Funding Opportunity: AFRI Releases RFA for Foundational and Applied Science Program

Lewis-Burke Associates, LLC – May 20, 2019

The U.S. Department of Agriculture's (USDA) National Institute of Food and Agriculture (NIFA) recently released a request for applications (RFA) for the Agriculture and Food Research Initiative (AFRI) Foundational and Applied Science (FAS) program. The fiscal year (FY) 2019 solicitation will distribute approximately $192.5 million, a $12 million increase over the FY 2018 RFA, to support research and extension proposals related to the six priorities outlined in the most recent Farm Bill: Plant Health and Production and Plant Products ($43.9 million); Animal Health and Production and Animal Products ($36.8 million); Food Safety, Nutrition, and Health ($26.2 million); Bioenergy, Natural Resources, and Environment ($21.7 million); Agriculture Systems and Technology ($19.5 million); Agriculture Economics and Rural Communities ($22.9 million); and $21.6 million for crosscutting programs.

FAS is the last of AFRI's three annual RFAs to be released, following the Sustainable Agricultural Systems (SAS) program at the end of March and the Education and Workforce Development (EWD) program at the end of April. Like the EWD solicitation, the FAS RFA included deadlines and funding levels for both FY 2019 and FY 2020. The objective of the FAS program is to advance basic and applied research in agricultural sciences across a number of disciplines and crosscutting areas. Additionally, the RFA adds new priority areas for each program.

Consistent with the FY 2018 solicitation, the RFA incorporates the Food and Agriculture Cyber informatics and Tools (FACT) initiative, launched by NIFA in 2016 to support data science in agriculture. The solicitation seeks projects that "1) focus on fundamental or core big data analytics and tool development, and/or 2) apply big data concepts to specific science domains or across domains and sectors for any of the animal health and production and animal products program area priorities." In addition to FACT, the FAS program maintains its emphasis on microbiome research by establishing a new Agricultural Microbiomes program area within the crosscutting initiatives.

Additionally, it is important to note that conference proposals will now be accepted anytime throughout the year. Those intending to submit conference proposals must submit a letter of intent (LOI) 135 days in advance of the conference. Conference grant applications should be submitted 90 days before the start of the conference.

Total Funding and Award Size: USDA anticipates making approximately $192.5 million available for an undetermined number of awards in both FY 2019 and 2020. Individual award amounts, award distribution, and project period will vary based on research area. Additional information is provided below:

- **Program 1 – Plant Health and Production and Plant Products ($43.9 million)**
  - *A – Foundational Knowledge of Agricultural Production Systems*
    - $500,000 total per project with a project period of up to five years.

- LOI required for conference proposals only.
- FY 2019 applications due by **August 8, 2019.**
- FY 2020 applications due by **April 9, 2020.**
  - o B – *Foundational Knowledge of Plant Products*
    - $500,000 total per project with a project period of up to five years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 18, 2019.**
    - FY 2020 applications due by **March 19, 2020.**
  - o C – *Pests and Beneficial Species in Agricultural Production Systems*
    - $500,000 total per project with a project period of up to five years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 9, 2019.**
    - FY 2020 applications due by **March 12, 2020.**
  - o D – *Physiology of Agricultural Plants*
    - $500,000 total per project with a project period of up to five years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 18, 2019.**
    - FY 2020 applications due by **March 19, 2020.**
  - o E – *Plant Breeding for Agricultural Production*
    - Funding levels and project period vary by subtopic and type of proposal.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 18, 2019.**
    - FY 2020 applications due by **March 19, 2020.**
  - o F – *Pollinator Health: Research and Application*
    - Funding levels and project period vary by subtopic and type of proposal.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 25, 2019.**
    - FY 2020 applications due by **March 26, 2020.**

- **Program Area 2 – Animal Health and Production and Animal Products ($36.8 million)**
  - o A – *Animal Reproduction*
    - $500,000 total per project with a project period of up to five years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 11, 2019.**
    - FY 2020 applications due by **March 12, 2020.**
  - o B – *Animal Nutrition, Growth, and Lactation*
    - $500,000 total per project with a project period of up to five years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 11, 2019.**
    - FY 2020 applications due by **March 12, 2020.**
  - o C – *Welfare and Well-being of Agricultural Animals*
    - Funding levels and project period vary by subtopic and type of proposal.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 11, 2019.**
    - FY 2020 applications due by **March 12, 2020.**
  - o D – *Diseases of Agricultural Animals*
    - Funding levels and project period vary by subtopic and type of proposal.
    - LOI required for conference proposals only.

- FY 2019 applications due by **July 11, 2019.**
- FY 2020 applications due by **March 12, 2020.**
- o *E – Animal Breeding and Functional Annotation of Genomes*
    - $500,000 total per project with a project period of up to five years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 11, 2019.**
    - FY 2020 applications due by **March 12, 2020.**

- **Program Area 3 – Food Safety, Nutrition, and Health ($26.2 million)**
    - o *A – Food Safety and Defense*
        - $500,000 total per project with a project period of up to five years.
        - LOI required for conference proposals only.
        - FY 2019 applications due by **July 17, 2019.**
        - FY 2020 applications due by **March 19, 2020.**
    - o *B – Novel Foods and Innovative Manufacturing Technologies*
        - $500,000 total per project with a project period of up to five years.
        - LOI required for conference proposals only.
        - FY 2019 applications due by **July 16, 2019.**
        - FY 2020 applications due by **March 19, 2020.**
    - o *C – Diet, Nutrition and the Prevention of Chronic Diseases*
        - $1 million total per project with a project period of up to five years.
        - LOI required for conference proposals only.
        - FY 2019 applications due by **July 18, 2019.**
        - FY 2020 applications due by **March 19, 2020.**
    - o *D – Food and Human Health*
        - $500,000 total per project with a project period of up to five years.
        - LOI required for conference proposals only.
        - FY 2019 applications due by **July 24, 2019.**
        - FY 2020 applications due by **March 26, 2020.**
    - o *E – Mitigating Antimicrobial Resistance Across the Food Chain*
        - $1 million total per project with a project period of up to five years.
        - LOI required for conference proposals only.
        - FY 2019 applications due by **July 25, 2019.**
        - FY 2020 applications due by **March 26, 2020.**

- **Program Area 4 – Bioenergy, Natural Resources, and Environment (BNRE) ($21.7 million)**
    - o *A – Soil Health*
        - $500,000 total per project with a project period of up to four years.
        - LOI required for conference proposals only.
        - FY 2019 applications due by **August 1, 2019.**
        - FY 2020 applications due by **April 2, 2020.**
    - o *B – Water Quantity and Quality*
        - $500,000 total per project with a project period of up to four years.
        - LOI required for conference proposals only.
        - FY 2019 applications due by **August 1, 2019.**
        - FY 2020 applications due by **April 2, 2020.**
    - o *C – Sustainable Biomass Feedstock Systems*
        - $1 million total per project with a project period of up to four years.

- LOI required for conference proposals only.
- FY 2019 applications due by **August 1, 2019.**
- FY 2020 applications due by **April 2, 2020.**
  - o *D – Sustainable Agroecosystems: Health, Functions, Processes and Management*
    - $500,000 total per project with a project period of up to four years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **August 8, 2019.**
    - FY 2020 applications due by **April 9, 2020.**

- **Program Area 5 – Agriculture Systems and Technology (AST) ($19.5 million)**
  - o *A – Engineering for Agricultural Production Systems*
    - $500,000 total per project with a project period of up to four years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 25, 2019.**
    - FY 2020 applications due by **March 5, 2020.**
  - o *B – Bioprocessing and Bioengineering*
    - $500,000 total per project with a project period of up to four years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 25, 2019.**
    - FY 2020 applications due by **March 5, 2020.**
  - o *C – Nanotechnology for Agricultural and Food Systems*
    - $500,000 total per project with a project period of up to four years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 18, 2019.**
    - FY 2020 applications due by **March 19, 2020.**

- **Program Area 6 – Agriculture Economics and Rural Communities (AERC) ($22.9 million)**
  - o *A – Small and Medium-Sized Farms*
    - $500,000 total per project with a project period of up to four years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 18, 2019.**
    - FY 2020 applications due by **March 5, 2020.**
  - o *B – Economics, Markets and Trade*
    - $500,000 total per project with a project period of up to four years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **July 18, 2019.**
    - FY 2020 applications due by **March 5, 2020.**
  - o *C – Social Implications of Food and Agricultural Technologies*
    - $500,000 total per project with a project period of up to four years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **September 12, 2019.**
    - FY 2020 applications due by **May 14, 2020.**
  - o *D – Environmental and Natural Resource Economics*
    - $500,000 total per project with a project period of up to four years.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **September 12, 2019.**
    - FY 2020 applications due by **May 14, 2020.**
  - o *E – Rural Economic Development*

- $500,000 total per project with a project period of up to four years.
- LOI required for conference proposals only.
- FY 2019 applications due **August 15, 2019**.
- FY 2020 applications due **April 16, 2020**.

- **Program Area 7 – Crosscutting Programs ($21.6 million)**
  - *A – Agricultural Innovation through Gene Editing*
    - Up to $300,000 per project with a project period of up to two years
    - FY 2019 LOIs are due **June 19, 2019.**
    - FY 2020 LOIs are due **February 19, 2020.**
    - FY 2019 applications due by **August 21, 2019.**
    - FY 2020 applications due by **April 23, 2020.**
    - *LOI should address which program area is most relevant to the proposal, see RFA for more information*.
  - *B – Agricultural Microbiomes*
    - Up to $750,000 per project with a project period of up to four years.
    - FY 2019 LOIs are due **July 9, 2019.**
    - FY 2020 LOIs are due **March 10, 2020.**
    - FY 2019 applications due by **September 26, 2019.**
    - FY 2020 applications due by **May 14, 2020.**
    - *LOI should address which program area is most relevant to the proposal, see RFA for more information*.
  - *C – Critical Agricultural Research and Extension (CARE)*
    - $300,000 total per project with a project period of up to three years (nonrenewable).
    - No LOI required.
    - FY 2019 applications due by **August 21, 2019.**
    - FY 2020 applications due by **April 23, 2020.**
  - *D - Food and Agriculture Cyber informatics Tools (FACT)*
    - Funding levels and project period vary by subtopic and type of proposal.
    - LOI required for conference proposals only.
    - FY 2019 applications due by **August 15, 2019.**
    - FY 2020 applications due by **April 16, 2020.**
  - *E - Inter-Disciplinary Engagement in Animal Systems (IDEAS)*
    - $1 million total per project with a project period of up to five years.
    - FY 2019 LOIs are due **June 20, 2019.**
    - LOIs are not required for the FY 2020 competition.
    - FY 2019 applications due by **September 5, 2019.**
    - FY 2020 applications due by **May 21, 2020.**
  - *F – Tactical Sciences for Agricultural Biosecurity*
    - Funding levels range from $500,000 to $1 million for up to four years depending on subtopic and type of proposal.
    - FY 2019 LOIs are due **July 9, 2019.**
    - FY 2020 LOIs are due **March 10, 2020.**
    - FY 2019 applications due by **September 26, 2019.**
    - FY 2020 applications due by **May 28, 2020.**

Cost Sharing: A one-to-one cost share is required for applications that are commodity specific and those that fail to address research issues in a national context. For equipment grants, the total amount of federal funding may not exceed 50 percent of the total cost. Additional specifications regarding the cost sharing requirement for equipment grants is provided in the full RFA.

Eligibility and Limitations: Eligible applicants under this solicitation include but are not limited to: State Agricultural Experiment Stations; colleges and universities (including junior colleges offering associate degrees or higher); university research foundations; and other research institutions.

Note: Universities that are on the list of "Most Successful Universities and Colleges Receiving Federal Funds" are not eligible for any Strengthening grants unless they are in an EPSCoR State. This table can be found here: https://nifa.usda.gov/sites/default/files/resource/Table-1-Most-Successful-Institutions.pdf.

Sources and Additional Information:
- The full RFA is available at https://nifa.usda.gov/sites/default/files/rfa/20190507-fy2019-afri-foundational-and-applied-science-rfa.pdf
- The NIFA website can be found at https://nifa.usda.gov/.
- More information on AFRI is available at https://nifa.usda.gov/program/agriculture-and-food-research-initiative-afri.