Opportunities for federal funding of modeling research

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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)

- Research and Education Activities: 891.7 million dollars
- Integrated Activities: 161.9 million dollars
- Extension Activities: 483.6 million dollars
- Mandatory and Endowment Funding: 37.0 million dollars

Total = $1,585,267
Investing in Modeling
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

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<th>Plant Health, Production and Products</th>
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<tr>
<td>Animal Health, Production and Products</td>
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<td>Food Safety, Nutrition and Health</td>
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<td>Bioenergy, Natural Resources and Environment</td>
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<td>Agricultural Systems and Technology</td>
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<td>Agricultural Economics and Rural Communities</td>
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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.
USDA Announces $8.8 Million Available to Support Agriculture Programs at Hispanic-Serving Institutions
Grants

The lifecycle of grants and cooperative agreements consists of four phases: Pre-Award, Award, Post-Award, and Close Out. NIFA’s Office of Grants and Financial Management provides support and guidance for award recipients during each of these phases.
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 correct FON

• Submit electronically through grants.gov
What To Do If You Have Questions?

Contact the Program Staff!!!