

United States Senate

WASHINGTON, DC 20510-0906

COMMITTEES:
ARMED SERVICES
SPECIAL COMMITTEE ON AGING
BANKING, HOUSING, AND
URBAN AFFAIRS
COMMERCE, SCIENCE AND
TRANSPORTATION

May 8, 2009

The Honorable Daniel K. Inouye, Chairman
Senate Committee on Appropriations
S-128, U.S. Capitol
Washington, D.C. 20510

The Honorable Thad Cochran, Vice Chairman
Senate Committee on Appropriations
S-146A, U.S. Capitol
Washington, D.C. 20510

The Honorable Herb Kohl, Chairman
Appropriations Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies
129 Dirksen Senate Office Building
Washington, D.C. 20510

The Honorable Sam Brownback, Ranking Member
Appropriations Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies
190 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairmen and Ranking Members,

In this letter you will find my project requests for the Fiscal Year 2010 Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Bill. The requests include budget estimates provided to me by the requesting organizations. If you have any questions or need additional information, please do not hesitate to contact me.

I certify that neither I nor my immediate family has a pecuniary interest in any of the congressionally directed spending items that I have requested, consistent with the requirements of paragraph 9 of Rule XLIV of the Standing Rules of the Senate. I further certify that I have posted a description of the items requested on my official website, along with the accompanying justification.

**Florida A&M University
1601 South Martin Luther King Jr Drive
Tallahassee, FL 32307**

**Project: Center on Integrated Bioenergy Research and Training
Account: Cooperative State Research, Education, and Extension Service; Special Research
Grants
\$3,999,000**

Florida A&M University, along with Tuskegee University and Alabama A&M University will embark on a singular mission to produce high quality research in bioenergy and related technologies that meets the needs of the nation and focuses on training the next generation of scientists, particularly minorities, in bio-based products, bioenergy, alternative energy, and environmental sustainability.

There is a growing consensus that constraints on the supply of petroleum and the negative environmental consequences of burning fossil fuels require the adoption of alternative energy sources. These alternatives must be both renewable and environmentally sustainable. Biomass is an important alternative for both energy and chemical production that meets these requirements. The Southeast has abundant supplies of biomass, and Florida will play a major role in this endeavor.

The Center's work on biofuels will focus on feedstock development, conversion processes, system integration, and biomass public policy and education issues.

Education priorities will include several programs for the education community. These programs are expected to positively impact the future of education and industry through the development of innovative competitions, science modules, capacity development, web-access training programs, topical meetings and the support of scholarships, fellowships and industry internships for students and teachers. These activities will help to build a strong core of future researchers, engineers and instructors in the area of biobased industries.

Budget:

FAMU: Salaries, \$340,000; Equipment, \$340,000; Operating Expenses, \$113,000; Indirect Costs, \$340,000.

Tuskegee University: Salaries, \$340,000; Equipment, \$340,000; Operating Expenses, \$113,000; Indirect Costs, \$340,000.

Alabama A&M University: Salaries, \$340,000; Equipment, \$340,000; Operating Expenses, \$113,000; Indirect Costs, \$340,000.

National Institute of Food and Agriculture (15%): \$600,000

Total: \$3,999,000

**Florida State University
109 Westcott Bldg.
Tallahassee, FL 32306**

**Project: Risk Reduction for Agricultural Crops
Account: Cooperative State Research, Education, and Extension Service; Research and
Education Activities/Federal Administration
\$5,000,000**

University Partners: Florida State University, University of Florida, University of Miami, University of Georgia, Auburn University, The University of Alabama-Huntsville, North Carolina State University, Clemson University.

Description of the Project: The current drought in the southeastern U.S., the worst in recent history, has had significant impacts on the water resources. It has reemphasized the vulnerability of citizens to climate variability and climate extremes. The Federal Government can reduce the risks of droughts by using modern technologies such as climate models, which can predict future climate, and decision support tools to help mitigate some of these uncertainties and provide adaptation strategies for the agricultural and environmental sectors.

The Southeast Climate Consortium (SECC), which encompasses the partners listed above, has been at the forefront of research and extension for the application of climate predictions to risk reduction for agriculture and natural resources. With support from USDA and NOAA, the SECC has developed new methods to predict the consequences of climate variability for agricultural crops, forests, and water resources in the southeastern USA. In recent real-life tests, these methods have been applied to the problems that farmers raising specialty crops face arising from variable rainfall, temperature, and wild fires. This program has strong support of extension in all states. The new tasks are to develop improved methods to forecast droughts and other extreme climate events. These forecasts will be incorporated into decision support systems to help agricultural, forest, and natural resource managers to reduce risks of losses and environmental damage. The SECC will develop new partnerships and methods for incorporating climate forecasts into agricultural and water policy decisions and will continue the development of a decision support system to provide seasonal and multi-year projections to water resources managers, especially for agricultural water use. Lastly, the Consortium will initiate research to determine risks and appropriate agricultural responses to longer term trends in climate.

This program has been previously funded under this account. The climate of the southeast U.S. is highly variable, from season to season, year to year, and across decades. The most noticeable aspects of this variability are the severe storms and droughts that affect the region. Advances in climate science give researchers the ability to forecast probable shifts in seasonal climate. This information can be used by agriculture and forest managers to mitigate \$500 million or more in losses annually. The Consortium is developing tools that help decision makers in agriculture, forestry, and water resources management to understand and apply climate information. The SECC has developed AgClimate, a prototype decision support system that is available on the Internet and is in the process of transferring this website to State Cooperative Extension Services who will manage operations of the site. The project will continue to support research to provide

new information and tools for AgClimate. The SECC is developing tools to become part of a future decision support system for water resources managers. More recently, in response to strong stakeholder interest, climate information products have been developed that show historical observations of climate and provide projections of future climate at the local and regional level.

Budget: Salary, \$4,201,000; Travel, \$159,500; Indirect and other costs, \$639,500.

Harbor Branch Oceanographic Institute at Florida Atlantic University
600 US 1 North
Fort Pierce, FL 34946

Project: Sustainable Marine Aquaculture
Account: Agricultural Research Service
\$2,000,000

With increasing seafood demand and collapsing wild fisheries U.S. marine aquaculture development is urgent. Wild harvest of seafood has remained static at about 200 billion pounds since the 1980's. With increasing world population, aquaculture's contribution to seafood demand must rise from 30% to 50% in the next 25 years. The expansion of the U.S. aquaculture industry is challenged by several factors such as the high cost and limited availability of coastal land and water resources, environmental impact concerns, high production costs, appropriate feeds that use alternatives to fish meal, lack of quality fish seedstock, and insufficient technology transfer to the farmers and workforce.

This cooperative research program is addressing the critical concerns holding back the growth of the domestic aquaculture industry. This cooperative research program includes development of cost-effective, energy efficient aquaculture systems and production strategies capable of reliable year-round production of salt water food fish, Florida pompano and cobia, in inland low salinity environments.

Harbor Branch and USDA-ARS scientists are leaders in the development of aquaculture technology and the transfer of aquaculture technology to industry. A 25,000 square foot water reuse aquaculture facility located at Harbor Branch Oceanographic Institute at Florida Atlantic University is used by this cooperative research program to develop energy efficient production systems to grow fish juveniles to market size, to create diets with alternative ingredients to fish meal, and to improve techniques for reliable production of fish seedstock for year-round availability. Timely delivery of the information is being provided through workshops, conferences, and publications. The next steps are to take the cooperative research breakthroughs and fully develop the production-scale technology to a level that is economically viable.

Developing the nation's domestic aquaculture capacity will positively affect the U.S. seafood trade deficit, increase employment opportunities for inland rural sectors and displaced farmers, increase crop diversity, and enhance food security.

This project received a total of \$8,550,000 in Congressionally-directed funding between FY2004 and FY 2008.

Budget: This is a cooperative research program with USDA-ARS. The funds are used approximately 50-60% for USDA-ARS and 40-50% for Harbor Branch. The majority of the funds are spent at the Harbor Branch Oceanographic Institute. A small amount of funds are removed for Small Business Innovation Research and administration. The budget breakdown includes salaries for 14 staff, supplies to culture fish (e.g., feeds, water chemistry and monitoring, nets), and travel for scientific meetings.

Hillsborough County
601 E. Kennedy Blvd.
26th Floor
Tampa, FL 33602

Project: Ruskin Tropical Aquaculture Research
Account: Cooperative State Research Education and Extension Services; Special Research Grants
\$300,000

Funds will be used to partner with and expand research programs with the USDA at the Hillsborough County Tropical Aquaculture Laboratory. The Hillsborough County/Ruskin Tropical Aquaculture Laboratory is a cooperative venture of Hillsborough County and the University of Florida. This funding provides much needed science-based technologies in nutrition, reproduction, health, and water quality management issues for the tropical ornamental aquaculture industry, based primarily in Hillsborough County. Research in this field requires multiple years to complete. Continuation of this funding will insure completion of the valuable research currently underway.

The Ruskin Aquaculture Laboratory has been performing research since 1996 which benefits the aquaculture industry in Hillsborough County. It is necessary to continue to support aquaculture research in the face of increasing foreign competition from Malaysia, Singapore, Thailand, Indonesia and China. Critical to confronting this increased foreign competition is further research to accelerate scientific findings.

Examples of the applied research this program has funded in past years include:

- Development of new drugs and chemicals for treatment of fish disease and aquatic pests.
- Development of commercial production strategies for species currently only imported into the US market by foreign competitors.
- Development of water conservation and other best management practices to reduce environmental impact and improve efficiency of Florida's aquatic industry.

- Research to specifically address the culture of non-native aquatic species and their impact when and if released into the waters of the state.

Budget:

Salaries: \$250,000 to hire two research biologists, two graduate students, and two technicians to assist faculty in research objectives.

Operating Expenses: \$50,000 to provide funds for materials and supplies (feed, plumping, filtration, water quality testing, etc.), travel, and publication of results (extension and peer-reviewed journal articles).

**Mote Marine Laboratory
1600 Ken Thompson Parkway
Sarasota, FL 34236**

**Project: U.S. Sustainable Aquaculture Food Technologies (US-SAFTI)
Account: Cooperative State Research, Education, and Extension Service; Special Research Grants
\$800,000**

Funds will be used to develop innovative and sustainable technologies to farm marine fishes on land and to expand the supply of safe seafood for U.S. consumers.

A critical need exists for inland recirculating aquaculture technologies to reduce the large and growing global demand for seafood, to reduce fishing pressure on declining wild fish populations, to improve our nation's food security and health, and to provide jobs for U.S. aquaculture farmers. The growing demand for marine fishery resources is currently being met through imported seafood produced in coastal ponds or sea cages in other countries around the world. U.S. industry development continues to be inhibited by the high cost and limited availability of coastal lands, high production costs and governmental regulations. For U.S. marine aquaculture production to expand and develop, innovative approaches to address the constraints being faced by the emerging aquaculture industry must be used.

This project will develop innovative and sustainable technologies to farm several species of marine fishes (Southern Flounder, Cobia, Pompano, Red Drum, and Amberjack) in sustainable land based systems and to expand the supply of safe seafood for U.S. consumers. A critical need exists for sustainable inland recirculating aquaculture technologies to reduce the large and growing global demand for seafood, to reduce fishing pressure on declining wild fish populations, and to improve our nation's food security and health.

Funds will be used for salaries of scientists, graduate students, fish production technicians, and equipment maintenance staff; filtration, water quality and fish production equipment; filtration and fish production supplies; fish food; electricity; travel to scientific and industry meetings to transfer technologies as they are developed; and publication of project results.

Budget:

Salaries/stipends for scientists, graduate students and support staff: \$550,000

Research supplies, tanks & filtration equipment: \$250,000

U.S. Department of Agriculture

Project: Agricultural Research Laboratory, Canal Point, FL, Facility Replacement

Account: Agricultural Research Service, Buildings and Facilities

\$3,000,000

Funding would be used for construction of a new Agricultural Research Service laboratory. There is a demonstrated need for facility improvement and expansion at the USDA Sugarcane Field Station at Canal Point, Florida. This facility will support a wide variety of valuable crop-based research. The USDA/ARS Canal Point Field Station is focused on research to sustain sugarcane production in the mainland United States by developing high yield sugarcane resistant to diseases and other stresses. The station also develops new breeding/genetic, pathology, soil, and agronomic technologies that improve production efficiency, soil conservation and enhance the Station's sugarcane breeding program. However, the aging facility has a demonstrated need for replacement and expansion. In 2004, the USDA performed a feasibility study on the expansion of this aging facility at Canal Point, Florida. This feasibility study concluded that current facilities are unable to meet ARS needs, and laboratory, office, administrative and support space as well as new greenhouses are necessary to adequately meet the Station's research needs.

Budget: 100% of this funding will be used for planning, engineering, design and construction of facilities at this federal laboratory.

U.S. Department of Agriculture

Project: Agricultural Research Laboratory, Canal Point, FL, Sugar Cane for Energy Research

Account: Agricultural Research Service, Salaries and Expenses

\$3,425,000

The use of sugarcane as a feedstock for energy production holds tremendous promise for the sugarcane and renewable fuels industry. Some countries, such as Brazil, have had tremendous success in the use of sugarcane for ethanol production. However, that technology is not automatically transferable to the United States. Sugarcane production needs to be more productive on poor soils that are prone to drought, flooding and low nutrient status. Economical production of sugarcane on poorer land areas beyond where the crop is currently grown is required to fulfill the needs of both demands for sugar for food and renewable fuels production. Different cane varieties and ethanol production systems necessitate additional investment in research to achieve maximum efficiency and economic viability.

The USDA/ARS Sugarcane Field Station, Canal Point, Florida, is focused on research to sustain sugarcane production in the mainland United States by developing high yield sugarcane resistant to diseases and other stresses such as flood, drought and nutrient stresses. The station also develops new breeding/genetic, pathology, soil, and agronomic technologies that improve production efficiency, soil conservation and enhance the Station's sugarcane breeding program. The U.S. sugarcane industry supports an increase in funding for this laboratory to evaluate sugarcane germplasm under high-stress, low-input production systems for sugar and energy production.

Budget: 100% of funding will be used to support salaries, expenses and equipment for additional research at this federal laboratory.

U.S. Department of Agriculture

Project: Citrus Canker and Greening Research - FL, TX, CA

Account: Cooperative State Research, Education, and Extension Service; Special Research Grants

\$10,000,000

Continuation of vital citrus Canker, citrus Greening/Huanglongbing (HLB) and Asian Citrus Psyllid (ACP) research by the U.S. Department of Agriculture's Agricultural Research Service (ARS) to improve technologies for treatment and detection, methods of movement and containment, and means to control and eliminate these devastating citrus diseases.

Currently, citrus Canker disease, the spread of the ACP and citrus Greening/HLB are the most serious diseases and vector facing the U.S. citrus industry. Both diseases and the vector have been declared endemic in the state Florida and pose serious threats to California, Texas and to the viability of the U.S. citrus industry. Research supported through federal funding in addition to state and grower funds is critical to ensuring that the citrus industry remains a viable part of America's economy. In Florida alone, commercial citrus is a \$9 billion dollar a year industry that supports almost 90,000 jobs.

Canker is caused by a bacterium that creates lesions on the leaves, stems, and fruit of citrus trees, including oranges and grapefruit. While not harmful to humans, Canker significantly affects the health of trees, causing leaves and fruit to drop prematurely. Wind and rain help to spread Canker. Citrus greening/HLB is a bacterial disease which is spread by the Asian citrus psyllid. Although it presents no threat to humans or animals, trees diagnosed with citrus greening/HLB have greatly reduced production and often die within a few years.

Recently, research for these diseases and vector has been done on a state by state basis. More than 100 research projects are currently underway in an attempt to find scientific answers to greening/HLB, the ACP and Canker.

In the past, this project was funding through CSREES for Florida only. In light of the national implications and severity of the threat, the year's request is for funding to also provide research in CA and TX.

U.S. Department of Agriculture
Project: Citrus Health Response Plan
Account: Animal and Plant Health Inspection Service
\$104,000,000

Funding is requested for the Citrus Health Response Plan (CHRP). The CHRP will provide a regulatory framework that identifies minimum production standards to enhance the Citrus industry's ability to produce fruit suitable for the marketplace, protects the integrity of the citrus nursery certification program, and provides a means by which citrus pests, diseases and disease vectors do not spread to other citrus-producing states. The goal of the CHRP is to sustain the United States' citrus industry, to maintain grower's continued access to export markets, and to safeguard the other citrus growing states against a variety of citrus pests, diseases and disease vectors. This is a collaborative effort involving growers, Federal and State regulatory personnel and researchers.

With citrus canker and Huanglongbing (HLB)/greening being endemic in Florida, as well as other exotic citrus pests, diseases and disease vectors on the doorstep, new approaches have become necessary to help protect U.S. citrus production and mitigate the impact of these unwanted pests. In Florida alone, commercial citrus is a \$9 billion dollar a year industry that supports almost 90,000 jobs. California and Texas combined have over a \$3.2 billion economic impact with over 26,000 jobs in their respective states.

CHRP was developed by APHIS—working closely with regulatory officials from Florida, California, Texas and other citrus-producing states, industry stakeholders, university scientists, and scientists with USDA's Agricultural Research Service—to compile industry production guidelines and best practices for fruit and nursery stock production that addressed citrus canker and other citrus diseases such as HLB/greening. The CHRP Technical Working Group action plan is to prevent these diseases, conduct surveys, provide diagnostic services, and deal with the Asian Citrus Psyllid vector and HLB/Greening inoculum.

Along with nursery stock product compliance the CHRP provides guidelines for fruit inspection, treatment, and certification. The CHRP also identifies minimum standards, where available, for implementing appropriate survey, diagnostic, and mitigation measures to reduce the proliferation and spread of citrus canker, citrus HLB/greening, and other diseases of significance.

Budget:

Citrus nursery cleanliness, \$8,900,000; Quarantine, \$6,100,000; Packinghouse inspection/survey, \$30,900,000; Response, \$33,600,000; Environmental compliance, \$19,200,000; Diagnostics \$1,900,000; Infrastructure \$3,800,000.

**University of Central Florida
4000 Central Florida Blvd.
Orlando, FL 32816**

**Project: Florida Biomass to Biofuels Conversion Program
Account: Cooperative State Research, Education, and Extension Service; Research and
Education Activities/Federal Administration
\$3,000,000**

The State University System (SUS) of Florida, led by the University of Central Florida (UCF), is proposing to establish a system-wide R&D initiative that would accelerate research and commercial development of emerging technologies for the conversion of cellulosic biomass waste from the State of Florida to produce ethanol and other biofuels. Given that a major limitation to the cost-effective conversion of biomass to biofuels is the high cost of the required biocatalysts, the development of new technologies for low cost biomass processing enzymes is essential to facilitate the development of the United States biofuels industry. Newly developed UCF technology is estimated to be one-thousand-times cheaper than currently sold commercial enzymes for ethanol production. This initiative will also include the identification of new markets for agricultural waste products; the development of transportation and other fuels and energy from renewable sources; and the creation of new jobs and enhanced economic development in the rural economy of the State of Florida.

Growing, harvesting and processing of tobacco that produces industrial enzymes will revitalize commercial tobacco farming in a healthy and positive manner. Jobs will be created at all levels including farm laborers, skilled technical staff, trained scientific and management staff, green house construction, and maintenance, in the biotech industry et cetera. UCF has produced an initial estimate that this project would create 25 high tech jobs and 75 skilled/unskilled jobs.

Recent estimates suggest that the biotechnology industry in the United States could employ five times the current number of workers by 2012 (more than a million jobs), creating a significant demand for highly trained workers. This project will contribute to the creation of new jobs in the biotechnology industry.

Budget: Of the \$3,000,000 request, \$500,000 would go to the University of Florida, \$1,500,000 would go to the University of Central Florida; \$200,000 would go to Florida Atlantic University; and \$800,000 would be used for a competitive Request for Proposals.

Please know that I appreciate you and your staff's hard work. If you need additional information, please don't hesitate to contact me. Thank you for your consideration of these requests.

Sincerely,

A handwritten signature in blue ink that reads "Mel Martinez". The signature is written in a cursive, flowing style.

Mel Martinez
United States Senator