

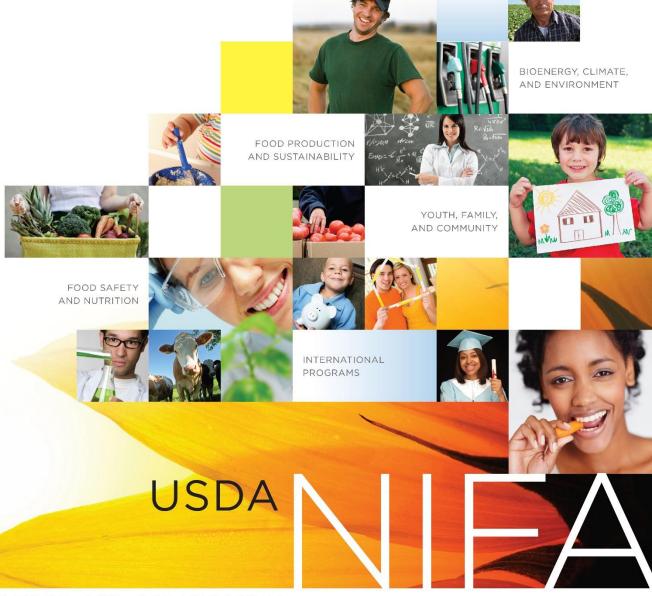
Opportunities for federal funding of modeling research

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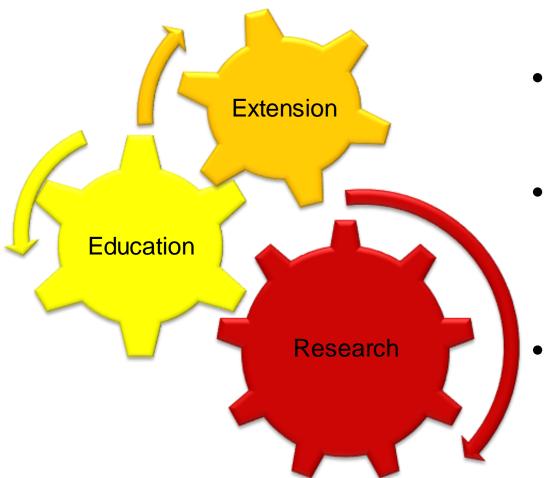


NATIONAL INSTITUTE OF FOOD AND AGRICULTURE





NIFA Funding Support

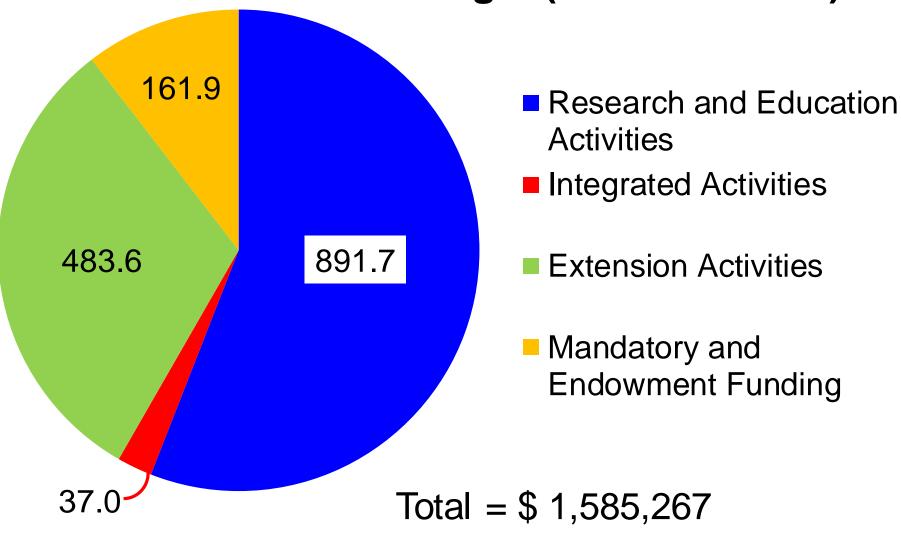


- Research Provide answers to the complex issues facing society
- Education Support schools and universities in training the agricultural workforce
- Extension Provide knowledge gained through research to agricultural workforce; theory to practice





NIFA's FY 2018 Budget (million dollars)







Investing in Modeling





United States Department of Agriculture

Why modeling?





Strategic Planning

Gap analysis - What is versus what should be





Strategic Planning

- Gap analysis What is versus what should be
 - How do you see what doesn't exist?





Strategic Planning

- Gap analysis What is versus what should be
 - How do you see what doesn't exist?
 - Encounter a problem you can't solve
 - Modeling





Why modeling?

- Organize and interconnect what is known
- Makes complex systems more transparent
- Highlight and identify knowledge gaps
 - Areas needing research, next steps
- Better questions





Does NIFA Invest in Modeling?

- Currently 80 active AFRI livestock projects with a stated modeling component
 - 8 directly involve the dairy enterprise
 - Ruminal metabolism, genomic prediction, whole genome selection, host-pathogen interaction, metabolic diseases, antimicrobial resistance, and nutrition





Funding Mechanisms

Capacity Funding

- Hatch Research
- Evans-Allen
- Animal Health and Disease, section 1433
- McIntire-Stennis Cooperative Forestry
- Smith-Lever Formula for Extension

Competitive Grant Funding





Competitive Grant Funding

>30 Competitive Programs with broad eligibility

- Agriculture and Food Research Initiative (AFRI)
- Specialty Crop Research Initiative (SCRI)
- Organic Agriculture Research and Extension Initiative (OREI)
- Beginning Farmer and Rancher Development Program (BFRDP)
- Biotechnology Risk Assessment Research Grants Program (BRAG)





AFRI – largest competitive grant program at NIFA

- \$400 million in FY 2018
- Three Request for Applications (RFAs) in FY 2018
 - -Education and Workforce Development
 - -Foundational and Applied Science Program
 - -Sustainable Agricultural Systems -**CAPs**

Plant Health, Production and Products

Animal Health, Production and Products

Food Safety, Nutrition and Health

Bioenergy, Natural Resources and **Environment**

Agricultural Systems and Technology

Agricultural Economics and Rural Communities





Education and Workforce Development

- Professional Development for Secondary School Teachers and Educational Professionals (PD-STEP)
- Research and Extension Experiences for Undergraduates (REEU) - Institution applies for a group of fellowships
- Predoctoral fellowships Individual applies
- Postdoctoral fellowships Individual applies





AFRI Foundational Program

- Mostly single function research
- Mostly fundamental research
- Don't change markedly from year to year
- Smaller grant size, \$500,000 maximum
- Individual investigators or small teams





AFRI Foundational Program

 Modeling is specifically invited in nine of the Foundational program area priorities.





Newer Program Area Initiatives

- Critical Agricultural Research and Extension (CARE) – projects to yield solutions quickly that can be rapidly implemented by producers
- Exploratory Innovative ideas not addressed previously; high risk-high reward; preliminary data





AFRI Sustainable Agricultural Systems

Sustainable Agricultural Systems:

- Only Coordinated Agricultural Project Grants, and Strengthening Coordinated Agricultural Project Grants
- Projects must be Integrated
- Research component is more applied
- Larger grant size, \$10 million
- Multiple investigators/large teams





AFRI Sustainable Agricultural Systems

 Modeling is specifically invited in the program area priorities for Sustainable Agricultural Systems.





United States Department of Agriculture National Institute of Food and Agriculture



ABOUT

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DATA GATEWAY

BUDGET & LEGISLATION

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S LANGUAGE



TOPICS

PROGRAMS



NEWSROOM

IMPACTS

RESOURCES

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USDA Announces \$8.8 Million
Available to Support
Agriculture Programs at
Hispanic-Serving Institutions



FEATURED INFORMATION



Data Gateway



RFA List



Farm Bill



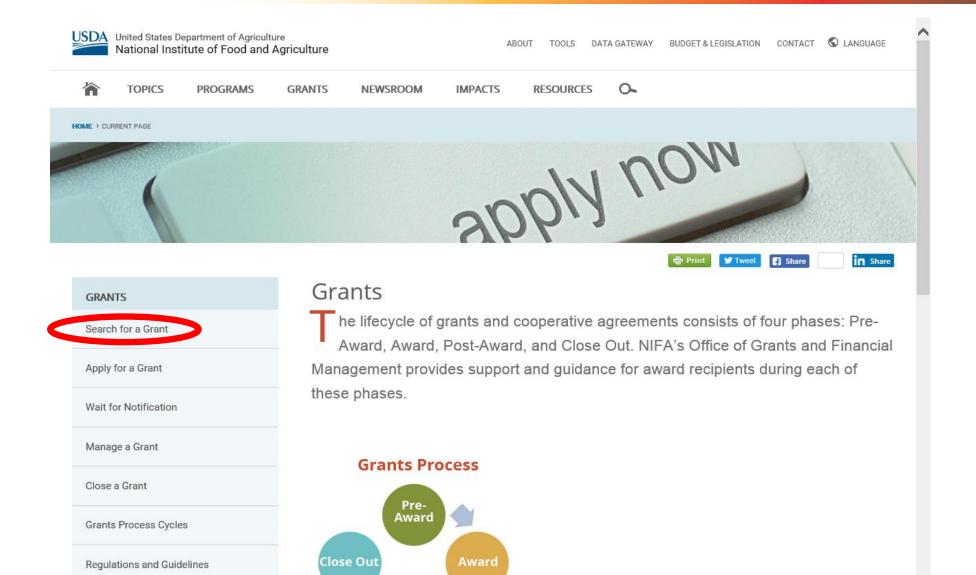
Calendar



Capacity Grants

Grant Training

National Institute of Food and Agriculture



Post-Award





Applying for Grants

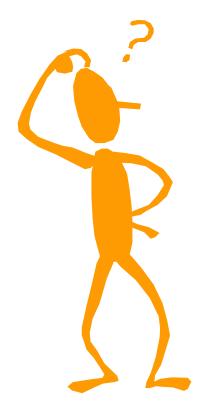
 Download RFA from NIFA website and obtain the Funding Opportunity Number (FON)

USDA-NIFA-AFRI-005802

- Download application package and instructions from www.grants.gov using the <u>correct FON</u>
- Submit electronically through grants.gov



What To Do If You Have Questions?



Contact the

Program Staff!!!



