



# Integrating Teaching Components into Agricultural Research Projects

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# Southern Region SARE 2011 Request for Pre-proposals

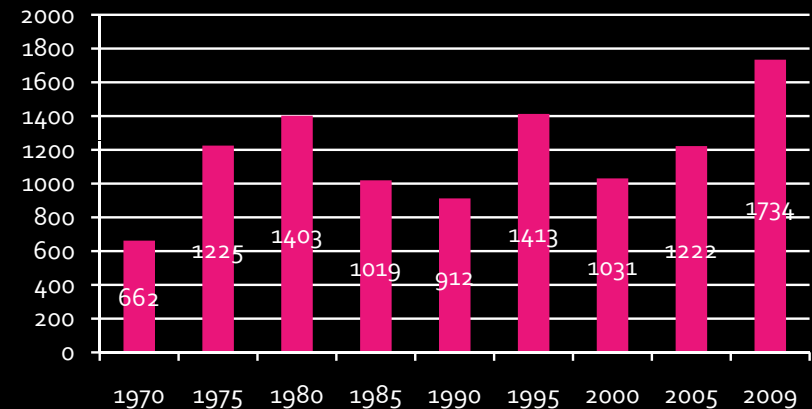
## Pre-proposal pass/fail criteria:

- 1. Focus on developing sustainable agriculture systems
- 2. Project's central purpose should be research based with an **educational/outreach component**.
- 3. Take a systems research approach.

# What is happening in CAES?

- Record high student enrollment, both graduate and undergraduate
- Highest ever minority enrollment
- Over 50% female
- Second highest:
  - Starting salaries
  - Job placement rate
  - Placement into graduate and professional school

CAES Undergraduate Student Enrollment

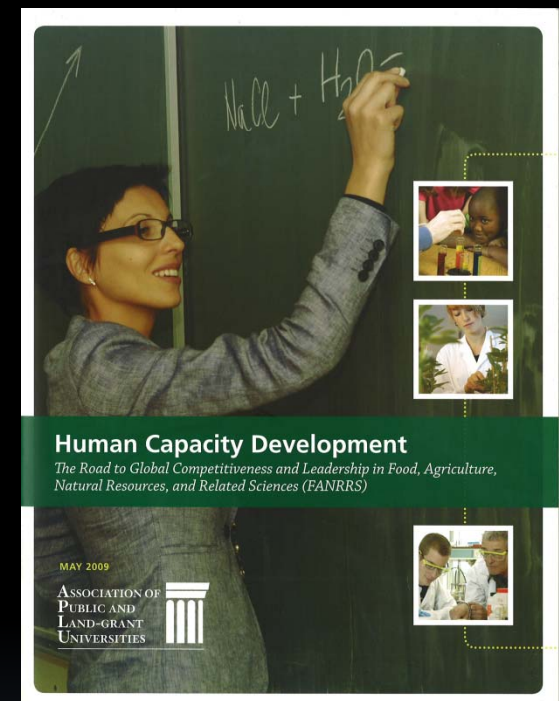


# Guiding Publications:

*Human Capacity Development: The Road to Global Competitiveness and Leadership in Food, Agriculture, Natural Resources, and Related Sciences (FANRRS) . 2009.*

Prepared by the Academic Programs Section, Board on Agriculture Assembly of the Association of Public and Land-grant Universities (APLU).

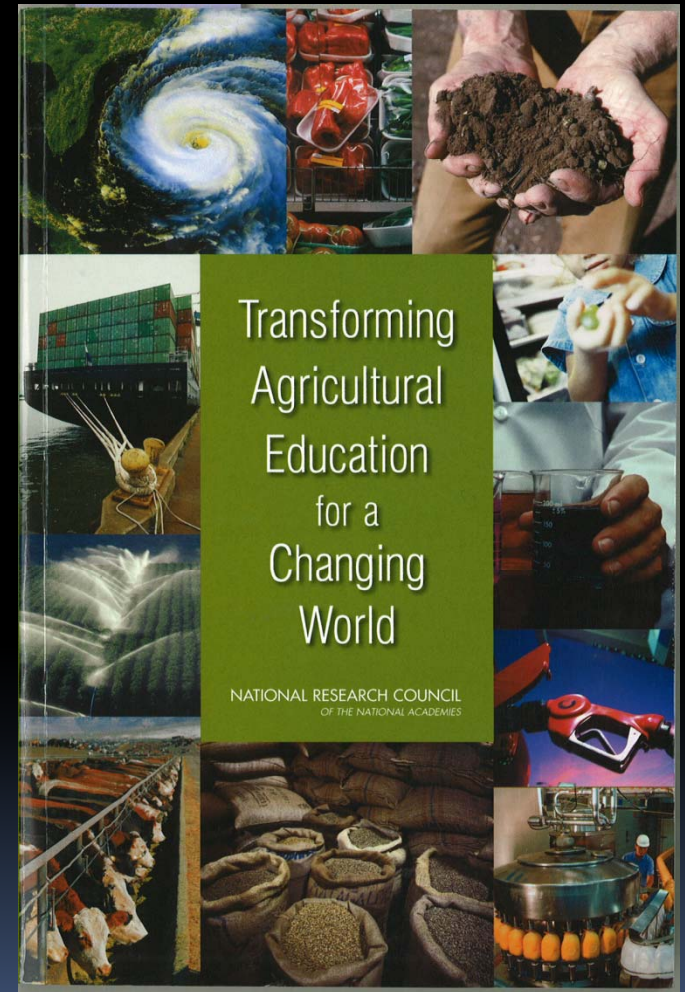
<http://www.aplu.org/NetCommunity/Document.Doc?id=1639>



# Guiding Publications:

## *Transforming Agricultural Education for a Changing World . 2009.*

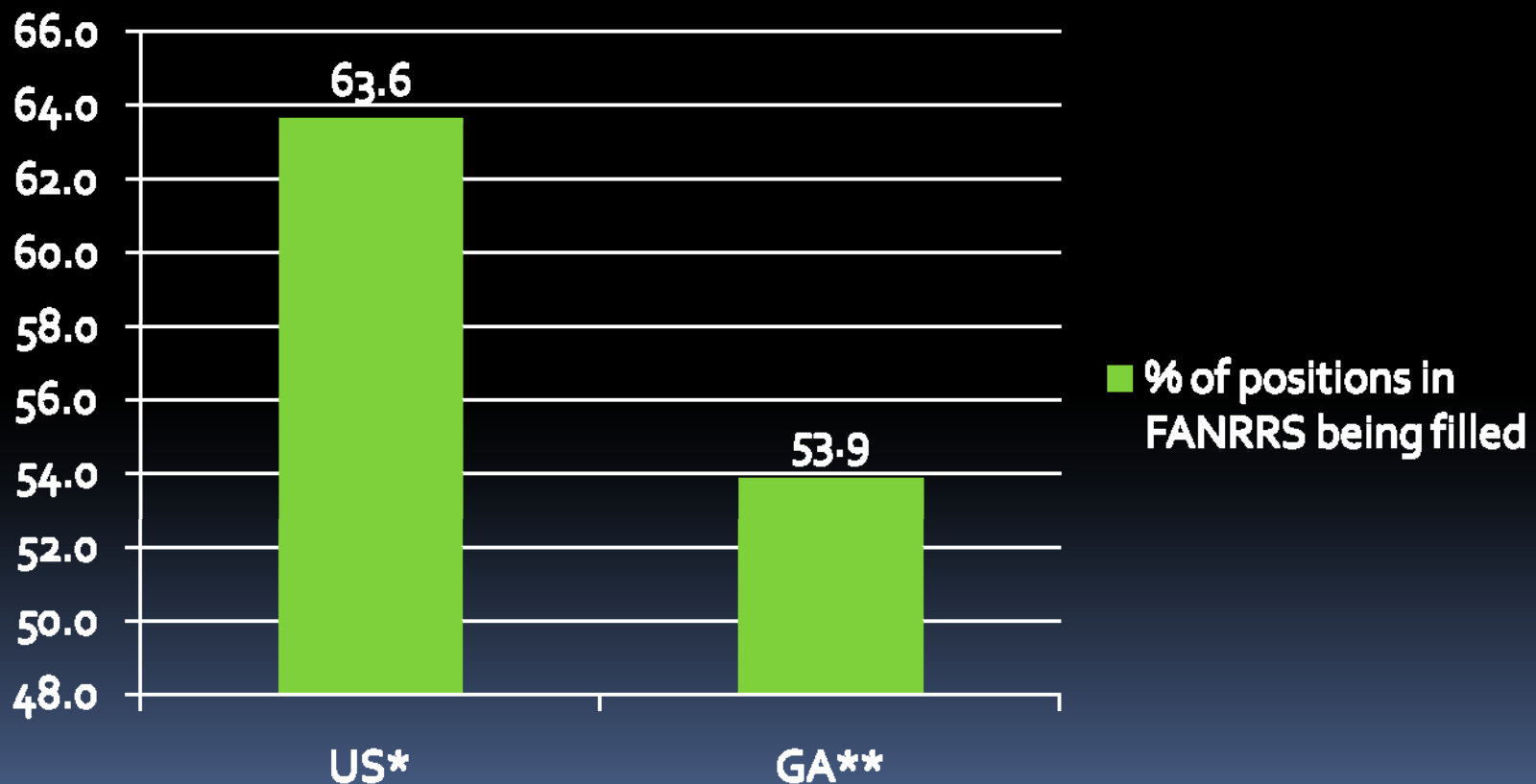
Prepared by the National Research  
Council of the National Academies



[http://dels.nas.edu/ag\\_education/report.shtml](http://dels.nas.edu/ag_education/report.shtml)


# Goal 1: Increase supply of trained graduates in the Food, Agriculture, Natural Resources, and Related Sciences (FANRRS)

## % of positions in FANRRS being filled




\*Goecker et al., 2005, [www.csrees.usda.gov/newsroom/news/2005news/USDA\\_05\\_Report2.pdf](http://www.csrees.usda.gov/newsroom/news/2005news/USDA_05_Report2.pdf)


\*\*UGA CAED, 2008, <http://www.caed.uga.edu/publications/2008/>




Goal 2: Integrate research, international experiences and Extension engagement (service-learning) into the undergraduate experience.




## Goal 3: Address the Needs for Doctoral-level Professionals in FANRRS

- *Predicted 9% increase in demand for agricultural and food scientists. Doctoral students should be provided with opportunities to gain a formal understanding of the principles of teaching and Learning.*
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Goal 4: Expand the reach of the university by increasing the use of distance education technology.




Goal 5: Expand knowledge of  
agriculture to new  
audiences.

# Ideas on teaching activities to include in grant proposals:

1. Increase the number of students graduating from FANRRS disciplines through recruiting activities.
  - Invite students to field days and other outreach activities.
  - Reach out to K-12 students, especially those from non-ag backgrounds.



## 2. Increase undergraduate opportunities for research:


- CAES will host an Undergraduate Research Symposium
    - Day-long forum in the spring for CAES undergraduates to present research
    - Students will submit abstract and give poster or oral presentation
    - Awards will be presented
    - Will be held prior to CURO symposia (must have 3.4 to present at CURO)
    - Preparatory event will be held for students
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### 3. Increase undergraduate opportunities for:

- International experiences
- Internships
- Service learning – “Extension is ideally positioned to identify opportunities.”

### 4. Include activities to promote STEM concepts for K-16 students.



## 5. Increase diversity of students.


- CAES Emerging Scholars – host under-represented students from FVSU and FAMU for summer undergraduate research experience.

## 6. Offer youth development activities:

- CAES Young Scholars program is mentioned as a model (<http://www.caes.uga.edu/academics/internships/youngscholars/index.html>).

### Request funds for:

- Student pay
- Student housing
- Research materials
- Travel for students



7. Create projects to enhance students' problem-solving skills

8. Expand the CAES undergraduate curriculum

- CAES offers an Organic Agriculture Certificate
    - 51 students enrolled!
    - Expand course offerings
    - Offer animal-based courses
    - Considering a major in Sustainable Agriculture
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## 9. Request Graduate Teaching Assistants and prepare them to teach by offering them exposure to the concepts of learning, engagement and discovery

- Resources offered through Graduate School:


<http://www.uga.edu/gradschool/?4.5>


- Emerging Leaders Program – invited leadership workshop
- Professional development seminars

Examples:

- Beginning your academic job search: the nuts and bolts of finding the right faculty position
- Making the difference: how to effectively find and apply for federal career opportunities
- The interview process: securing a higher education position
- Business etiquette and interviewing
- A teaching portfolio program
- Interdisciplinary Certificate in University Teaching
- 5-minute mentor briefs and podcasts



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- Resources offered through the Center for Teaching and Learning: [http://www.ctl.uga.edu/teach\\_asst/programs.htm#TAOrientation](http://www.ctl.uga.edu/teach_asst/programs.htm#TAOrientation)
  - TA Orientation
  - GRSC 7770 – Graduate Seminar
    - Techniques to organize and effectively conduct the first class meeting of a course
    - Options for dealing with students and classroom problems
    - Planning, organizing and presenting a good lecture
    - Tips on managing class discussions
    - Good test design
    - Using a variety of teaching methods
    - UGA instructional policies and procedures
    - Developing a teaching portfolio

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- LLED 7768 and LLED 7769 – Language development seminars for international graduate assistants
  - Technology support for instructional purposes
  - Videotaping and consultation for instructional enhancement
  - GTA Newsletter
  - The Outstanding Teaching Assistant Award
  - The Excellence in Teaching Award
  - Professional development seminars
  - Online handbook for Graduate Teaching and Laboratory Assistants
  - Future Faculty Program for award-winning GTAs and GLAs preparing for faculty positions



10. Develop new Distance Education Courses to expand the reach of the college

“Academic projects should be fully integrated into the proposal, not just an add-on.”