

Welcome to our second issue of *Ingenuity*. Response to our new format last year was positive. I hope you continue to enjoy the magazine!

This issue once again brings you a mix of student accomplishments, faculty activities, and research developments. Don't miss the profile of 2005 Russ Prize winner Leland J. Clark on page 13. And check out our Class Notes section on pages 22-23. If you haven't lately, drop us a line at ingenuity@ohio.edu or log on to www.ohio.edu/engineering/update to tell us what's new with you!

Sadly, one of our dearest Ohio University alumni and friends, Dr. Beth K. Stocker, B.S. '28, HON '03, passed away in August (see page 4). As you may know, last November, we also lost another friend and fine engineer, Dr. Fritz J. Russ, B.S.E.E. '42, HON '75. Their profound influence on the College will be felt by many—for many years to come.



Gathered to honor Dr. Fritz J. Russ, B.S.E.E. '42, HON '75, Dean Dennis Irwin and Dolores Russ visit in April.

Both Beth and Fritz would have been pleased to know that our undergraduate programs in chemical engineering, civil engineering, electrical engineering, industrial and systems engineering, and mechanical engineering have been reaccredited by the Engineering Accreditation Commission of ABET, Inc. The review was being performed last year just as we went to press.

It was especially challenging because this was the first time our programs were scrutinized under a new set of standards. The EC2000 guidelines use outcomes-and-assessment-based criteria instead of simply counting credit hours of different course topics. Dozens of individuals, from faculty—especially those who did self-



Dean Dennis Irwin

study reports—to department chairs, students, and our various advisory boards, participated to make the effort a success.

I also have exciting news about the new learning community facility we told you about last year. The project is now being developed as a larger, more comprehensive integrated learning and research building, bringing together the Russ College and the College of Osteopathic Medicine with other colleges in a 100,000-square-foot, state-of-the-art facility.

The building will change the face of engineering education at Ohio University and beyond. Its open design will foster interdisciplinary collaboration and teamwork among students, faculty, and staff. Flexible spaces will enable classes to gather in ways that suit their many different needs. And the building itself will serve as a learning tool—its inner workings will be visible to showcase engineering at work.

The facility also will promote collaborative research efforts by eliminating traditional academic silos and co-locating multidisciplinary teams of scientists and engineers working toward common research goals. It could open in early 2009.

In the meantime, we have made significant enhancements for today's students. Tablet PCs are available for faculty and students to check out and use in the classroom. Students can now combine





(L to R) Trying their best to hold on, Dean Dennis Irwin, visiting professor Gilles Clement, and Interim Associate Dean for Graduate Studies Angie Buckley try out zero gravity aboard a parabolic flight.

electronic presentations with handwritten notes, as well as generate solutions and share them easily with the rest of the class.

The Department of Aviation welcomed its new training fleet of seven new Piper Warrior III aircraft this past spring. Equipped with a state-of-the-art avionics system featuring full glass-panel cockpit displays, the planes make Ohio University among the first universities nationwide to offer student pilots training with such advanced technology.

I had the opportunity to make an aviation breakthrough of my own this past year. I participated in the European Space Agency's 39th Parabolic Flight Campaign to research how astronauts use bodily and visual cues to interpret their body orientation. Along with our new Interim Associate Dean for Research and Graduate Studies Angie Buckley and visiting space physiologist Gilles Clement, I experienced nose-dives and weightlessness aboard an Airbus A300 that flew steep, upward climbs simulating twice-normal earth gravity. These were followed by sharp dives that simulate near-zero

gravity. It was an exhilarating experience. I hope you'll enjoy the accompanying photo!

Finally, I want to congratulate the Avionics Engineering Center for its outstanding year. The center set a new record for externally funded research during the fiscal year 2005, having received \$8.5 million in grants and contracts. Instrument Landing System (ILS) and Global Positioning System (GPS) research each brought in approximately \$3 million. For more than four decades, we have been the avionics industry leader in ILS, the primary precision landing system used by the nation's largest air carriers.

Overall, our external research funding increased by 25 percent over last year. The quality, depth, and breadth of our research activity well supports President McDavis's goals as outlined in Vision Ohio, the University's new strategic plan. Working with chairs and faculty, I have focused the College's overall strategy to align with the University's. For one, we will play an integral role in helping Ohio University become a nationally prominent research university.

I hope you will join me in celebrating the many accomplishments of our students, faculty, and staff! 🎉

A handwritten signature in black ink that reads "Dennis Irwin".

Dennis Irwin, Ph.D., P.E.

Dean and Moss Professor of Engineering Education

A stylized logo for the name "meier". The letters are black with a white outline. The 'm' and 'e' are lowercase, while the 'i', 'e', and 'r' are uppercase. The logo is set against a white background.