Louisiana’s Research Infrastructure Improvement Strategy Cooperative Agreement

Michael Khonsari
Louisiana EPSCoR Project Director
Theme

- The focus of the Louisiana EPSCoR project is the development of a multi-functional cyberinfrastructure to broadly enable significant advances in modern science and engineering.
Theme: Cyberinfrastructure

Institutions Involved
- LSU
- LSU HSC
- LA Tech
- SUBR
- Tulane
- Tulane HSC
- UL-Lafayette
- UNO
- Xavier
Statewide Enhancement Activities

- Grantwriting Seminars and Workshops
- Planning Grants for Preliminary and Major Initiatives
- Links with Industry, Research Centers, and National Laboratories
- Pilot Funding for New Initiatives
- Travel Grants for Emerging Faculty
- SBIR/STTR Phase Zero Grants
- Speaking of Science
- Faculty Expertise Database
- State and Regional Conferences
Education and outreach activities are highly integrated into each Science Driver and CyberTools component.
Outreach, K-12

Specific examples include:

- **e-Science**: a new program to teach concepts of distributed computing, remote visualization, and simulation by deploying Sony PlayStations™ at high schools.

- **Advanced Science Portal**: a program where students will be able to perform two important science studies by developing portals for LIGO gravitational wave simulation and analysis on the LONI grid; and for Storm-surge prediction.

- **Summer research programs** for minority students
Project Governance and Responsibilities

The PI (Khonsari) will:

- provide scientific and technical leadership, as well as overall program coordination;

- ensure that various stakeholders operate as a cohesive research enterprise progressing toward the realization of project goals and objectives.
Project Governance and Responsibilities

- The LA EPSCoR Committee is responsible for coordinating and aligning the statewide EPSCoR activities with the State’s R&D improvement strategies and will initiate and promote inter-jurisdictional collaborations.

- Science drivers and cyber tools team leaders will give periodic presentations to EPSCoR committee.
Project Governance and Responsibilities

- Science Executive Committee (SEC) will meet **bi-monthly** to discuss progress, coordinate activities, and carry out budgetary and programmatic adjustments.

- SEC consists of the PI, EPSCoR Committee Chair (Guice), LONI Executive Director (McMahon), and team leaders for science drivers and cyber tools components (Cortez, Gaver, Soper, and Seidel).
An External Review Board (ERC), consisting of eminent scholars in the appropriate research fields, will conduct comprehensive programmatic reviews twice annually and forward detailed recommendations to the PI, the SEC, and the EPSCoR Committee.
Project Governance and Responsibilities

- Team leaders for science drivers and cyber tools components will hold bi-weekly meetings with faculty, postdoctoral researchers, and graduate or undergraduate students involved in specific multi-institutional projects to gauge progress against quantifiable milestones and to redirect efforts when required.
Dr. Seidel will:

- be in charge of the development of cyber tools and associated work packages;
- coordinate the implementation and performance of the toolkit codes on the LONI network; and
- ensure that the research teams help in the development of tools that directly impact their research applications.
Dr. Soper will:
- ensure the completion of the projects at CBM² and the systematic integration of computational methods into the research endeavors;
- coordinate data collection used for validation of simulations;
- coordinate the outreach efforts in the areas of physical sciences and engineering; and
- develop industrial partnership programs in conjunction with the CBM² Industrial Liaison.
Project Governance and Responsibilities

Drs. Cortez and Gaver will:

- be responsible for the biosensor design and fabrication research project
- work with investigators from Tulane and Louisiana Tech, as well as collaboration with UNO and Xavier.
LA EPSCoR will submit an annual progress report specifying major accomplishments according to the project’s goals, objectives, and deliverables. Using FY 2006 as a baseline, the annual progress report must identify the numbers of other underrepresented groups in staff positions and as participants in activities funded by the award. Future funding will be based, in part, on progress in increasing these numbers according to a yearly schedule.
Reporting Requirements

Annual report must include:

- description of efforts, accomplishments, commitments, and plans to ensure that the positive outcomes of the project will be sustained beyond the duration of the grant;

- evidence of linkages, coordination, and collaboration with other NSF-funded projects in Louisiana that enhance proposed RII activities.

- evidence of the impact of formative aspects of the evaluation plan on, for example, project performance, documentation of progression, and attainment of the stated project goals and objectives, and modifications made.
Special reports

- PI will submit a special report in the **first 6 months of the first and second years** of implementation on progress made in specific areas (i.e. education, outreach, faculty development, progress and coordination on science and cyber tools development components).

- PI will submit a special written report **every 6 months** during the 3-year duration on actual expenditures of the budget.
Reporting Requirements

- LA EPSCoR will develop a 3-year evaluation plan including both formative and summative assessment aspects. **Within 4 months of award date, LA EPSCoR will submit a thorough evaluation plan.**

- Evaluation plan will describe specific goals, strategies and activities, expected outputs, and pursued outcomes. It should include type of data to be collected and appropriate metrics to assess both the implementation and overall impact of the project.

- LA EPSCoR will hire an evaluation expert to develop and refine metrics, analyze data, and interact with the SEC and ERB.
Awardee Support of Ongoing Management and Oversight

- A site visit to assess progress will be conducted in Years 1 and 3.

- A reverse site visit will occur at the projects midpoint (1.5 years) to determine progress at that stage of the implementation process, to identify potential midpoint correction measures, to submit recommendations for program improvement, and/or to decide NSF future funding support.
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