Conference, Regular, and Collaboration
- 100 percent matching requirement
  - Waived to HSACUs, NLGCAs, and land-grants.

Award Max: \$50,000 to \$ 1millionAward rate: 9%Contact:Irma LawrenceFY2019 Deadline: TBDILAWRENCE@nifa.usda.gov202-531-0633

### FY 2019 HSIs RFA 3 Levels of Funding

LEVEL 1. Regular up to \$250K

Strengthening, first

time applicants + \$25K

**LEVEL 2. Collaboration**–Priority Oriented-\$250K/yr/4yrs

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

\*Plant Sciences\*ForestryFood Science/NutritionAnimal Science/Plant scienceNatural ResourcesMicrobiology/Nanotechnology

### LEVEL 3. Conference \$30,000 to \$50,000

### **HSIs Projects Duration -- 4 years**

The statutory time limit for these grants is five (5) years.

### **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
- Entomology Animal

- Environmental
   Sciences/Management
- Animal Sciences
- Soil Sciences
- Family & Consumer Sciences
- International Education/Research
- Plant Sciences and Horticulture (including Turf Sciences)
- Other

### **Indirect Costs**

Use negotiated rate, but may not exceed 30 percent.

### **Matching Requirements**

### 100 percent matching requirement

Matching requirements does not apply to grants awarded to HSACUs, NLGCAs, and Land-grants. (Pages 17-18 RFA)

Note that NIFA included information at

http://www.nifa.usda.gov/business/awards/matching\_require.html to further assist you in determining if you must meet the new matching requirement.

### **Non-Land Grant Colleges of Agriculture**

 Capacity building grants for non-land-grant colleges of agriculture to develop curricula, conduct research, participate in outreach activities, and enhance agricultural related programs outside of the land-grant university system.

### • Project Types

- Teaching Projects
- Research Projects
- Outreach or Applied Research Projects

### **Non-Land Grant Colleges of Agriculture**

- Eligibility restricted to NIFA certified NLGCA
- Approximately **\$4.8 million** available each year.
- FY 2018 application deadline was in May.
- Grant Types/Size in FY 2018
  - a) Planning Activity/Conference Grant = \$30,000
  - b) Regular Grants = \$150,000
  - c) Collaborative Grants = not to exceed \$3

Award Max: varies Contact: Dr. Ariela Zycherman <u>Ariela.Zycherman@nifa.usda.gov</u> Funded: 38% FY 2018 Deadline: TBD 202-720-0384

## **Other Grant Programs**



## Beginning Farmers and Ranchers Development Program (BFRDP)

- In FY 2018, **\$17.7 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

## Beginning Farmers and Ranchers Development Program

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

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).



## **Forest Service**



# There are opportunities to include international activities in your

NIFA **Capacity** grants (mainly land grant institutions)

• NIFA Competitive grants (all eligible institutions)

### Note:

Any international activity must advance U.S. agricultural goals. Only U.S. institutions are eligible to apply for NIFA awards.

For info on competitive grant programs with global engagement opportunities see https://nifa.usda.gov/opportunities-global-engagement

Questions? Email: otto.gonzalez@nifa.usda.gov

### **3 Steps toward including an International activity**

Step 1 - See If it fits within a NIFA grant program



Step 3 – Identify potential collaborators, institutions, or locations

Step 2 – Determine how it helps you accomplish your research, education or extension objective

#### Advancing U.S. Agriculture through Global Engagement



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U.S.-U.K. Collab: Mycobacterial Transmission Dynamics in Agricultural Systems: Integrating Phylogenetics, Epidemiology, Ecology, and Economics

Researchers at Cornell University formed a collaborative with scientists in the United Kingdom (U.K.) to investigate mycobacterial transmission in agricultural systems. Their objective was to develop a quantitative methodology for incorporating whole genome sequence data into bacterial transmission models for infectious diseases, integrating ecology, economics, molecular biology, and epidemiology. Due to their valuable collections of data and isolates in the U.S. and the U.K., with experts across multiple scientific fields, the team was able to apply these methods and models to better understand the principles and dynamics governing transmission of mycobacterial infection. AFRI grant

#### Learn More About NIFA's Opportunities for Global Engagement

NIFA's Center for International Programs establishes connections between NIFA and other organizations, such as the U.S. Agency for International Development (USAID), Food and Agriculture Organization of the United Nations (FAO). CGIAR system of international agricultural research centers, and the World Bank; and with agricultural research agencies of other countries to globally advance the results and experience of NIFA and the institutions it serves, and achieve goals important to U.S. agriculture. To find out more about NIFA's international collaborations and opportunities in the different NIFA grant programs visit us on the web: https://nifa.usda.gov/program/global-engagement-programs

#### Global Engagement Programs

- Enhancing NIFA's' Effectiveness for Global Engagement
- Grant Opportunities for Global Engagement Developing Global Partnerships

Contact: Otto Gonzalez, Director, Center for International Programs, otto.gonzalez@nifa.usda.gov

All project descriptions in this document are based on reports from the grantees in the USDA Current Research Information System (CRIS) https://cris.nifa.usda.gov

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Training future leaders with a good

NIFA

understanding of global food and agriculture issues is

Expanding US Market Access in China's

Evolving Agricultural and Trade Policy

To gain an understanding of China's

agricultural trade policies and promote U.S. market access

to China, a team from Virginia Polytechnic Institute (Virginia

Tech) researched U.S. market access under China's

evolving agricultural and trade policies. Working with

Chinese collaborators, they traveled to China to interview

Advancing U.S. Agriculture through Global Engagement

#### Biology and Management of Plant-Associated Viruses and Endophytic Fungi in New Mexico

Regarding endophytic fungi: Locoweeds (found globally) are leguminous plants which are toxic to grazing animals due to consumption of swainsonine, an alkaloid produced by fungi which live endophytically inside the locoweed plants. Scientists at New Mexico State University are working with Chinese scientists to compare locoweed endophytes in China to those found in the western United States. Fungal endophytes and locoweed plants will be characterized biologically and molecularly. By better understanding the fungi and their interaction with their plant hosts, New Mexico State University scientists hope to develop options to help rangeland managers avoid or control the problem of livestock poisoned by locoweed. HATCH grant



#### Risk Assessment and Eradication of Globodera in U.S. Production of Potato

The U.S. potato industry depends upon the ability to respond in a quick, economical, and environmentally sound way to invasive agricultural pests such as cyst nematodes in the genus Globoderg. The University of Idaho formed a consortium of researchers, extension specialists, and educators from three land-grant institutions (U. of Idaho, Oregon State University, Cornell University), USDA Agricultural Research Service, and international experts (James Hutton Institute, Scotland: INRA, France; Agriculture and Agri-Food Canada). The objective is to increase the capacity of the U.S. to respond to the threat of Globodera in potato production because potato is the most important non-grain food crop in the world. AFRI grant



#### Managing Plant Microbe Interactions in Soil to Promote Sustainable Agriculture

Lettuce drop is a destructive disease caused by a fungus (Verticillium dahliae) that causes lettuce leaves to wilt and drop to the soil surface. The University of California, Davis, with collaboration from the California Leafy Greens Research Board, and Bayer Crop Sciences in Germany is researching how certain soils are able to suppress lettuce drop and other diseases caused by Verticillium spp. They applied a metagenomics, highthroughput DNA sequencing approach to identify the soilborne microbes that eliminate Verticillium wilt symptoms in lettuce grown in California's Salinas Valley. Ultimately, this knowledge will aid in the development of strategies to manage Verticillium wilt throughout the world. HATCH grant

ociatal challenges. NEA's investments in transformative science directly support the ciences, visit enwunifa.usda.gov/impacts, sign up for email update

#### larger global population with increasing dietary needs. To improve wheat production, faculty from the University of

Nebraska-Lincoln, with collaboration from the International Maize and Wheat Improvement Center (CIMMYT) in Mexico. Texas A&M University, the University of Hohenheim (Germany), Kansas State University, and Genetics and Crop Plant Research - IPK (Germany), conducted research to develop the necessary knowledge-base, germplasm, and heterotic pools to support the development of hybrid wheat. This project, a part of the NIFA's participation in the International Wheat Yield Partnership (IWYP) is expected to help create the scientific and germplasm foundations for successfully launching the hybrid wheat industry in the United States. AFRI grant

Developing the Tools and Germplasm for

Wheat yields will need to increase to feed a

Hybrid Wheat



Advancing U.S. Agriculture through Global Engagement

#### Strengthening U.S. Agriculture with Multidisciplinary International Undergraduate **Research and Extension Experiences**

The University of Tennessee is bringing together 14 undergraduate students and 10 mentors in a 3-year experiential research and extension project to investigate smallholder farms practicing conservation adjacent to the Vaca Forest Reserve in Belize. They will conduct projects on crop production and soils: social and economic systems: and wildlife forestry, and ecosystem services. An agro-ecological approach will be used to foster systems-level thinking and develop transdisciplinary skills. Their goal is to develop leaders in agriculture and natural resources research and extension who can synthesize the complexity of agricultural systems to keep U.S. agriculture at the forefront of addressing sustainable global food security. AFRI grant

#### U.S.-U.K. Collaborative Research: Host Resistance to Avian Pathogenic E. coli

Avian colibacillosis, a disease caused by the bacterium Escherichia coli (Avian Pathogenic E. coli -APEC) is responsible for much mortality in poultry flocks. Scientists from Iowa State University and the Roslin Institute, University of Edinburgh (United Kingdom) formed a collaborative research team. leveraging their respective expertise in poultry immunology, genomics, and microbiology. The goal was to reduce the impact of APEC on the poultry industry in the United States and the United Kingdom through development of complementary veterinary and breeding control strategies based on a thorough understanding of host functional response to E. coli infection. AFRI grant

ive societal challenges. NEWs investments intransformative science directly support the long-term cultural sciences, visit www.nifa.usda.gov/impacts, sign up for email updates or follow us on Twitten



#### **Expanding their Career Competencies** through International Experiential

Faculty at Texas A&M University (TAMU) and Prairie View A&M University (PVAMU) teamed to broaden their students' academic experiences and career competencies through a faculty-led study abroad program in Namibia, partnering with the University of Namibia and Namibia-based research centers, Recruiting students traditionally underrepresented in study abroad programs was an important objective. Faculty included Namibians' knowledge of communitybased natural resource management strategies, and how to use these strategies to address food security issues. TAMU and PVAMU faculty with colleagues in Namibia developed course materials, and aimed to integrate learning from the study abroad experience into courses back at their universities. HEC grant



breeding lines. HATCH grant

NPX3 mision is to invest in and advance agricultural research, education, and extension that solve societal challenges. NPX's investments in transformable solve of energies support the long term prospecty and global premimene of U.S. agriculture. To learn more about NPX's impact on agricultural sciences, vist www.nfausta.gou/inpacts, sign up for email update sor follow us on Twatter 00.000. NPX, 4VFTmentex15, second 2017.

https://nifa.usda.gov/resource/advancingus-agriculture-through-global-engagement





#### institutions can receive NIFA grants, and any international activities must advance U.S. agriculture. The NIFAfunded projects described here are examples of how U.S. researchers and faculty through international collaborations and activities are achieving results valuable to the U.S. and the world. These projects help promote U.S. agriculture, advance trade, serve U.S. food security and food safety needs, and foster

Advancing U.S Agriculture through Global Engagement

collaboration to address mutual interests within the global agricultural science community.

National Institute of Food of Agriculture (NIFA) grantees are including international activities as an effective

way to help achieve research, education, and extension objectives important to U.S. agriculture. Only U.S.



United States Department of ol Food www.nifa.usda.gov Asriculture and Agriculture (USDA\_NIFA

#### Zika Virus (ZIKV) has emerged in the

Americas where susceptible populations of new vectors of transmission may arise and the disease may spread more rapidly. To fully understand the range of mosquito species capable of transmitting ZIKV in the Americas, University of Florida researchers studied ZIKV transmission in Haiti, with an objective to determine the frequency of Zika infection in wildcaught mosquitoes, and in mosquitoes stored from previous collection. What was learned in Haiti could be applicable to Florida and other southern states of the U.S. due to the similarity of mosquito species.



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#### Learning Opportunities

#### both Chinese and U.S. leaders in agribusinesses, government agencies, and universities to determine trade constraints, regulations and other impediments to U.S. agricultural exports. This research will provide U.S. agribusinesses and agricultural exporters with knowledge to evaluate notential, risks and opportunities caused by differential agricultural and trade policies and help U.S. agribusinesses expand market access into China. AFRI grant

Environment

#### Development of Woody Landscape Cultivars People love ornamental plants that exhibit

researchers will test both species for their performance

under drought and flooded conditions and use them for



### USDA/NIFA's

### Center for International Programs works to:

- Enhance global engagement of NIFA and the institutions it serves
- Develop global partnerships
- Build capacity at home and abroad

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Director, Center for International Programs, USDA/NIFA

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For info on NIFA global engagement opportunities https://nifa.usda.gov/program/global-engagement-programs

## Grant Writing Tips for Success

"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?

2. 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 !!!

3. 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

4. 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

5. 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

6. 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

7. Prepare budget with a strong justification

- Unreasonable budgets hurt proposals create skeptics within reviewer ranks (credibility)
- Keep budgets within guidelines in the RFA they are judged on degree of reasonableness

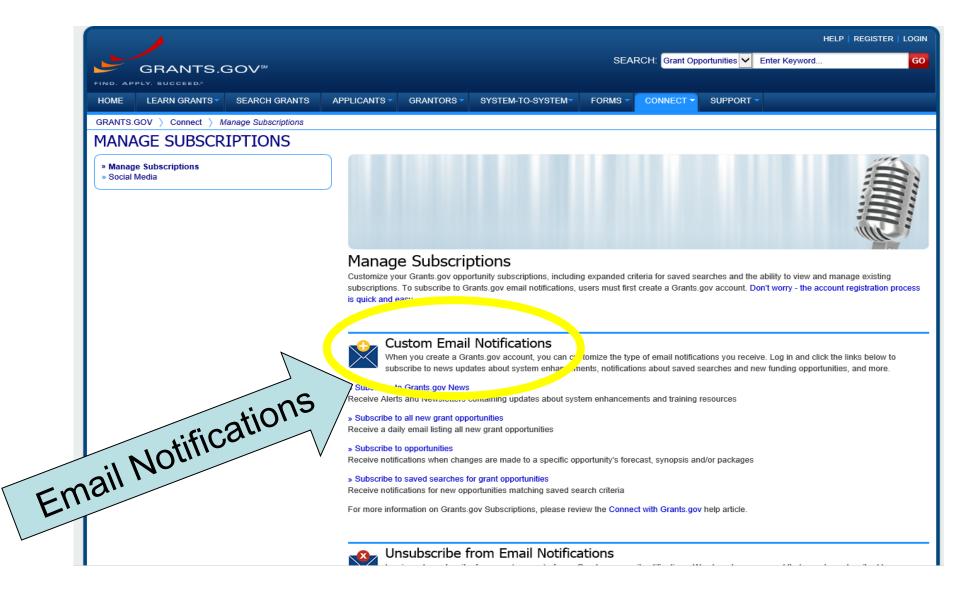
- 8. Obtain critical input from experienced and <u>successful</u> colleagues. Someone who....
  - Talks frankly, bluntly and clearly don't want someone who beats around the bush
  - Has little sympathy for your ego
  - Has been successful in obtaining grants

9. Fill out forms completely and correctly

Documents <u>must</u> be in PDF

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

- 5:00 pm Eastern Time
- A deadline is a deadline is a deadline!



## Questions?

# Thank You!