



## College of Engineering Students Excel at 23<sup>rd</sup> Annual HENAAC Conference

*Six Students Receive Awards at Great Minds in STEM Conference.*

**TAMPA, Fla. (October 13, 2011)** – College of Engineering students won a total of six awards during the student technical poster competition at the 23rd Annual HENAAC – Great Minds in STEM conference held at Walt Disney World October 6-8, 2011. **Mandek Richardson**, a doctoral student, in the Department of Chemical and Biomedical Engineering, placed first in the category Graduate Engineering/Technology with his poster, titled “Delay Path Modification of a Surface Acoustic Wave Biosensor for Enhanced Biosensing.” **Trishelle Copeland-Johnson**, a junior in the Department of Chemical and Biomedical Engineering, placed first in the category Undergraduate Science/Mathematics with her poster, titled “Optimization of Steam Methane Reformer Furnace Performance Strength through Process Modeling and Case Studies.”

Sponsored by NASA, NSF, and the U.S. Department of Energy, the intent of the Great Minds in STEM national poster competition is to give students the opportunity to display their research accomplishments and receive recognition for their scholarly investigation or scientific study. Each student abstract and poster was judged by two STEM professionals from academia, industry or government based upon the National Science Foundation’s review criteria (Intellectual Merit and Broader Impact). Student winners receive cash awards ranging from \$400 to \$1,200.

The list of USF student winners, titles, and advisors included:

### **Graduate, Science/Mathematics**

Second Place: **Julio Medrano**, Department of Electrical Engineering  
*In-vivo Bioimpedance Change during Electroporation as an Indicator of DNA Delivery Effectiveness*  
Advisors: Richard Gitlin (Department of Electrical Engineering), Mark Jaroszeski (Department of Chemical and Biomedical Engineering)

Third Place: **Dorielle Price**, Department of Electrical Engineering  
*Use of Electrical Impedance to refine biological assays for chemotherapeutic drug discovery*  
Advisor: Shekhar Bhansali, Department of Electrical and Computer Engineering, Florida International University

### **Graduate, Engineering/Technology**

1<sup>st</sup> place; **Mandek Richardson**, Department of Chemical and Biomedical Engineering  
Advisor: Venkat Bhethanabotla, Department of Chemical and Biomedical Engineering  
Title: Delay Path Modification of a Surface Acoustic Wave Biosensor for Enhanced Biosensing

2<sup>nd</sup> Place: **David Cure**, Department of Electrical Engineering

*Low profile antennas for biomedical applications*

Advisors: Thomas Weller, Department of Electrical Engineering; Felix Miranda, NASA Glenn Research Center

Third Place: **Caesar Morales**, Department of Electrical Engineering

*Bandwidth Enhancement and Miniaturization of Antennas Based on Magneto- Dielectric Polymer Nanocomposite Substrates*

Advisors: Jing Wang, Department of Electrical Engineering; Thomas Weller, Department of Electrical Engineering; Thomas Weller, Department of Electrical Engineering

### **Undergraduate, Science/Mathematics**

First Place: **Trishelle Copeland-Johnson**, Department of Chemical and Biomedical Engineering

*Optimization of Steam Methane Reformer Furnace Performance Strength Through Process Modeling and Case Studies*

Advisor: David Edwards, Air Liquide Delaware Research and Technology Center

Annually over 3,000 of the best and brightest students, professionals and high level executives attend the Great Minds in STEM Conference. The event is a national venue for the recruitment, recognition and retention of top Hispanic talent in STEM.

College of Engineering students attended professional development workshops, networked with representatives from Fortune 500 corporations (Boeing, Abbott Labs, IBM, Lockheed, Cummins, etc.) and federal agencies (CIA, NASA, Defense Logistics Agency, Army Corps of Engineers, Air Force Research Laboratory, etc.) for internships/co-ops and permanent employment opportunities. Undergraduates and graduate students also supported the College of Engineering/diversity outreach mission by serving as student ambassadors during the Career and Graduate School Fair.

Conference Link: [Great Minds in STEM](#)

**-USF-**

*The University of South Florida is a high-impact, global research university dedicated to student success. USF is classified by the Carnegie Foundation for the Advancement of Teaching in the top tier of research universities, a distinction attained by only 2.2 percent of all universities. The Carnegie Foundation also classifies USF as a community engaged university. It is ranked 44th in total research expenditures and 34th in federal research expenditures for public universities by the National Science Foundation. The USF System has an annual budget of \$1.5 billion, an annual economic impact of \$3.7 billion, and serves 47,000 students in Tampa, St. Petersburg, Sarasota-Manatee and Lakeland.*

**Bernard Batson**

**Associate Director Student Services**

**USF College of Engineering**

**813-396-9309**

[bbatson@usf.edu](mailto:bbatson@usf.edu)