



Louisiana EPSCoR

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Experimental Program to Stimulate Competitive Research

University Researchers Provide Glimpse of Louisiana's Future at Capitol

Researchers and students representing Louisiana's nine-university *Consortium for Micro-Nano Technologies for Advanced Physical, Chemical and Biological Sensors* provided state lawmakers with an exciting glimpse into Louisiana's technological and economic future.

"Capitol Day," hosted on April 20 in the Capitol Rotunda by the Board of Regents' Experimental Program To Stimulate Competitive Research (Louisiana EPSCoR), featured displays and hands-on exhibits illustrative of the Consortium's wide-ranging research into the virtually limitless possibilities of micro- and nano-technology, the science of manufacturing microscopic devices with applications in fields as diverse as medicine, manufacturing and national defense. The Consortium is funded jointly by the National Science Foundation and the Board of Regents.

Faculty and student researchers, as well as some industry representatives, used displays, videos, computer simulation, hands-on demonstrations, and even an actual human brain to acquaint a steady stream of lawmakers and Capitol visitors with their cutting-edge research.

"The implications and potential of the Consortium's research are far reaching," said Louisiana EPSCoR Director Michael Khonsari. "The Consortium's goal is to establish a world-class infrastructure that will promote Louisiana's considerable research capabilities and stimulate our economic competitiveness through the development of micro-and nano-scale systems for chemical, biomedical and other commercial applications." To date, Consortium researchers have earned four patents, with another 13 pending.



Governor Blanco takes time to pose for a picture with research team leaders (from left) Kody Varahramyan, Steven Soper, Charles O'Connor, and Nicolas Bazan, and LA EPSCoR Project Director Michael Khonsari.



LSU graduate student Shawn Llopis talks to Senator "Kip" Holden about her research.

Also featured at the event was the work of Louisiana university researchers associated with the newly-formed Center for Biological Modular Microsystems, who have used "smart" nano- and micro-scopic polymers, such as plastics, to fabricate microsystems capable of detecting the presence of disease as well as harmful environmental factors.

The Capitol Rotunda event was followed in the evening by a reception at the Governor's Mansion, attended by state lawmakers, event participants, campus representatives, members of the Louisiana Board of Regents and Governor Kathleen Blanco. "I applaud you for the exciting work you are doing," Governor Blanco told Consortium representatives at the reception. "Your research directly supports the economic development objectives of Vision 2020. The wonderful discoveries you've made, the technologies you've developed and the transfer of that technology to new business ventures have tremendous economic potential for our state. And I look forward to even more exciting discoveries in the future."

"You have forged productive, long-term partnerships that will continue to pay dividends well into the future. The patents you have received and the technological know-how you put into practice day in and day out are having a meaningful impact on Louisiana. The devices and technology you're developing are helping to bring Louisiana to the forefront of technological progress in a variety of disciplines. Congratulations on all your success," said Commissioner of Higher Education Joseph Savoie, also on hand for the event and reception.

Louisiana EPSCoR and the Louisiana Board of Regents: A Winning Partnership

Louisiana EPSCoR has been awarded over \$80 million from the various EPSCoR participating agencies since its inception. Of that amount, over \$23.6 million was from the National Science Foundation (NSF). The Constitutionally protected Board of Regents Support Fund (BoRSF) has provided matching funds of over \$28.2 million for the EPSCoR program.

Together, Louisiana and the Regents have been awarded funding for statewide EPSCoR and EPSCoR-like programs from DOD, DOE, EPA, NASA, NIH, and NSF. Most were multi-institutional with interdisciplinary research.

In each case, the objective has been to strengthen targeted R&D areas relevant to the State and diversification of its economy and, in the process, develop Louisiana's research capacity, infrastructure, and science and engineering personnel.

Opportunities for Louisiana Researchers

Through Louisiana EPSCoR's Research Infrastructure Improvement Award from NSF, Louisiana faculty may take advantage of the following programs/funding opportunities:

- Planning Grants for Major Initiatives
- Grant Writing Seminars and Workshops
- Travel Grants for Emerging Faculty
- Louisiana Expertise Exchange Program
- Speaking of Science Speakers' Bureau
- Funding Opportunity Alerts



For RFP's and additional information, visit the Board of Regents' Office of Sponsored Programs website at <http://laregents.org>.

History of EPSCoR

The Experimental Program to Stimulate Competitive Research (EPSCoR) is a federal and state partnership designed to build and expand the science and engineering research, education and technology capabilities in states that have historically received lesser amounts of federal research and development (R&D) funding.

The National Science Foundation (NSF) established EPSCoR in 1978 in response to Congressional concerns over the uneven distribution of federal science and technology research funds. The program was expanded in 1990, and seven federal agencies now have EPSCoR or EPSCoR-like programs. The goal is to enhance the R&D capabilities of the program's 24 states, Puerto Rico and the Virgin Islands, by building academic research bases capable of contributing to the nation's ability to compete in the global economy.



Louisiana EPSCoR joined EPSCoR in 1987. Its goal is to establish and strengthen collaborations among the State's R&D constituents in order to:

- Become more competitive in gaining national research and development support;
- Increase science and technology transfer activities with business and industry; and
- Be more effective in educating larger numbers of science and engineering undergraduate and graduate students, especially minorities.



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