Interested in Our Competitive Grants Program?

The South Central Regional Center, in cooperation with the U.S. Department of Transportation - Research and Innovative Technology Administration and other federal agencies, has dedicated funding towards a regional competitive grants program to support bioenergy, biofuels, and bioproducts research.



For more information on Request For Applications (RFAs), visit our website at **www.sungrant.okstate.edu** and click on the "Funding Opportunities" tab.

Contact Us!

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WWW.SUNGRANT.OKSTATE.EDU



The South Central Sun Grant Center is housed on the campus of Oklahoma State University in Stillwater, which is a premiere agricultural institution rooted in the land-grant principles of instruction, extension, and research.

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THE POWER OF BIOMASS

What is the Sun Grant?

The Sun Grant Initiative is a national network of land-grant universities and federally funded laboratories working together to further establish a biobased economy. These institutes are at the forefront of research and innovation for bioenergy and biofuels production. They have the history, technology, and resources available to lead the nation towards a renewable, sustainable, domestic energy industry. Sun Grant Centers are also charged with reviving America's farming communities by placing an emphasis on rural economic development through the production of biobased renewable energy feedstocks.

The Regional Concept

The Sun Grant Initiative Act of 2003 results from Title IX of the Farm Security and Rural Investment Act of 2002. From there, the National Sun Grant Program was born. There are five regional centers across the U.S., including the Northeast Center at Cornell University, the Southeast Center at University of Tennessee, South Central Center at Oklahoma State University, North Central Center at South Dakota State University, and Western Center at Oregon State University. The regional concept allows each center to focus on priority areas and feedstocks unique to their respective area.

Partnership Activities

- *Awarding Competitive and Center Grants.* Land-grant university based projects must fit into a set of regional priorities identified by the center in consultation with the U.S. DOT-RITA. As of 2009, over \$4.9 million in DOT-RITA funds have been awarded.
- *Participating in the U.S. DOE National Sun Grant Feedstocks Partnership.* Center contributions include biomass resource assessment, development, and education/outreach.
- *Contributing to the USDA-NIFA Sun Grant Industrial Ecology Project.* A national database of technology coefficients and capital, operating, and energy cost functions is being created that captures the non-linear capacity in feedstock production, logistics, and conversion.
- *Maintaining and Contributing to the Educational Sun Grant Bioweb.* The Bioweb (www.bioweb.sungrant.org) is a noncommercial, educational website that provides current information about using biomass resources for bioenergy and bioproducts. Content is contributed by experts and vetted via an academic peer review process.







Research Priorities

Feedstock Development Plant breeding and selection Equipment technologies

Bioconversion Technology Development

Conversion efficiency Cost of production Enzymatic conversion Thermochemical conversion

Biofuels Systems Analysis

Industrial ecology Feedstock transport/delivery/storage Transport and delivery infrastructure

Multiple Land Use

Agricultural production Wildlife habitat Soil and water conservation Air quality Global climate change

Process Modeling and Economics

Economics and public policy Impact on food and feed markets

Environmental Impact

Life cycle emissions Green house gas emissions Carbon Energy balance NOX emissions Reduction in green house gas emissions

Education and Outreach Programs E-Extension Rural development outreach