

Message from Department Head

It was an exciting semester for MSU-ISE this past spring. It seemed like every week I would hear about a variety of interesting activities and events involving faculty or students. There were several seminars offered throughout the semester to expose the students to various areas where ISEs are at work (see list below). We had 16 ISE students travel to the Southeast Regional IIE Student Conference in Miami, Florida in late February. They represented us well at the conference and had the opportunity to participate in various workshops and activities including a career fair and plant tours. Our IIE student chapter will be hosting the spring 2015 regional conference at MSU and they have already started organizing in preparation for the event.

Speaking of our students, each year the Bagley College of Engineering selects six students to receive the Student Hall of Fame Award based on achievements in academics, leadership, and service. It was great to see that three of the six awards went to ISE students. I can't tell you how proud I was to see the achievements of our students recognized in this way.

Come the end of the semester, there were 27 new MSU-ISE students that either entered the job market or had plans to begin graduate school. This number was composed of 20 undergraduate, three masters, and four doctoral students. The department also successfully completed a search for a new faculty member that culminated in the hiring of Dr. Linkan Bian, a recent doctoral graduate from Georgia Tech with a research interest in stochastic modeling and prognostic analysis of complex systems. He will be joining us in the fall.

In the fall newsletter I invited you all to drop by and say hello when you were in the area. I appreciate those that took me up on the offer. I had the opportunity to meet with several alumni from as far back as the 70's. The offer still stands.

Go Dawgs!

John



Seminars

- **Laura Ikuma** (Louisiana State University), "Performance metrics to evaluate interfaces in the petrochemical industry"
- **Anne-Laure Ladier** (Grenoble Institute of Technology, Grenoble, France), "Optimizing the internal operations in a cross-docking platform"
- **John Behrends** (FedEx), "FedEx logistics and supply chain operations"
- **Rich Lopez** (Quorum Health Resources), "ISE in the healthcare industry"

NCITEC Update

This spring, the National Center for Intermodal Transportation for Economic Competitiveness (NCITEC) sent out a call for proposals and received 45 proposals from five of its member universities. The theme of NCITEC is to promote the development of an integrated, economically competitive, efficient, safe, secure, and sustainable national intermodal transportation network by integrating all transportation modes for both freight and passenger mobility. As such, NCITEC encourages (and has received) proposals from a wide range of disciplines. For example, in addition to proposals from engineering disciplines including industrial, civil, electrical, and mechanical, NCITEC has also received proposals from sociology, business, education, forestry, geosciences, and journalism. These proposals are currently going through a rigorous review process. Award notifications will be made early summer.

Several NCITEC projects are close to completion and the results of these will be available on the website soon (<http://www.ncitec.msstate.edu/>). One of the education projects, called Mission Intermodal Excellence, is aiming to train 4th to 8th grade teachers on safety, economic, and environmental issues related to intermodal transportation. These teachers will be on the MSU campus early June. Once they complete the three-day workshop they will be provided with multiple lesson plans and tool kits that they will take back to their students. The students will work on intermodal transportation projects through the fall semester and present their work at the end of the semester. Through projects like this, NCITEC is trying to educate and attract a new generation of transportation professionals.

J. Ron Walsh Awards

Each year a series of J. Ron Walsh Awards are presented to recognize the outstanding students that excel in academics, leadership and service. As well, J. Ron Walsh Awards are presented for best research and instructional papers for students and faculty. This year's winners are:

- Outstanding Senior: **Ashley McCall**
- Outstanding M.S. Student: **Halston Hales**
- Outstanding Ph.D. Student: **Mohammad Marufuzzaman**
- Outstanding Student Research Paper - **Gokce Palak**, "Supply chain designs and management for biocrude production via wastewater treatment."
- Outstanding Faculty Research Paper - **Mengqi Hu**, "An intelligent augmentation of particle swarm optimization with multiple adaptive methods" *Information Sciences*, 213, 68-83.
- Outstanding Faculty Instructional Paper - **Lesley Strawderman**, "A review of capstone course designs used in industrial engineering programs", *Proc. of the 2012 American Society for Engineering Education (ASEE) Conference*.

Undergraduate Highlights

- **Brooke Cannon**, **Jenna Sanders**, and **Daniel Snyder** all received the BCoE Student Hall of Fame Award.
- **Jenna Owen Sanders** was also selected for the Harry C. Simrall Award for Engineering Excellence.
- At the BCoE graduate ceremony, both **Jenna Sanders** and **Matthew Cook** received the Six-Sigma Certificate, while **Robert Robinson** received the Manufacturing Certificate.
- **Alex Barillas** and **Ashley McCall** presented research posters at the Spring 2013 Undergraduate Research Symposium. **Alex** placed 3rd in the "Physical Sciences and Engineering" category.



Alex Barillas at the Undergraduate Research Symposium



BCoE Hall of Fame Award winners: Daniel Snyder, Jenna Sanders, and Brooke Cannon

Graduate Student Highlights

- Three faculty (**B. Eksioglu**, **S. Eksioglu**, and **H. Medal**) and seven students (**A. Nandi**, **E. Rashidi**, **A. Barillas**, **W. Bowen**, **G. Palak**, **MD Roni**, **M. Marufuzzaman**) attended the Deep South INFORMS Chapter Analytics Research Workshop on April 12. Each student presented a poster in the conference. **Mohammad Marufuzzaman** was awarded 2nd place in the poster competition for his poster entitled "Minimizing the carbon footprint of biofuel supply chains under uncertainty".
- Four ISE graduate students received a Bagley Fellowship Award for the 2013-2014 academic year. Congratulations to **Apurba Nandi**, **Abigail Werth**, **Mohammad Marufuzzaman**, and **Seratul Jannat**.
- **Nirathi Govindu** won the John L. Imhoff National Scholarship.

Faculty and Alumni Highlights

- **Lesley Strawderman**, BCoE Award for Excellence in Online Teaching, Spring 2013.
- **Cathy "Chiappinelli" Dunn** (1975) was recognized as a 2013 Distinguished Fellow of the James Worth Bagley College of Engineering. She is the Deputy Director of the Port Development Division of the Port of New Orleans.

Spring 2013 Graduates

Doctoral:

- **Abdullah Al-Khaled**, “Criticality analysis of surface transportation infrastructures based on freight flow network optimization.” Advisor: Burak Eksioglu
- **Nirathi Govindu**, “Understanding the role of personal, psychosocial and occupational factors and their interactions on low back pain severity in workers.” Advisor: Kari Babski-Reeves
- **Yunchen Huang**, “Introducing transferability and the UPMDS usability framework in a multiple-device system.” Advisor: Lesley Strawderman
- **Xuan Liu**, “Activity-Based Pedestrian Behavior Simulation inside intermodal facilities.” Advisor: John M. Usher

Master’s Thesis:

- **Wayne Barnett**, “Analyzing the evolution of supply chain management best practices by tracking changes in the Baldrige Criteria.” Advisor: Stan Bullington

Master’s Non-Thesis: Ebony McCray and Gerard Rowe

Undergraduates: Erek Allen, Joseph Beidelman, Angela Cannon, Christophe Clyburn, Matthew Cook, Brooks Davis, Stephen Forero, David Godbold, Michelle Green, Krystal Kimble, Chatherine Lewie, Madison McKee, James Morgan, Krystin Nowicki, Rebecca Pittman, Sushil Poudel, Kyle Pung, Robert Robinson, Jenna Sanders, and John Willis



MSU-ISE students at the Southeast Regional IIE Student Conf. in Miami.

Visit us at: <http://www.ise.msstate.edu>

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LinkedIn Aside from the ISE website, the best way to stay on top of the latest news about ISE students, faculty, and the department is to join the [Mississippi State University Industrial & Systems Engineering](#) LinkedIn group. This is the principal place where we post news on a regular basis. There are over 350 MSU ISE alumni members in that group, so it is a great way to reach out to other ISE Bulldogs. (Link is: <http://www.linkedin.com/groups/Mississippi-State-University-Industrial-Systems-4054704/about>)