

The Grand Isle Project – Undergraduate Research Project Supported by OFD

I. Principal Investigator: Sadredin Moosavi, Assistant Professor, STEM Dept.

II. Description:

The Grand Isle Project is driven by undergraduates recruited as part of a service-learning component to a physical geology course at Tulane University. Funding from the UMASS OFD and an NSF RAPID Research Experiences For Undergraduates (REU) grant have supported continuation of this work during 2009-2010. Students use basic surveying techniques and GPS to monitor erosion and deposition along the beach on a rapidly subsiding barrier island that has been heavily impacted by hurricanes, Army Corps of Engineers beach nourishment projects and the BP oil spill. U. Mass Dartmouth students have not been involved yet due to departmental refusal to offer credits to undergraduates.

III. Results:

The Grand Isle project is in its third year and continues to produce critical scientific data used for planning and recovery by Grand Isle State Park while simultaneously helping to educate numerous undergraduate students and the general public.

A. Student Poster at National Meeting

Tyler Brown (Senior Environmental Science Major, Tulane University) presented the poster ***RAPID COASTAL EROSION IN GRAND ISLE STATE PARK: BASELINE DATA WITHIN THE AREA OF THE BP DEEPWATER HORIZON OIL SPILL DEPOSITION*** at the Geological Society of America annual meeting in Denver, CO. Tyler will be completing his senior capstone graduation requirement with this project.

B. Faculty Presentation at National Meeting

I presented the talk ***GEOSCIENCE EDUCATION IN A STEM ENVIRONMENT: CHALLENGES TO PROVIDING QUALITY GEOSCIENCE RESEARCH EXPERIENCES FOR UNDERGRADUATES*** at the Geological Society of America annual meeting to a session focusing on conducting undergraduate research as a lone geoscientist.

C. Grand Isle State Park Consultation

As the BP oil spill clean up continues, data and insights generated by this project are guiding where clean up operations occur and how they proceed so as to minimize disturbance to the natural environment and protected species within it.

D. National Geographic Documentary

The Grand Isle project will be featured in a National Geographic webcast soon.

IV. Tips for Replication:

Project must be:

- Scientifically compelling
- Meet student curricular needs
- Serve faculty research needs