



inGear

Spring 2007

Read it and Reap.

There's a lot happening these days at the Edward P. Fitts Department of Industrial and Systems Engineering. There's concrete evidence of it around campus, with our imminent move to renovated, spacious facilities in Daniels Hall. There are tangible signs of it, with new faculty and new initiatives. And there's a palpable excitement in the air, as we add academic concentrations, fellowships, research projects, and more.

Keeping you informed of these events, and others like them, is the purpose of *inGear*.

We hope you enjoy reading this issue and future issues as much as we enjoy the opportunity to spread the good news.

SEE YOU AT THE NEWSSTAND.

Editorial staff at *Prevention* magazine, preparing an article on topics such as health problems that can be avoided through ergonomic adjustments, common ergonomic mistakes people make, and healthcare tips not often heard from physicians, wanted to talk to recognized ergonomics experts.

Where did they turn? To The Ergonomics Center of North Carolina, an integral part of the Edward P. Fitts Department of Industrial and Systems Engineering. If you would like to learn more about The Ergonomics Center of North Carolina, visit www.theergonomicscenter.com

SOME OF OUR CLOSEST COLLEAGUES ARE HALF A WORLD AWAY.

Collaboration and cross-pollination between China's leading university, Tsinghua University in Beijing, and the Edward P. Fitts Department of Industrial and Systems Engineering benefits both parties. And it may soon benefit a panda named Niu Niu.

There are many connections between the Chinese school and ours. NCSU has signed a memorandum of understanding with Tsinghua and the Chinese Academy of Sciences to foster exchange programs and joint degree programs. Several of our ISE faculty members are actively involved with Tsinghua and one of their professors is currently co-teaching one of our courses. And the College of Science of the National Tsinghua University recently announced that Dr. Shu-Cherng Fang – Walter Clark Professor of Industrial Engineering and Operations Research, 1974 graduate of Tsinghua University and member of our faculty since 1988 – is the 2007 recipient of its Outstanding Alumnus Award; the award has been bestowed only six times in the history of the College.

It may be that our affinity for our friends and colleagues in China provided part of the motivation in our recent effort to help a young panda that was seriously injured in a fight among a group of pandas in Shaanxi province. Niu Niu was rescued and her life was saved, but two-thirds of her front left leg had to be removed, seriously compromising her ability to walk, mate and forage for food.

Staff at the Shaanxi Rare Animal Rescue Center in China came up with the breakthrough idea of providing the panda with an artificial limb, but they couldn't create this limb on their own and put out an international call for help. Because research conducted by our department, in collaboration with the NCSU vet school, had previously resulted in a highly functional artificial leg for a pet cat, some of our faculty members believed our expertise could help Niu Niu get back in the game.

Even though we are half a world away, we are continuing to correspond with our colleagues in China to discuss further details, and we are working with the rescue center to come up with a solution.

news nuggets:

Roasting and toasting.

On April 12, our department head, Dr. James Wilson, was feted at a dinner and roast in recognition of his many accomplishments within the department and the field. Dr. Wilson will be stepping down as department head at the end of this school year after eight years in the position, but he will remain a critical part of our ISE faculty.

Lunching and lauding.

April 5 was the date for our annual C.A. Anderson Awards Luncheon. Well-deserved recognition was paid to outstanding ISE undergraduate students Jillian Johnson, Kyle Ward, Brent Hauser, James Lavin and David Jones; and teaching assistant Ali Kefeli. The C.A. Anderson Outstanding ISE Faculty award recipient was Thom Hodgson, James T. Ryan Professor of Industrial and Systems Engineering.

Way to go!

The NCSU ISE student simulation team was named a finalist in the Institute of Industrial Engineers' (IIE) Rockwell Simulation Competition for the eighth time in nine years. The team consists of seniors Kirstin Lanning and Matt Diering and rising senior James Lavin.





ISE VACATES PARK SHOPS AND PUTS DEPARTMENT UNDER SAME ROOF.

The Manufacturing Processes and Systems Laboratory and the Furniture Manufacturing Center – two key parts of the Edward P. Fitts Department of Industrial and Systems Engineering – are moving from Park Shops to their new home in Daniels Hall. The Manufacturing Processes and Systems Laboratory has been located in Park Shops for nearly 60 years, while the Furniture Center has called it home for over 10 years. The department has been in different buildings all across campus for most of its history and this move puts just about everyone under the same roof.

“These new facilities are top of the line and offer our students, faculty and staff a brand new working environment and much more space,” said Debbie Allgood, administrative manager for the department. “This plan has been in the works for several years and is greatly anticipated among all of us.”

The Manufacturing Processes and Systems Laboratory and the Furniture Manufacturing Center will now occupy the bottom floor of Daniels, which has been completely renovated and provides an additional 14,000 square feet of lab space. The move will begin on May 21 when a crew of workers transfers all of the equipment and machines. It will take about four weeks to complete this move, and the new facilities will be in use during the summer. The department will host an open house this fall when students return to campus.

HELLO, DOLLY.

While we don’t actually expect to run into stars with the stature of a Dolly Parton or a Brooks and Dunn, we are nonetheless eagerly anticipating our upcoming visit to Nashville.

From May 19 through May 23, the Institute of Industrial Engineers (IIE), by far the world’s largest and most prestigious professional society devoted to industrial engineering, will hold its annual conference and exhibition in Music City. And the Edward P. Fitts Department of Industrial and Systems Engineering will be there – exhibiting, participating in workshops and special sessions, joining more than 1,300 other leaders from manufacturing and service industries, government and industrial engineering schools. We will also host a breakfast reception at the event.

Making the conference all the more rewarding is that two of our faculty will receive distinguished honors. Professor Yuan-Shin Lee will be formally recognized as a Fellow of IIE – the highest classification of membership in IIE, awarded to outstanding leaders in the profession who have made significant, nationally and internationally recognized contributions to industrial engineering. In addition, current ISE faculty member and Dean of NC State’s School of Engineering Louis Martin-Vega will also be installed as the national IIE president for 2007-2008.

The 2007 conference will be devoted to the critical role of industrial engineering in a world without boundaries. We expect to both learn and contribute while attending this major knowledge-sharing event. And we expect to return to Raleigh whistling a bluegrass tune or two.

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feature:

NUMBER 14 WITH A BULLET.

Although we’re already one of the nation’s top 14 academic programs in industrial and systems engineering, we’re aiming even higher. We think of it as the transformation of the department, and it includes many actions, activities and additions:

- Endowed professorships
- Ph.D. fellowships
- A chaired professorship that will support a tenured faculty position to be awarded to an internationally known authority in the field of information technology
- Three new disciplines –
 - Health Systems Engineering
 - Logistics Systems Engineering
 - Bioproduction Systems Engineering
- Additional sponsored research
- International scholars
- The move to renovated office, laboratory and classroom space (detailed in a separate article)

Much of our physical and academic growth is being made possible by a generous endowment bestowed by Edward P. Fitts, Distinguished Engineering Alumnus (1961), internationally recognized leader in environmentally friendly packaging and processes, and namesake of the department.