



Science, Engineering and Technology



Annually, over 250 faculty, graduate students, and post-doctoral researchers participate in EPSCoR activities.

EPSCoR-funded research is leveraging the supercomputing resources provided by the Louisiana Optical Network Initiative (LONI) to mine the vast, heterogeneous and rapidly growing Protein Databank to reduce the cost and time required for drug development.

EPSCoR researchers developed a novel nano-encapsulation technology that may be used to substantially enhance the ability to treat cancers.

Miniaturized antibody-based sensors that can detect low molecular weight contaminants, such as environmental pollutants, cancer biomarkers, chemical warfare agents, and drugs are being developed as part of a biosensor initiative funded by EPSCoR.



EPSCoR researchers are investigating energy-storage materials that will be used for electrical storage, hydrogen fuels, and catalytic reactions that are critical to the county's future energy needs.

A novel thermal barrier coating that can lead to more portable yet highly productive, robust, and economical engines with increased power-to-weight ratio and power-specific fuel consumption is being developed by NASA EPSCoR researchers.

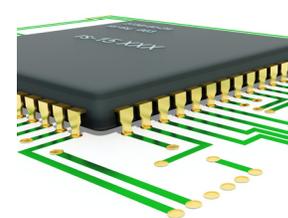
The Gulf Coast



A recently-funded EPSCoR project, in conjunction with researchers from Alabama and Mississippi, has established the Northern Gulf Coastal Hazards Collaboratory to address a problem of major national importance – engineering design, coastal system response, and risk management of coastal hazards.

Business Development

EPSCoR assists small companies to compete for Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grants. SBIR and STTR grants increase the incentive and opportunity for small firms to undertake cutting-edge, high-risk, high-quality scientific, engineering, or science/engineering education research that have a high-potential economic payoff if the research is successful.



Education

Over the past three years, the Speaking of Science program sent scientists to speak to a combined audience of over 10,000 K-12 students about their research.

A wide variety of summer outreach projects connect with high school and college students and teachers to introduce them to the latest research developments, thus bolstering the pipeline to careers in science and technology and reversing the 'brain drain' from Louisiana.

