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FACT SHEET

AGRICULTURE AND FOOD RESEARCH INITIATIVE

Each day, the work of USDA-supported scientists and researchers touches the lives of all Americans, from farm field to kitchen table and from the air we breathe to the energy that powers our country. USDA science is on the cutting edge, helping to protect, secure and improve our food, agricultural and natural resources systems. Every dollar invested in agricultural research returns over $20 to our economy, making USDA resources an extraordinarily wise investment in our nation's future.

The Agriculture and Food Research Initiative (AFRI) is America's flagship competitive grants program for research, education, and extension projects in the food and agricultural sciences. The National Institute of Food and Agriculture (NIFA) awards AFRI grants to stimulate rural economies, increase food production, promote the bioeconomy, mitigate impacts of climate variability, address water availability issues, ensure food safety and security, enhance human nutrition, and train the next generation of the agricultural workforce.

GENERAL INFORMATION

AFRI was established by Congress in the 2008 Farm Bill and re-authorized in 2014 and 2018. The Consolidated Appropriations Act, 2019, funds AFRI at $415 million.

AFRI grants support research, education and extension activities in six Farm Bill priority areas:

- Plant Health and Production and Plant Products;
- Animal Health and Production and Animal Products;
- Food Safety, Nutrition, and Health;
- Bioenergy, Natural Resources, and Environment;
- Agriculture Systems and Technology; and
- Agriculture Economics and Rural Communities.

FUNDING PORTFOLIO

NIFA's AFRI funding portfolio includes both single- and multi-function research, education and extension grants that address key problems of national, regional and multi-state importance. AFRI-funded projects sustain all components of agriculture, including farm efficiency and profitability, ranching, renewable energy, forestry (both urban and agroforestry), aquaculture, rural communities and entrepreneurship, human nutrition, food safety, biotechnology, and conventional breeding. These projects also create jobs and help develop the next generation of agriculture and food scientists.

For Fiscal Year 2019, AFRI funding supports three Requests for Applications:

- Education and Workforce Development
- Foundational and Applied Science
- Sustainable Agricultural Systems

Grants may be awarded to state agricultural experiment stations; colleges and universities; university research foundations; other research institutions and organizations; federal agencies; national laboratories; private organizations or corporations; individuals; or any group consisting of two or more of the aforementioned entities. Eligibility information may be found in Part III, A, of each Request for Application and is linked to the project and grant type listed in Part I, C. Each grant program has its own unique set of requirements and deadlines, which are available within specific Requests for Applications in Part I, C.

NIFA reviews all proposals accepted in its competitive grant programs through an external peer review process with experts from within the respective field in question. Specific details on review formats and evaluation criteria may vary among programs.

PROJECT TYPES

- Research Projects involve scientific investigations or inquiries that result in generating knowledge.
- Education Projects include formal classroom instruction, laboratory instruction, and practicum experience in the food and agricultural sciences. It also includes other related matters such as faculty development, student recruitment and services, curriculum development, instructional materials and equipment, and innovative teaching methodologies.
- Extension projects include programs and activities that deliver science-based knowledge and

informal educational programs to people, enabling them to make practical decisions.

- Integrated Research, Education, and/or Extension Projects bring together at least two of the three functions of the agricultural knowledge system (research, education, and extension) around a problem area or activity.

GRANT TYPES

- Standard Grants support targeted, original scientific Research, Education, Extension, or Integrated Projects.
- Coordinated Agricultural Projects are large-scale multimillion dollar projects that support Research, Education, Extension or Integrated Projects to promote collaboration, open communication, and the exchange of information; reduce duplication of effort; and coordinate activities from individuals, institutions, states and regions.
- Conference Grants support scientific meetings that bring together scientists to identify research, education, and/or extension needs, update information, or advance an area of science.
- Food and Agricultural Science Enhancement Grants strengthen science capabilities in research, education, extension and integrated projects.
    - Predoctoral Fellowship Grants
    - Postdoctoral Fellowship Grants
    - New Investigator Grants
    - Strengthening Grants
        - Sabbatical
        - Equipment
        - Seed
        - Strengthening Standard
        - Strengthening Coordinated Agricultural Project
        - Strengthening Conference
- Other (Collaborative Grants) are Research, Education, Extension, or Integrated Projects that allow AFRI programs to partner resources with other funding organizations, domestic or international, to address high priority mission areas of mutual interest, without either organization transferring funds to the other.

BUILDING ON A RECORD OF ACHIEVEMENT

In the years since AFRI was established, the program has led to true innovations and groundbreaking discoveries in agriculture to improve and sustain rural economic growth, address water availability issues, increase food production, find new sources of energy, enhance resiliency of our food systems, ensure food safety, and combat childhood obesity.

- AFRI-supported research on plant breeding is leading to the development of new cultivars for many critical crops. Fifteen percent of U.S. wheat acreage planted uses cultivars resulting from AFRI investments.
- AFRI-funded researchers developed an electrochemical nanoscale process to create a low-cost solution to bacterial contamination in the food processing industry.
- AFRI-supported research is resulting in new tools that better monitor, prevent, control, and manage future outbreaks of avian flu.
- Food safety research supported by AFRI is developing new technologies to reduce the allergenicity of peanuts.
- AFRI-funded research is developing solutions to combat the serious decline in the populations of honeybees and other pollinators.
- Each year, AFRI provides funding for the education and training of almost 2,500 undergraduate, graduate, and postdoctoral students for careers in food and agriculture.

ADDITIONAL INFORMATION

For more information about USDA NIFA's Agriculture and Food Research Initiative, visit

- Main AFRI Website
  nifa.usda.gov/afri
- AFRI Requests for Applications
  nifa.usda.gov/afri-request-applications
- Food and Agricultural Science Enhancement Grants
  nifa.usda.gov/afri-fase-epscor-program
- Education and Workforce Development RFA
  nifa.usda.gov/program/afri-education-workforce-development
- Foundational and Applied Science RFA
  nifa.usda.gov/program/afri-foundational-program
- Sustainable Agricultural Systems RFA
  nifa.usda.gov/program/afri-sas
- NIFA's Grant Lifecycle
  nifa.usda.gov/grants