

2016 UF/IFAS RESEARCH OVERVIEW

UF/IFAS FLORIDA AGRICULTURAL EXPERIMENT STATION













Introduction

The research mission of UF/IFAS, conducted under the Florida Agricultural Experiment Station (FAES), is to discover new knowledge, encourage innovative study and create applications based on sound science that address challenges facing agriculture, natural resources and interrelated human systems in Florida, our country and the world.

All UF/IFAS research is conducted under the auspices of the FAES and the oversight of the FAES Director, who also serves as UF/IFAS Dean for Research.

Research

Agricultural topics most actively researched by FAES include pest and disease management, nutrition management, improved crop varieties, biotechnology, livestock reproduction and health, irrigation, and food safety.

Natural-resources topics under study by FAES researchers include climate variability, water quality and conservation, energy conservation, land-use issues, wildlife, invasive species, fisheries, forest science, ecotourism, ecology, and ecosystem services.

In human systems, studies by FAES personnel investigate global competitiveness, labor-saving technologies, marketing, consumer behavior, personal and family financial management, child and family development, youth development, agricultural education, sustainable development, food safety, and human nutrition.

Funding

According to the most recent National Science Foundation figures, UF has ranked first or second among U.S. universities in total agricultural sciences research expenditures since fiscal year 2001.1

Financial support for UF/IFAS research activities comes from a variety of sources, including federal grants; state appropriations; check-off programs sponsored by producers; contracts and grants from non-profit organizations and private companies; donations; and revenues from the licensing of crop cultivars, products and technologies developed by UF/IFAS personnel.

Faculty

UF/IFAS employs close to 500 faculty members with research appointments, along with a similar number of research support employees such as lab technicians.

Many UF/IFAS researchers are award-winning, internationally recognized experts who publish

papers in leading peer-reviewed journals. Many of our faculty members are inducted into prestigious organizations such as the National Academy of Sciences and are fellows of the American Association for the Advancement of Science.

UF/IFAS researchers have joint appointments that include teaching and/or Extension responsibilities. Findings from UF/IFAS research are used as the basis for Extension programs taught statewide via publications, distance education, and field day events, and are the foundation of many of the classes taught by our faculty.

History

FAES was founded in 1887 at Florida Agricultural College in Lake City, the state's original land-grant institution. When UF officially began operations in fall 1906, FAES was relocated to Gainesville. The first FAES director in Gainesville was Peter Rolfs, and the first UF president. Andrew Sledd, was a former FAES director; the campus academic building Rolfs Hall and dormitory Sledd Hall are named for the two. For much of the 20th century, FAES was headquartered in Newell Hall on the UF main campus, named for former FAES director Wilmon Newell (1921-1943).

The first off-campus FAES facility was the Citrus REC in Lake Alfred, established in 1917 to aid the state's citrus growers. It was followed by the Everglades REC in Belle Glade, North Florida REC in Quincy, and the Tropical REC in Homestead, all of which were established in the 1920s. Additional facilities were opened in the decades that followed, increasing the FAES statewide presence.

The Future

Florida is always changing, and FAES is committed to constant evaluation and improvement of its programs to ensure maximum benefit for all stakeholders. Here are some initiatives emerging to meet the state's needs:

As the U.S. economy becomes more globally connected, UF/IFAS researchers are taking steps to increase international collaboration and address challenges in other countries with conditions similar to Florida's for the benefit of all.

To cope with increasing demand for Florida's water resources, UF/IFAS researchers are helping to develop best management practices, including new methods for reducing irrigation water lost to evaporation.

To help producers cope with climate variability, UF/IFAS researchers are finding better methods of predicting weather patterns, developing sustainable management strategies, and producing cultivars that are more drought- and heat-tolerant.



on-campus (CY 2015)

off-campus

with research appointments (CY 2015)

departments + 1 school

Research and Education

fellows***

eféreed journal publications (FY 2014-15)

U.S. plant patents (FY 2014-15)

U.S. utility patents (FY 2014-15)

foreign utility patents (FY 2014-15)

plant variety protection . certificates

- *Excluding county faculty
- **Current National Academy of Sciences members
- ***Current American Association for the Advancement of Science fellows

+ FOCUS AREAS

- Plant and animal food systems
- Food safety and security
- Climate variability
- Water quality and quantity
- Emerging and invasive pests and diseases
- Natural resources, landscapes and environment
- Human, animal and environmental health
- Sustainable energy
- Human services, community development and communication

FUNDING

UF/IFAS agricultural sciences research expenditures

\$161.1 in Federal FY 2014¹ **MILLION**

Sponsored Research Awards

STATE FY MILLIONS (\$)

04/05 **59.7**

05/06 68.5

06/07 72.2

07/08 71.6

08/09 91.26

09/10 85.29

10/11 112.89

11/12 125

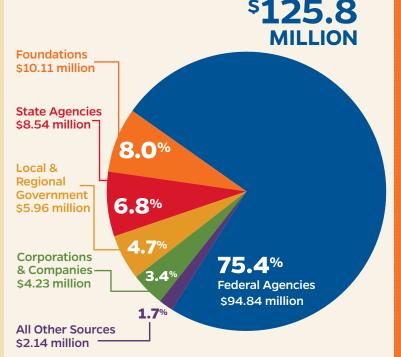
12/13 107.1

13/14 102.3

14/15 125.8



1,102 Awards Received, Totaling





UF/IFAS Research Facilities



Facilities

UF/IFAS provides research support for faculty members assigned to 14 departments and one school on the UF main campus, plus off-campus facilities including 12 Research and Education Centers, six Research and Demonstration Sites (that include two biological stations), a research forest, an 850-acre dairy farm, and a fuel ethanol pilot plant.

UF/IFAS researchers play leading roles in campus-wide research initiatives such as the Emerging Pathogens Institute, Florida Climate Institute, UF Genetics Institute, and UF Water Institute. They also are involved in UF/IFAS-based centers of excellence such as the Center for Aquatic and Invasive Plants, Center for Food Distribution and Retailing, Center for Landscape Conservation and Ecology, Plant Innovation Center, and the Center for Public Issues Education in Agriculture and Natural Resources.

An Equal Opportunity Institution. Florida Agricultural Experiment Station, Institute of Food and Agricultural Sciences, University of Florida, Jackie Burns, dean for UF/IFAS Research, publishes this information to further programs and related activities. For more information contact the UF/IFAS Office of the Dean for Research, P.O. Box 110200, Gainesville, Florida 32611-0200, 352-392-1784.

¹"Table 40. Total and Federally Financed Higher Education R&D Expenditures in the Agricultural Sciences, Ranked by FY 2014 Total: FYs 2011–14." NCSES Data. National Science Foundation. Web. 23 Dec. 2015. From http://l.usa.gov/llN0qGT