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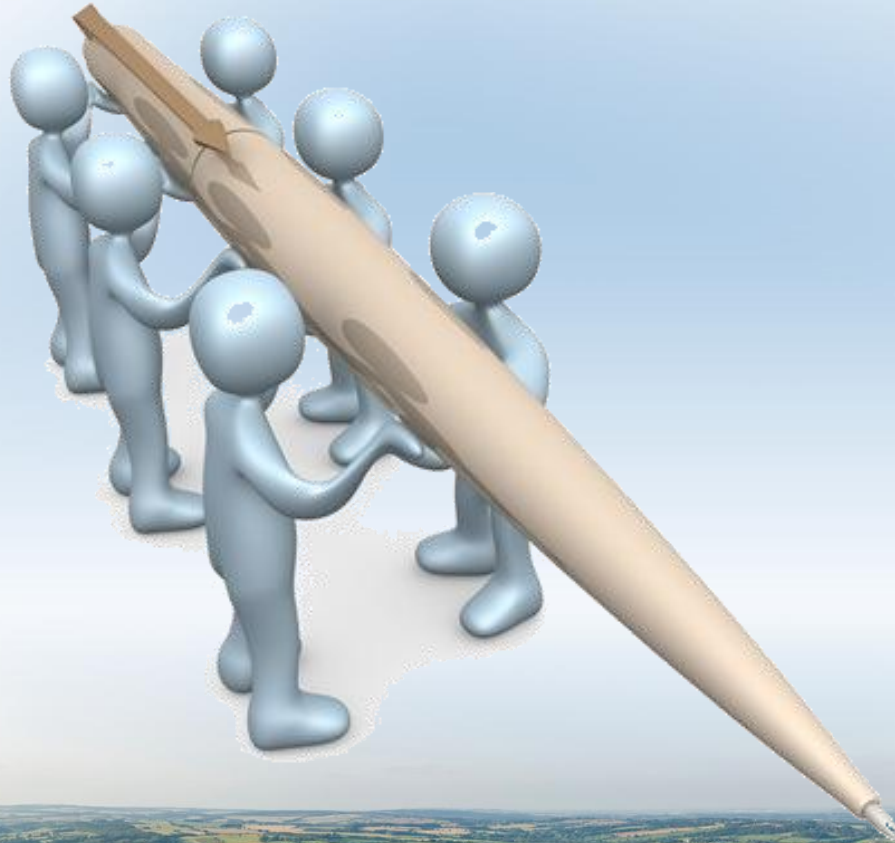
# 1890 Institutions Research, Extension, and Teaching Capacity Building Grants Program

**Ali Mohamed, NPL  
SERD/MA/NIFA**

**ARD Winter Meeting  
Key west Florida  
January 11, 2010**



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## Discussion Outline

- ***The 1890 Research, Teaching, and Extension Capacity Building Grant Program***
  - Issues to give attention to:
    - Building capacity
    - Impacts
    - USDA new philosophy
      - Focal Areas
      - Scaling
  - Program Outreach and communication:
    - Blog and Twitter
    - ARD website
    - PD conference as show case





## Discussion Outline

- Understanding the application processes
- Quality of the applications
  - About the Logic Model
  - Letters of support
- New Terms and Conditions for CBG
- Feedback
  - Questions & Answers



## **Five focal areas:**

- **Global Food Security and Hunger.**
- **Climate Change**
- **Sustainable Energy**
- **Childhood Obesity**
- **Food Safety**



# **Institute of Food Production and Sustainability**

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



## **Institute of Bioenergy, Climate, and Environment**

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



# Institute of Food Safety and Nutrition

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





# **Institute of Youth and Community Development**

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



## **The Challenges Cannot Be Met in Isolation**

- To meet the environment challenge, the food challenge must be met without increased land and water use, fertilizer and pesticide release, and fossil fuel input
- meeting the health challenge depends on maintaining ecosystem services
- meeting the energy challenge with biofuel production cannot come at the expense of food production



# Science Supports

## Some examples:

- understand genotype–phenotype connection
- biodiversity: recognize and employ evolutionary adaptability
- networks: unravel and apply complex system logic



# Science Supports

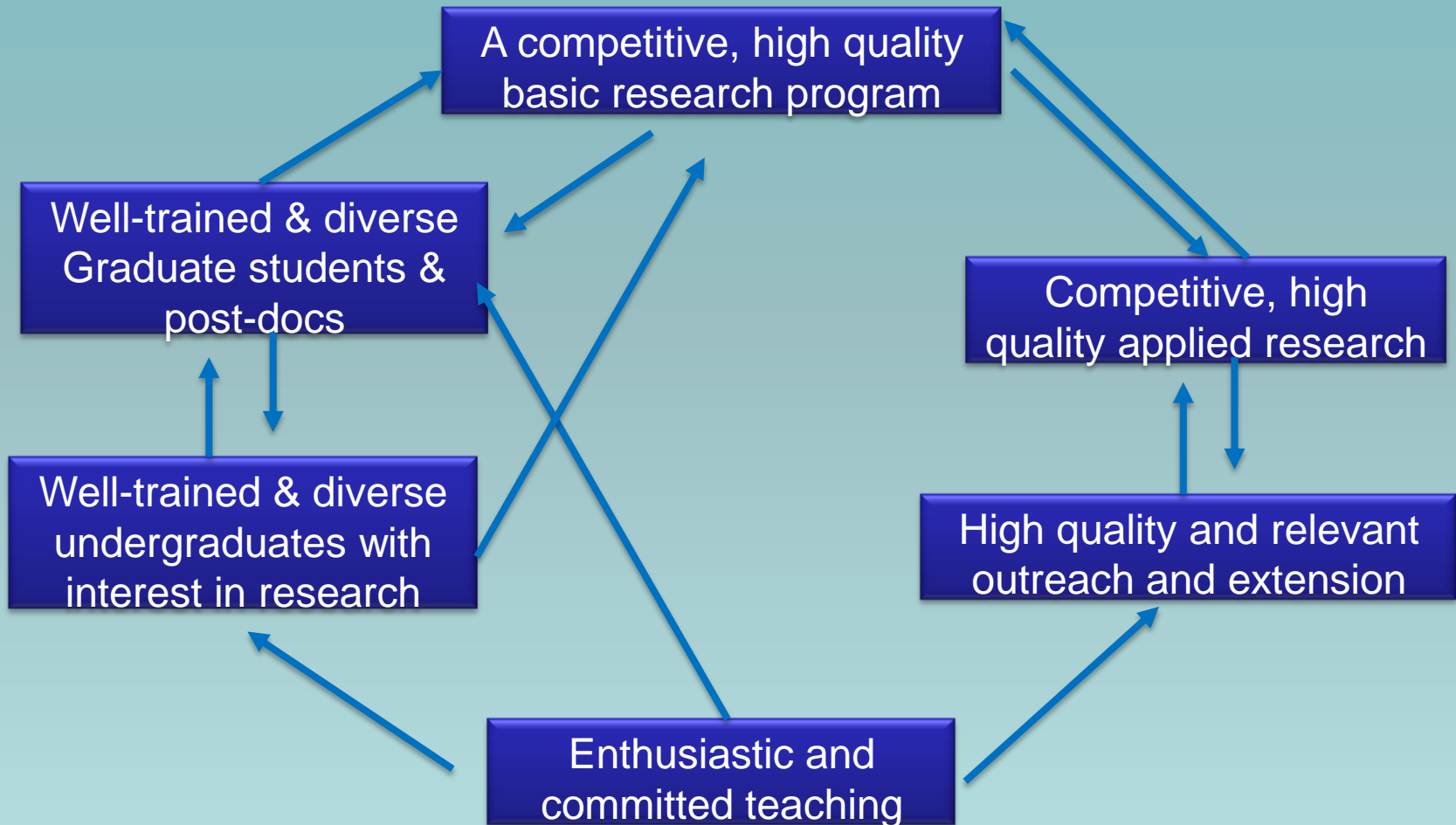
## Some examples:

- information infrastructure: make results of all scientific research fully interoperable
- imaging: see biological processes at all scales
- high throughput: make monitoring metabolomes and proteomes as routine as genome sequencing





# Ingredients for success





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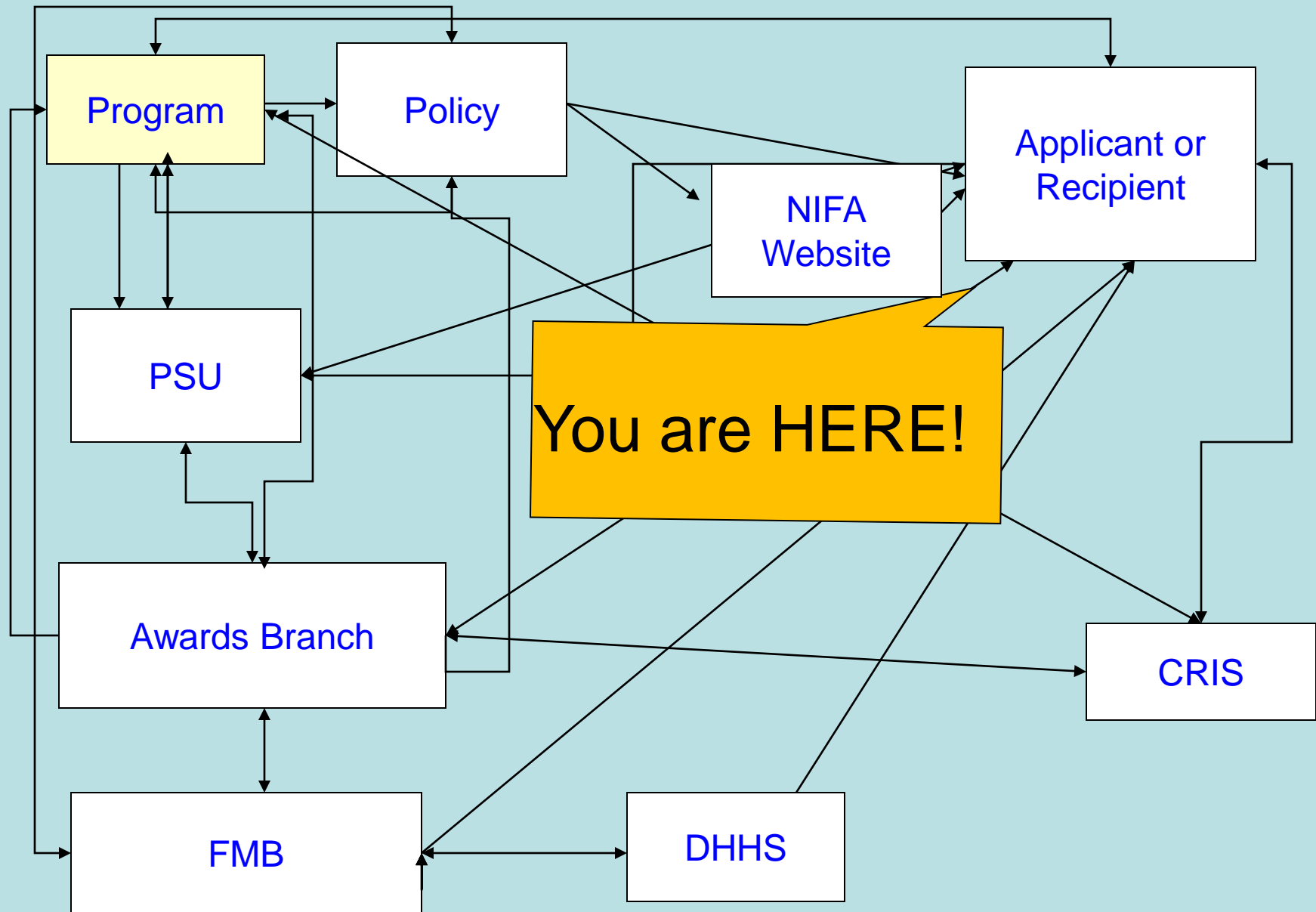
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# Understanding The Application Processes



As an anthropologist, I've been to tropical jungles and frozen tundras. I've seen primitive cultures and sophisticated societies. But *this* is the only place where I've been unable to figure out what's going on!"

# The USDA-NIFA Grants Process







# Understand the Ingredients of a Successful Program

- Progressive growers/stakeholders with a desire to tackle the tough problems & issues
- Engaged research & extension experts and a well developed knowledge base
- Knowledgeable people on the ground (public & private)
- A lot of innovation, creativity & flexibility
- Small egos
- A win-win for agriculture, consumers & the environment



# Find the Funding Source with the Best Fit for Your Need

- Carefully read program descriptions to find those with the best fit for your program.
  - Program objectives, funding size, duration.
  - How does what you do fit the grant program.
- Look at abstracts of projects funded in past years to get a feel for the priorities of the grant program.
- Get in touch with the program contact if you're not sure if or how your proposal idea fits the grant program.



# **1890 Integrated Applications in CBGP**

**Solving today's problems  
through integrated**

**Research,**

**Education &**

**Extension**



# **What does optimal integration look like?**

**Research, education, and extension components complement one another and are truly necessary for the ultimate success of the project.**





# Integrated Project Characteristics

- **Stakeholder Driven**
- **Issue / Problem Focused**
- **Outcome Oriented**



## **Strong Integrated Projects Include:**

- **Collaborative Team Approach**
- **Management Plan**
- **Evaluation Plan**
- **Sustained Educational Initiatives**



## **Budget Allocation for Integrated application**

- **Based on Stakeholder input, 10% of the budget will be devoted to Integrated applications**
- **Research, Education and Extension (2 of 3 components)**
  - **Logic model required**
  - **No more than 2/3 of budget devoted to any single component**
  - **Management plan required**



# Overview of the Competitive Grant Proposal Process

- Application Process
- Review Process
- Post-Review Administration
- Process for Awards and Declines





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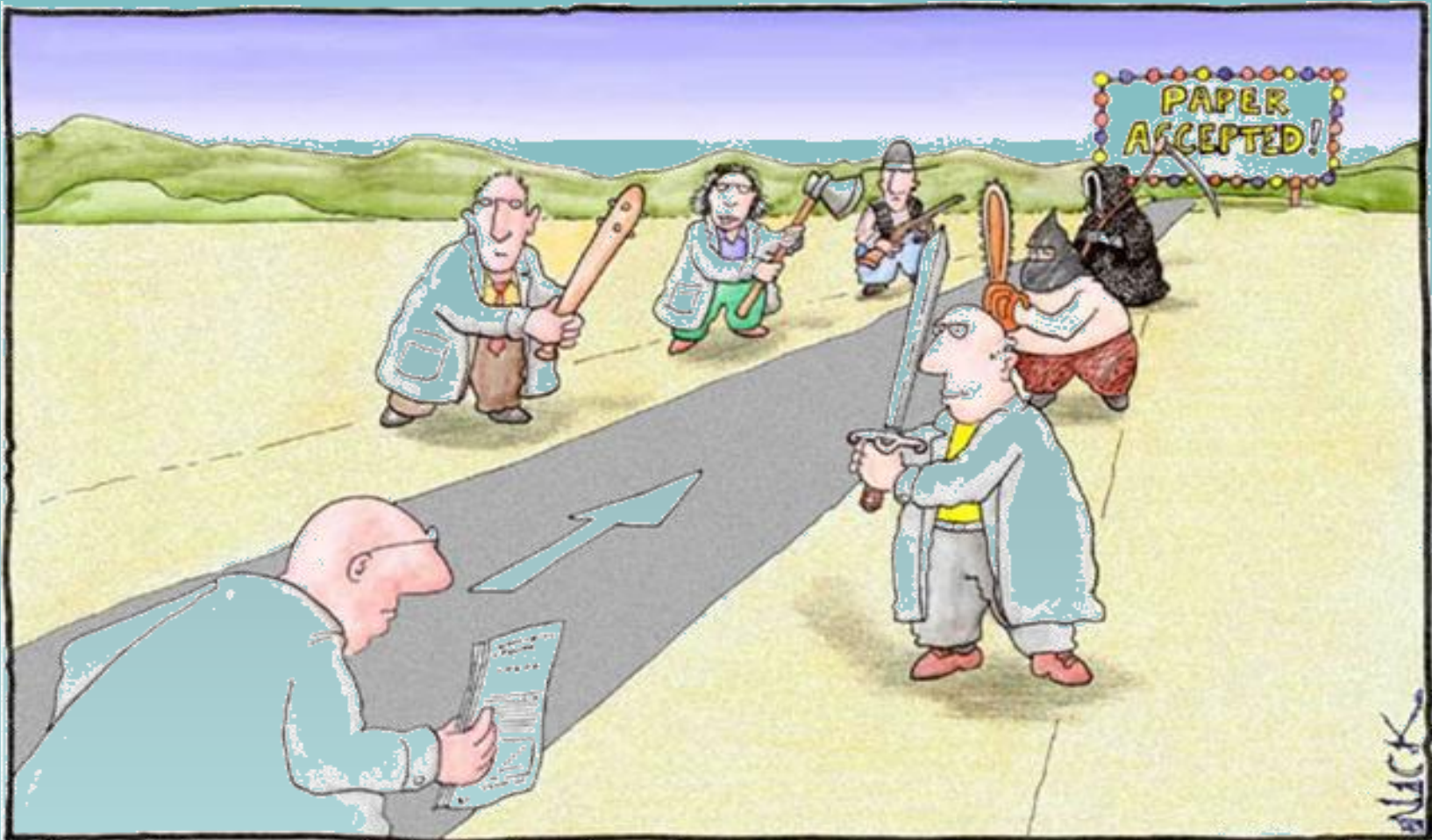




# Review Process

- Review process is designed to be fair and unbiased
- Understanding the review process for your specific program helps in preparation of a more competitive proposal





Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'

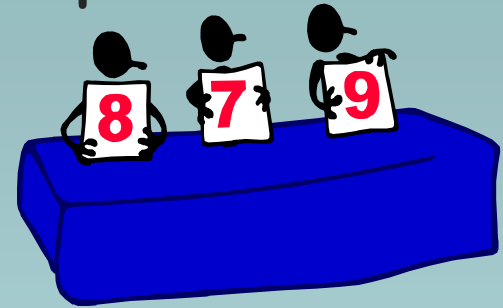


# Understand the Review Process

- Volunteer for review panels:
  - Understand the process.
  - ID characteristics of outstanding proposals.
  - Generate new project ideas.
- Competition is keen, comes down to small things.



- **Peer-reviewed competitive programs**
  - Review by peers and other experts - provide written and/or verbal evaluations
  - PD should understand the review process for insight into your reviewers
  
- **Evaluation factors are program-dependent and very important**
  - PD should understand the evaluation criteria before writing the proposal





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Toos

**"I gave you 24 hours to review and report  
on the Internet in thirty words or less.  
Now let's have it."**



## How the Review will be done

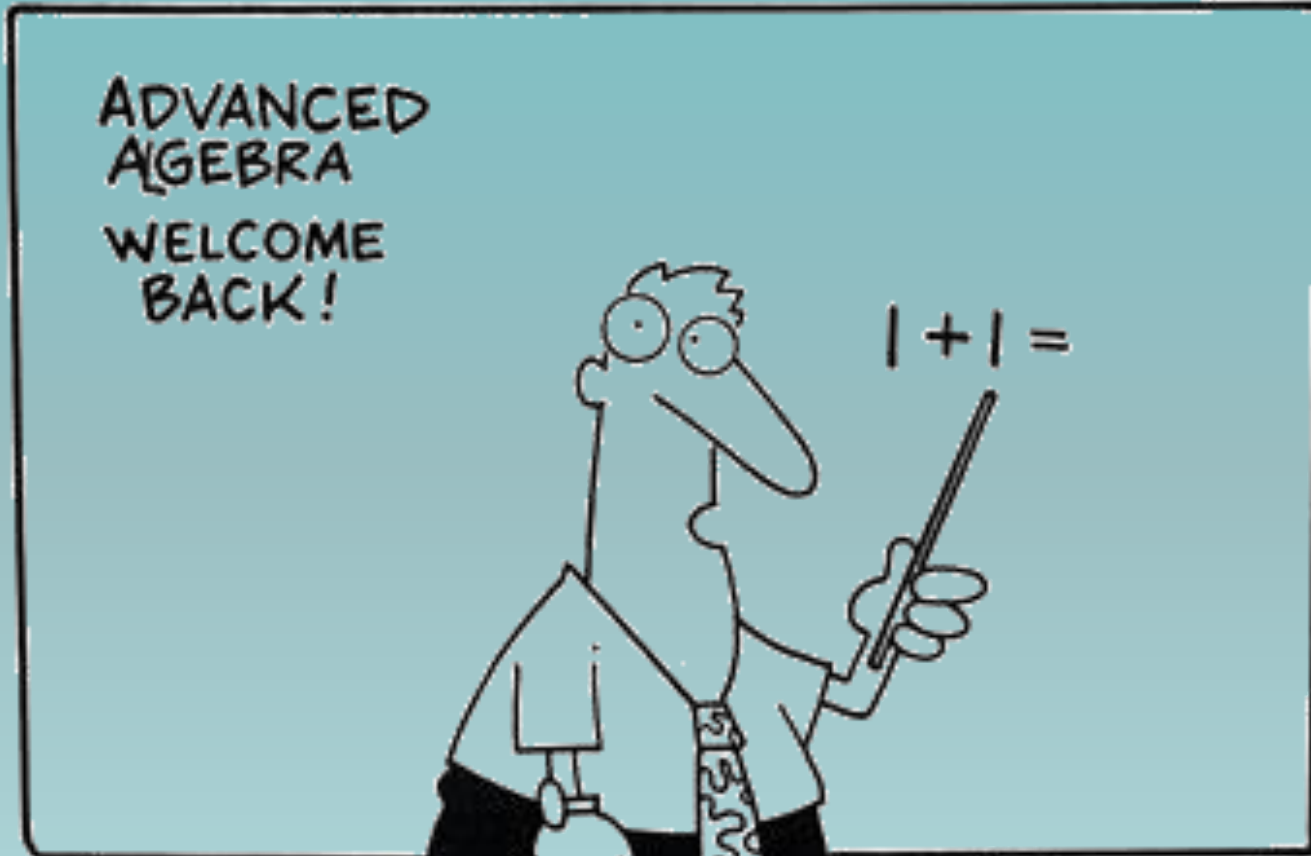
- 3 Panel (Research, Teaching and Extension).
- Each panel will include experts from the other 2 areas.
- Integrated application will be reviewed based focus area.
- 1890s' faculty will serve on the panels.
- Scoring system will be continue (Total score is 100).
- Scores will be arranged from the highest to lowest in each areas.
- Funding recommendation will be based on highest score in each area.



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# Maximum Award

Project Type	Teaching	Research	Extension
	Maximum Project Budget		
<b>Single Institution Applications</b>	\$150,000	\$300,000	\$200,000
<b>Joint Project Proposals</b>	\$300,000	\$500,000	\$300,000
<b>Integrated Project Applications</b>		\$600,000	





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**Closing date is Feb 16<sup>th</sup>, 2010**





# Recommendation to Improve funding rate

- Establish quality control for applications.
- Ensure that submitted applications address your capacity building needs.
- Each university allowed up to 24 applications, however, quality of applications is more important than number of applications
- Institutions should submit their proposals ahead of the deadline. Early submission will provide the applicants with enough time to respond to needed modification, correction or re-submission.



# Recommendation to Improve funding rate

- Ensure that applications have required documentation such as Letter of support, budget form and justification.
- Check the applications for completion as well as correct documentation prior to submission.
- Check program code and discipline codes.
- Be sure that applications and all documentation are submitted in specified format identified in the RFA.



## Recommendation to Improve funding rate

- Be sure that e-mail addresses for the PD and AR are correct in e-grant.gov system.
- Upon completing submission of all applications, Institutions are encouraged to e-mail or fax the list of the submitted proposals to the **NPL (Ali Mohamed)** to track applications in the system.
- The list should include: PD name, Proposal title, grant number provided by grants.gov.



# On Campus Workshops

- Three grantsmanship workshops will be conducted on three central campuses
- The workshops will address
  - FY 2010 Capacity Building Request for Application (RFA) and stakeholder inputs
  - Tips and Tricks in proposal development
  - Integrated Programs
  - Logic Model
  - Program roadmap and strategic plan
  - Reporting Impacts
  - How to successfully manage your grant



<b>Group 1</b>	<b>Group 2</b>	<b>Group 3</b>
<b>February 9, 2010</b>	<b>February 25, 2010</b>	<b>March 02, 2010</b>
<b>**Alcorn State University</b>	<b>**Alabama A&amp;M University</b>	<b>**West Virginia State University</b>
<b>Southern University</b>	<b>Tuskegee University</b>	<b>University Maryland ES</b>
<b>University Arkansas Pine Bluff</b>	<b>Florida A&amp;M University</b>	<b>Virginia State University</b>
<b>Prairie View A&amp;M</b>	<b>Tennessee State University</b>	<b>Delaware State University</b>
<b>Langston University</b>	<b>Fort Valley State University</b>	<b>Kentucky State University</b>
<b>Lincoln University</b>	<b>South Carolina State University</b>	<b>North Carolina A&amp;T University</b>





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# Agriculture and Food Research Initiative (AFRI)

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# AFRI

- USDA's core competitive grants program
- Research, education & extension projects
- Basic & applied research **and** integrated projects
- 10 year projects under certain parameters
- Single discipline or Multi-disciplinary
- Individual Investigator or Teams of Investigators



# AFRI

- Authorized for \$700 Million per year (FY 08 – 12)
- FY 2009 appropriation \$201.5 Million
- FY 2010 appropriation \$262.4 Million
- 30 % Increase this year !!!





# AFRI

## Eligibility:

- **Research:** State AES, colleges, universities, university research foundations, other research institutions & organizations, Federal agencies, national laboratories, private organizations or corporations, individuals
- **Integrated:** Colleges, universities, 1994 Institutions, Hispanic-serving agricultural colleges and universities
- **Indirect costs:** Capped at 22%
- **Matching funds (only equipment/ applied research; waivers may apply)**





## ***AFRI Project Types***

- Single Function Projects:
  - A. Research
  - B. Research Coordinated Agricultural Projects (CAP)
  - C. Education
  - D. Extension
  - E. Conference





## ***AFRI Project Types (cont.)***

- **Integrated Multifunctional Projects:**

- a- **Integrated**

- at least 2 of the 3

- Research, Education, Extension**

- b- **Integrated Coordinated Agricultural Projects (CAP)**



## **Food & Agricultural Science Enhancement (FASE) Projects**

- **Improve research, extension and education capabilities in states that have been less successful**
- **Faculty of small, mid-sized, and minority-serving institutions who have not been previously successful**
- **Single or co-investigators beginning research careers**



## ***AFRI Project Types (cont.)***

### **Food & Agricultural Science Enhancement (FASE)**

- 1. Postdoctoral fellowships**
- 2. NEW !!! Pre-doctoral  
fellowships expected in 2010**
- 3. New Investigators**



# Food & Agricultural Science Enhancement (FASE)

## Strengthening projects: Who Qualifies ?

- ✓ Small & mid-sized institutions or minority-serving institutions with limited success for Federal funds
- ✓ SAES or degree-granting institutions in states eligible for USDA Experimental Program for Stimulating Competitive Research (EPSCoR)

AL, AK, CT, DE, ID, HI, KY, LA, ME, (FY09-11)  
MS, NV, NH, ND, RI, SC, SD, VT, WV, WY  
DC, PR, Virgin Islands, Guam, American Samoa,  
Micronesia, Northern Mariana Islands



# Food & Agricultural Science Enhancement (FASE)

## 4. Strengthening projects: What options ?

- ❖ Seed Grants (preliminary data)
- ❖ Sabbaticals (re-tooling)
- ❖ Equipment (infrastructure)
- ❖ Standard strengthening  
(**any** previous single or multi-functional project)





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# An Overview of Other Competitive Programs



# Other Competitive Programs

- **Biotechnology Risk Assessment Program**
- **Risk Management Education Program**
- **Organic Agriculture Research and Extension Initiative**
- **Biomass Research and Development**
- **Beginning Farmers and Ranchers Development Program**
- **Specialty Crop Research Initiative**
- **Small Business Innovation Research**
- **Sustainable Agricultural Research and Education Program**



# Biotechnology Risk Assessment Program



- **Purpose:** To assist Federal regulatory agencies in making science-based decisions about the introduction of transgenic organisms into the environment
  - Risk Assessment Research
  - Risk Mitigation/Management Research



# Biotechnology Risk Assessment Program

- Authorized in the 1990 Farm Bill
- All U.S. public or private research or educational institutions or organizations are eligible
- Funded through a 2% set-aside of all funds used for agricultural biotechnology research





# Biotechnology Risk Assessment Program

- Identify and develop appropriate management practices to minimize physical and biological risks
- Develop methods to monitor the dispersal of genetically engineered animals, plants, and microorganisms
- To further knowledge of characteristics, rates and methods of gene transfer





# Biotechnology Risk Assessment Program

- Compare the relative impacts of organisms modified through genetic engineering to other types of production systems
- Other relevant areas of research
- Contact: [Daniel Jones](#)



# Risk Management Education

- **Purpose:** Educating agricultural producers about the full range of risk management activities.
- These activities include futures, options, agricultural trade options, crop insurance, cash forward contracting, debt reduction, production diversification, farm resources risk reduction and other risk management strategies.



# Risk Management Education

## Program Characteristics:

Open to all qualified public and private entities. Includes all colleges and universities, Federal, State, and local agencies, nonprofit and for-profit private organizations or corporations, and other entities.



# Risk Management Education

## Program Characteristics:

Indirect Costs at full negotiated rate

Matching encouraged but not required

Center Grants up to \$1,250,000

Standard grants up to \$300,000

Contact: [Pat Hipple](#)



# Organic Agriculture Research and Extension Initiative (OREI)

- **Purpose:** The purpose of this program is to fund projects that will enhance the ability of producers and processors who have already adopted organic standards to grow and market high quality organic agricultural products.
- **Eligibility:** 1862 Land-Grant Institutions, 1890 Land-Grant Institutions, 1994 Land-Grant Institutions, For-profit Organizations Other Than Small Businesses, Individuals, For Additional Information (See NIFA grants site)





# Organic Agriculture Research and Extension Initiative (OREI)

## Program Characteristics:

- The OREI is particularly interested in projects that emphasize research and outreach that assist farmers and ranchers with whole farm planning and ecosystem integration.
- Fieldwork must be done on certified organic land or on land in transition to organic certification, as appropriate to project goals and objectives.



# Organic Agriculture Research and Extension Initiative (OREI)

- Projects should plan to deliver applied production information to producers.
- Priority concerns include biological, physical, and social sciences, including economics.
- Contact: [Mary Peet](#)



# Biomass Research and Development (BRDI)

- NIFA and DOE Office of Biomass Programs competitively award Biomass Research and Development Initiative (BRDI) grants to eligible entities to research, develop, and demonstrate biomass projects (as defined in parts 1(A) & 1(B) of section 9008 of the Farm Security and Rural Investment Act of 2002 (7 U.S.C. 8101 et seq.) as amended).
- Eligibility: (A) an institution of higher education; (B) a National Laboratory; (C) a Federal research agency; (D) a State research agency; (E) a private sector entity; (F) a nonprofit organization; or (G) a consortium of 2 or more entities described in subparagraphs (A) through (F)



# **Biomass Research and Development (BRDI)**

- 1. The three main Technical Areas are:  
Feedstocks Development,**
- 2. Biofuels & Biobased Products  
Development, and**
- 3. Biofuels Development and  
sustainability Analysis.**



# Biomass Research and Development (BRDI)

- This is a joint solicitation with DOE managing the pre-application process and NIFA managing the full application process.
- Contacts:
  - Carmela Bailey
  - Daniel Cassidy
  - Bill Goldner





# Beginning Farmers and Ranchers Development Program (BFRDP)

The Farm Bill made available in fiscal year (FY) 2009 \$18 million to fund a Beginning Farmer and Rancher Development Program (BFRDP.) To support the nation's beginning farmers and ranchers, BFRDP will make three types of competitive grants:



# Beginning Farmers and Ranchers Development Program

1. Standard projects covering new and established local and regional training, education, outreach and technical assistance initiatives that address the needs of beginning farmers and ranchers in eighteen areas including:
  - mentoring, apprenticeships, and internships;
  - resources and referral;
  - whole farm planning
  - conservation assistance
  - other subject areas of use to beginning farmers or ranchers (see the BFR program page).



# Beginning Farmers and Ranchers Development Program

2. Educational Enhancement Teams: for evaluation, coordination and enhancement of Standard Projects.
3. Curriculum and Training Clearing House – develop a scoping projects of all BFR activities, develop and online clearing house and help enhance outcome based reporting.



# Beginning Farmers and Ranchers Development Program

- To be eligible to receive a BFRDP grant, the recipient must be a collaborative State, tribal, local, or regionally-based network or partnership of public or private entities.
- May include: a state cooperative extension service; a Federal, State or tribal agency; a community-based and nongovernmental organization; college or university (including an institution awarding an associate's degree) foundation or any other appropriate partner, as determined by the Secretary.



# Beginning Farmers and Ranchers Development Program

- Priority will be given to projects that are partnerships and collaborations led by or including nongovernmental and community-based organizations with expertise in new agricultural producer training and outreach.
- All applicants are required to provide funds or in-kind support from non-federal sources at least equal to twenty-five percent (25%) of the federal funds requested.

**Contact:** S. (Suresh) Sureshwaran





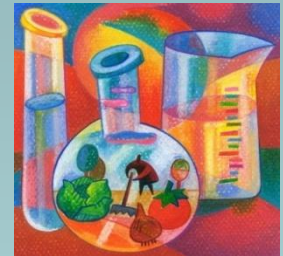
# Specialty Crop Research Initiative (SCRI)

- **Purpose:** Supports research and extension that takes a systems-based, trans-disciplinary approach to solving critical United States specialty crop issues, priorities or problems
- **Eligibility:** Federal agencies, national laboratories, colleges and universities, research institutions and organizations, private organizations or corporations, State agricultural experiment stations, individuals, or groups consisting of 2 or more of these entities.



# Small Business Innovation Research (SBIR) Program

- Research for the development of a profit-making technology, product or service
- Two-phase program - feasibility and development
- \$90,000 (Phase I); \$400,000 (Phase II)
- Small businesses of 500 employees or less
- Government-wide
- 2.5% set-aside of USDA extramural funding for research





# SBIR Topic Areas

- **Forests & Related Resources**
- **Plant Production & Protection - Biology**
- **Animal Production & Protection**
- **Animal Manure Management**
- **Air, Water & Soils**
- **Food Science & Nutrition**



## **SBIR Topic Areas (cont.)**

- **Rural & Community Development**
- **Aquaculture**
- **Industrial Applications**
- **Marketing & Trade**
- **Small and Mid-size Farms**
- **Plant Production & Protection - Engineering**



# University Involvement in USDA SBIR

- Strongly encouraged
- Faculty may serve as consultants or receive subcontract and continue to work full time at university



limited to no more than 1/3 of Phase I award budget or 1/2 of Phase II award budget





# University Involvement in USDA SBIR (cont.)

- Faculty may serve as principal investigator on the grant by:
  - reducing university employment to 49% for duration of grant, and
  - conducting SBIR research off-site (i.e., other than university research lab)
  
- Usually not acceptable for faculty to serve as consultants and have all the research done in their lab





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## Sustainable Agricultural Research and Education (SARE)



**Purpose:** Increase knowledge about - and help farmers and ranchers adopt - practices that are profitable, environmentally sound, and good to communities.

**Eligibility:** Open to all qualified public and private entities, including all colleges and universities, federal, state, and local agencies, private organizations, corporations, and individuals



# **Sustainable Agricultural Research and Education Program Characteristics**

- **Competitive grants for research, education, extension and professional development awarded by four regional administrative councils.**
- **Grants range by type and region, from \$400 to \$400,000**
- **Education and demonstration project grants, including development of farmer-to-farmer networks**
- **Interdisciplinary approaches encouraged**
- **Successful projects typically involve farmers/ranchers and include economic analysis and outreach plan**



# Looking for More?



Check out the Grants page on our web site.

[www.nifa.usda.gov/business/business.html](http://www.nifa.usda.gov/business/business.html)

The screenshot shows the NIFA website's Grants page. At the top, it features the USDA logo and the text "United States Department of Agriculture National Institute of Food and Agriculture". Below this is a navigation bar with links for Home, About Us, Grants, Forms, Newsroom, Help, and Contact Us. The main content area is titled "Grants" and is divided into three columns: "Looking for Funding", "Applying for a Grant", and "Managing a Grant". Each column contains a list of links and a "See All..." link. On the left side of the page, there is a "Search NIFA" box and a "Browse by Subject" menu with various categories like Agricultural Systems, Animals, Biotechnology & Genomics, etc.





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# Need Even More INFO?



Call or E-mail the Program Contact



[http://www.nifa.usda.gov/about/AllUnits/staff\\_view.cfm?record\\_id=2563](http://www.nifa.usda.gov/about/AllUnits/staff_view.cfm?record_id=2563)





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# Questions and Answers





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