



## Direct from LA EPSCoR

The following is the final in a series of three focusing on the education and outreach programs of LA EPSCoR's National Science Foundation EPSCoR-funded CyberTools project.

And another thing...In addition to the education and outreach programs managed by the CyberTools participants, a host of faculty/graduate student development initiatives for improving the State's research infrastructure are administered by the LA EPSCoR office.

All have had a significant impact on propelling Louisiana's science and technology enterprise to become more competitive.

Highlights of the Louisiana EPSCoR's seven education and outreach programs are as follows:

**Speaking of Science (SoS)** The SoS program provides K-16 students in every type of school — urban and rural, public and private — exposure to the State's best researchers. Its purpose is to increase public awareness of exciting research and development in Louisiana, spark the interest of students in science and engineering (S&E) professions and showcases the excellence of Louisiana's leading S&E faculty and professionals. Speakers are

available to speak on a variety of topics free of charge to students, educators, and general audiences throughout Louisiana.

Since the inception of the CyberTools award in 2007, 178 presentations have been given to approximately 10,440 students. The word used most by teachers to describe the program is *excellent*.

**Links with Industry and National Labs (LINK)** LINK'S objective is to help develop a diverse, internationally competitive and engaged workforce of scientists and engineers by providing opportunities for Louisiana researchers to visit national laboratories, research centers, or industrial facilities.

Louisiana EPSCoR provides funding for applicants to visit and train at an industrial facility, research center, or national laboratory for a period of two to 12 weeks.

In the past three years 18 faculty, 14 graduate students and three undergraduates were the recipients of LINK awards. Among their destinations were the University of British Columbia's

Pacific Institute of Theoretical Physics, Isaac Newton Institute for Mathematical Sciences, Cambridge, England; NASA Ames Research Center, Sandia National Laboratories, Grumman Space Technology at Redondo Beach, CA; Oak Ridge National Laboratories; Max Planck Institute of Mathematics in Bonn, Germany; Smithsonian Institution, Pacific Northwest National Laboratory; Nanospectra Biosciences Inc. in Houston, and the National Renewable Energy Laboratory in Golden, CO.

**Pilot Funding for New Research (Pfund)** This externally-reviewed competitive program stimulates and supports S&E faculty in their exploration of novel research. It provides an opportunity for both tenured and tenure-track faculty to enhance their research focus, explore new ideas and keep pace with cutting-edge techniques that could enable them to become more competitive in acquiring federal dollars.

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Students at Franklinton Elementary School in Franklinton playing their role as part of the Solar System during a Speaking of Science presentation by Dr. Laura Whitlock.

## LA EPSCoR Continued

According to the surveys submitted by recipients at the end of the second round of grants, Pfund awards resulted in two patents, 95 publications, 133 invited presentations, 107 submitted proposals; 19 proposals awarded, and over \$12.6 million in external funding.

**Planning Grants and Preliminary Planning Grants for Major Initiatives** The goals of this program are to 1) foster multi-institutional, trans-disciplinary collaborations that will lead to development of proposals for major research and/or education initiatives and 2) provide crucial support required by researchers who submit pre-proposals and are invited by federal agencies to submit full proposals for major center initiatives.

**Preliminary Planning Grants** provide assistance to teams of researchers in the process of developing a proposal (or pre-proposal, if required) to a federal funding agency for a large-scale research and/or education program.

Applicants may seek support for the preparation of proposals to federal competitions that meet the following criteria: 1) the resulting federal award will establish a multidisciplinary research and/or education project; and 2) total federal funding requested is at least \$1 million.

Applicants invited to prepare full proposals are automatically eligible for a Planning Grant. Recipients of both Planning Grants award types must submit a full proposal to a federal funding agency during the period of the award, generally one year.

**SBIR/STTR Phase Zero Grants** Louisiana EPSCoR supports the development of projects with economic potential by offering 'Phase Zero' awards that assist small

businesses in the preparation of Small Business Innovative Research (SBIR) or Small Business Technology Transfer (STTR) proposals in any of the 11 Federal agencies participating in those programs. Administered by the Louisiana Business & Technology Center, the program is competitive, with applications reviewed by an independent committee.

**Travel Grants for Emerging Faculty** The TGEF program assists emerging tenure-track faculty in the S&E disciplines by providing travel funds to further their research and strengthen collaborations by 1) visiting a federal funding agency program officer to discuss their research proposals or 2) giving plenary or major invited talks at national or international meetings.

13 TGEF I and 32 TGEF II grants have been awarded since the beginning of the CyberTools project. Recipients included tenure-track professors from Delgado Community College, Louisiana State University, LSU Health Sciences Center, Louisiana Tech, McNeese State University, Nicholls State, Northwestern State University, Tulane University, University of Louisiana at Lafayette, and University of Louisiana at Monroe.

"Faculty response to the TGEF program has been positive, reports Dr. Michael Khonsari, LA EPSCoR Project Director and Board of Regents Associate Commissioner for Research and Development. Approximately one year after travel, recipients complete a follow-up questionnaire to document the success of the program. The reported results include improved visibility of faculty members' research in the scientific community, collaborations with other leading researchers in the field, improved grant applications,

## About CyberTools

The National Science Foundation EPSCoR program awarded the Board of Regents' LA EPSCoR program a \$9 million Research Infrastructure Improvement (RII) Grant in 1997. With matching funds of \$3 million from the Board of Regents Support Fund and \$3.2 million from the nine participating institutions, the total of the three-year grant is over \$15.2 million.

The focus of the LA EPSCoR CyberTools grant is on cyberinfrastructure — the technology and network systems that have infiltrated every aspect of today's modern world — specifically on the development of Cyber Tools to help investigators effectively utilize cyberinfrastructure at a level that would not otherwise be possible.

The participating institutions are: Louisiana State University\*, LSU Health Sciences Center-New Orleans, Louisiana Tech University\*, Southern University-Baton Rouge\*, Tulane University\*, Tulane Health Sciences Center, University of Louisiana-Lafayette\*, University of New Orleans\* and Xavier University. (\*Members of LONI, the Louisiana Optical Network Institute)

and invitations to present at other national and international conferences.

"One TGEF recipient commented 'This grant program has been an enormous boost to my academic career.' And that is what the LA EPSCoR programs are all about concludes Dr. Khonsari."

