

RESEARCH EXPERIENCES FOR UNDERGRADUATES



This Research Experience for Undergraduates (REU) is a summer program by the Louisiana Alliance for Simulation-Guided Materials Application (LA-SiGMA), a 7-member alliance of universities in Louisiana: Louisiana State University, Grambling State University, Louisiana Tech University, University of New Orleans, Southern University at Baton Rouge, Tulane University, and Xavier University.

Members of LA-SiGMA provide numerous projects for the REU student to become familiar with interdisciplinary research. With research groups involving computational scientists, computer scientists and engineers, applied mathematicians, theorists and experimentalists, the participants work on cutting edge research in material sciences and computational tools.

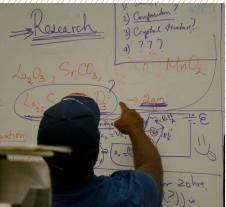
Our 2015 summer program dates vary by university, from May 25 to July 31.

We invite undergraduates, community college students, and high school seniors to apply to this REU!

RESEARCH PROJECTS

Possible REU projects include:

- Electronic and Magnetic Materials multiscale methods for strongly correlated electronic and magnetic systems; studies of correlated organic, ferroelectric, and superconducting materials.
- Materials for Energy Storage and Generation electro-chemical cells and capacitors that store and deliver electrical energy, lithium-ion batteries and electrochemical sensors, and catalytic reactions for fuel generation.
- Biomolecular Materials development of novel biomolecular material systems for the encapsulation, delivery, and release of therapeutics to targeted tissues.
- CyberTools and Cyberinfrastructure formalisms, algorithms, and codes for materials science.



REQUIREMENTS

Students should be:

- graduating at least one semester after completion of the REU, or high school seniors attending college in the Fall
- interested in a major that is within the computational science umbrella (leaves out few majors as it includes all sciences, mathematics, engineering, finance, statistics, etc.)
- considering a career in research and/or graduate school in their major
- · US citizens or permanent residents
- · and have at least a 2.75 GPA

AWARD

A stipend of \$4,500, free housing in university dormitories, and up to \$400 in travel expenses.

Apply online by March 1, 2015



http://reu.lasigma.loni.org/















