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FACT SHEET

PRESIDENT'S FY2017 BUDGET TO INVEST $700 MILLION IN USDA'S AGRICULTURE AND FOOD RESEARCH INITIATIVE

EACH DAY, THE WORK OF USDA SCIENTISTS AND RESEARCHERS TOUCHES THE LIVES OF ALL AMERICANS, FROM the farm field to the 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. Studies have shown that every dollar invested in agricultural research now returns over $20 to our economy, making USDA resources an extraordinarily wise investment in our nation's future.

Today the USDA will announce additional actions to ensure U.S. agricultural research continues to be the world's gold standard—delivering innovative solutions to our globe's most pressing challenges:

- The President's FY2017 Budget will invest a total of $700 million for the Agriculture and Food Research Initiative (AFRI), the fully authorized funding level established by Congress in the 2008 Farm Bill. In the seven years since AFRI was established, the program has led to true innovations and ground-breaking discoveries in agriculture to combat childhood obesity, improve and sustain rural economic growth, address water availability issues, increase food production, find new sources of energy, mitigate the impacts of climate variability and enhance resiliency of our food systems, and ensure food safety.
- More than $30.1 million in grants will be awarded through AFRI to fund 80 projects at universities, research institutes, and laboratories across the nation. These grants address crucial issues facing agricultural producers, consumers, and researchers such as food safety and quality, nutrients in plants, plant growth, and antimicrobial resistance strategies.

THE AGRICULTURE AND FOOD RESEARCH INITIATIVE

Established by the 2008 Farm Bill and re-authorized in the 2014 Farm Bill, the Agriculture and Food Research Initiative is the nation's premier competitive, peer-reviewed grants program for fundamental and applied agricultural sciences. The National Institute of Food and Agriculture (NIFA), a USDA agency, awards AFRI grants 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.

As part of the President's FY17 Budget proposal, AFRI investments will target the diverse challenges facing agricultural producers—from climate change to pollinator health to antimicrobial resistant bacteria. In addition to the $375 million provided in the discretionary request, the budget includes a legislative action to make available $325 million in mandatory funding for the program as part of a government-wide investment in research and development. Total AFRI funding in FY 2017 of $700 million would be double the $350 million FY 2016 funding level.

BUILDING ON A RECORD OF ACHIEVEMENT

With its broad funding portfolio, AFRI grants support cutting-edge science that advances sustainable agricultural production systems, provides for an abundant and quality food supply, supports the resiliency of rural communities, creates jobs, and develops the next generation of agriculture and food scientists. Seven years since AFRI was established, grants awarded to universities, non-profits, community groups, businesses, foundations, associations, and federal agency and international partnerships have led to significant achievements that address critical issues related to agriculture, food, the environment, and communities:

- 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 is planted using cultivars resulting from AFRI investments.
- A multi-state research team is developing novel nutritional, genomic, and genetic improvement technologies to help producers use less feed resources to produce beef for human consumption.
- AFRI investments in basic agricultural research has resulted in new diagnostic methods for animal diseases, genetic resources for row crops and livestock, and alternatives to antimicrobials.
- AFRI-funded researchers have developed an electrochemical process to create nanoscale pores that change the electrical charge and surface energy of a metal surface, which in turn exerts a repulsive force on bacterial cells and prevents attachment and biofilm formation. When this process was applied to aluminum, it created a surface called alumina, which proved effective in preventing E. coli and Listeria, major food safety and medical pathogens, from attaching to the surface. Alumina could provide a low-cost solution to bacterial contamination in the biomedical and food processing industries.
- Food safety research supported by AFRI is developing new technologies to reduce the allergenicity of peanuts.
- AFRI-supported research is resulting in new tools that better monitor, prevent, control, and manage future outbreaks of avian flu.
- A team of university researchers are developing strategies and tools to strengthen the resilience of corn-based cropping systems across the Midwest to the impacts of climate change.
- AFRI-funded research is supporting wide-scale changes in the management of the Ogallala Aquifer Region in the Western Great Plains and informing aquifer management across the world.
- AFRI-funded research is addressing the serious decline in the populations of honey bees and other pollinators.
- AFRI-supported research is investigating a variety of feedstocks including short rotation woody crops, switchgrass, and miscanthus for the development of advanced biofuels.
- AFRI-supported innovative research is leading to simple, low-cost strategies in U.S. schools that are measurably improving students' selection and consumption of healthy foods, increasing participation in the school meal programs, and reducing waste.
- Each year, AFRI provides funding for the education and training of almost 2,500 undergraduate, graduate, and postdoctoral students for careers in the food, agricultural, natural resource, and human sciences.

For more information about USDA NIFA's Agriculture and Food Research Initiative, visit www.nifa.usda.gov/program/agriculture-and-food-research-initiative-afri.
NIFA invests in and advances agricultural research, education, and extension and seeks to make transformative discoveries that solve societal challenges.
To learn more about USDA Results in Science, visit www.usda.gov/results.