



National Institute of Food and Agriculture
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National Institute of Food and Agriculture – Its Role in USDA: Status and Expectations for the Future



USDA Strategic Goals

- Help America promote agriculture production and biotechnology exports as America works to increase food security.
- Ensure that all of America's children have access to safe, nutritious, balanced meals
- Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving
- Ensure our National Forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources.





Five Pillars for the Secretary's Vision

Supporting the Creation of Rural Prosperity

- Increasing access to broadband and continuous business creation
- Developing local and regional food systems
- Capitalizing on climate change opportunities
- Developing renewable energy
- Generating and retaining green jobs through recreation and natural resource restoration, conservation, and management





Research at USDA

REE

- Agricultural Research Service
- Economic Research Service
- National Institute of Food and Agriculture
- (Forest Service)

Foreign Agriculture Service

Animal and Plant Health Inspection Service

Food and Nutrition Services

(Research informs portfolio of others)



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The role of the National Institute of Food and Agriculture is to support research, extension and education, and bring focus to meet society's grand challenges





NIFA – the agency for extramural research, extension and education

- Built on the history of CSREES
- Expanding the role of AFRI, the competitive grants program
- Bringing focus to ‘capacity’ funds while maintaining essential services to rural and urban America
- Placing emphasis on attracting a new generation of scientists to the agriculture mission





Why this is the right time for a change in research for agriculture

“The lessons of history led the Committee on a New Biology for the 21st Century to recommend that a(n) . . . initiative be put in place and charged with finding solutions to major societal needs: sustainable food production, protection of the environment, renewable energy, and improvement in human health. These challenges represent both the mechanism for accelerating the emergence of a New Biology and its first fruits.”





Can NIFA be a 21st Century Life Sciences Agency?

- Seek broad participation in the goals of the agency, including those outside the usual cadre of scientists and educators
- Use broader systems approaches to solve problems presented to agriculture, while ensuring 'sustainability'
- Create a 21st century workforce that achieves societal goals while rejuvenating rural America and creating economic prosperity in agriculture around the globe





Refocusing NIFA Research in 2010

Focuses the outcomes from NIFA-sponsored activities around thematic areas:

1. Climate change
2. Bioenergy
3. Food safety
4. Nutrition and childhood obesity
5. Global food security





NIFA's Primary Budget Initiatives

- Focus efforts on high priority issues, including climate change, childhood obesity, biomass/bioproducts
- Ensure agricultural productivity and sustainability, strengthen rural communities, and address global hunger
- Support fundamental science, applied research, and education
- Link scientific discovery, application of sustainable practices, producers; maintain support for SARE and other programs





NIFA Proposed Budget 2011 Continues Focus on Growth of Focus Areas, with Additional Flexibility for 'Foundational' Programs

- Look for expanded interactions/alignment between intramural and extramural research
- Explore collaborations with other agencies outside of REE, including FAS, FSIS, others
- Explore opportunities to expand interactions with sister Federal departments, including NSF, DOE, NIH/NCI/CDC, USAID, others





Who are the Next Generation of 'Agricultural Scientists'?

- Classical and advanced agricultural sciences
- Non-agricultural scientists (physicists, chemists, informaticians, nutritionists, biomedical scientists)
- Social, economic, policy making, communications





Important Principles for NIFA

- All activities sponsored by NIFA should be of highest quality: value for dollar
- Activities should, to the extent possible, focus on the 5 priorities/grand challenges while honoring legislative mandates
- Research and extension and/or education will be part of increasing percentage of grants awarded
- Support education/training of next generation of scientists





Important Principles for NIFA

- NIFA activities should be complementary to those of other REE agencies
- NIFA should leverage resources and expertise by partnering with other components of the U.S. government, foundations, and private sector
- NIFA research should support aims of the Department and USG: Research partners include land grant and non-land grant universities and colleges, research institutions, and non-academic entities
- NIFA should help build capacity of minority-serving institutions while achieving mission





Building Partnerships and Institutions to Feed the Agriculture Science Pipeline

- USG has a renewed commitment to global food security, including through building capacities
- Strengthening institutions in food and agriculture
- USDA and USAID to play central roles
- Opportunities for public and private sector to partner
- Call for other country commitments





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INSTITUTE OF FOOD PRODUCTION AND SUSTAINABILITY

*Enhancing global food security through
productive and sustainable agricultural systems*





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INSTITUTE OF BIOENERGY, CLIMATE, AND ENVIRONMENT

*Ensuring energy independence
through clean, biobased systems;
Ensuring sustainable and adaptive agro-ecosystems
in response to climate change*





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INSTITUTE OF FOOD SAFETY AND NUTRITION

Ensuring a safe food supply
Improving citizens' health through nutrition
Reducing childhood obesity
Improving food quality





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INSTITUTE FOR YOUTH, FAMILY, COMMUNITIES

Enabling vibrant and resilient communities
Preparing the next generation of scientists
*Enhancing science capacity in minority-serving
institutions*
Enhancing youth development





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CENTER FOR INTERNATIONAL PROGRAMS

*Leveraging the knowledge and commitment
of U.S. talent to enhance the lives of those
in developing countries*





Administration and Functions of Institutes in NIFA

- Institutes to be led by scientists + effective administrators with experience in USDA policies
- Will look to examples of best practices for operations of the institutes
- Will seek advice and input from external groups of stakeholders and expert scientists





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USDA: An Agency To Be Proud Of

Roger Beachy, Director, NIFA



INVESTING IN SCIENCE | SECURING OUR FUTURE



Recommendations for Consideration

- Reassessing the roles of competitive funding and capacity funds in the future of U.S. Agriculture (*writ large*)
- Reassessing the integration of education and extension in agriculture
- Strategies for engaging the next generation in the challenges of 'agriculture'
- Assessing the value and conservation of natural and genetic resources

