

# Russ College Faculty and Staff Accomplishments

**Michael Braasch**, Thomas Professor, School of Electrical Engineering and Computer Science, co-authored and presented “Precise Positioning and Attitude Determination in High Dynamic Flight Testing” at the 2005 American Astronautical Society’s Guidance and Control Conference in Breckenridge, Colorado, February 5–9, 2005. Other authors were **Curtis Cutright**, research engineer, Avionics Engineering Center, and **Joshua Kephart**, senior, School of Electrical Engineering and Computer Science.

**Doug Goetz**, associate professor, Department of Chemical Engineering, received a \$500,000, five-year American Heart Association “Established Investigator Award,” the first one received by Ohio University and Goetz’ third highly competitive grant.



Associate Professor of Chemical Engineering Doug Goetz coaches then-undergraduate chemical engineering major Cheri Borruso, B.S.Ch.E. '04 in his lab at Edison Biotechnology Institute on The Ridges.

**Tingyue Gu**, associate professor, Department of Chemical Engineering, co-authored:

- “Data Acquisition and Control of A 22-L B. Braun Fermenter Using LabVIEW,” *Chemical Engineering Communications*, vol. 192, pp. 137–144, 2005
- “Modeling of Immobilized Cell Columns for Bioconversion and Wastewater Treatment,” *Biotechnology Progress*, vol. 20, pp. 1460–1466, 2004.

**Trevor S. Hale**, assistant professor, Department of Industrial and Manufacturing Systems Engineering, co-authored “Improving Supply Chain Disaster Preparedness: A Decision Process for Secure Site Location,” *International Journal of Physical Distribution and Logistics Management*, vol. 35, pp. 195–207, 2005, and presented:

- “On the Generalized Dwell Point Location Problem for Storage/Retrieval Systems” at the 14th Industrial Engineering Research Conference in Atlanta, Georgia, May 15–17, 2005
- “Dwell Point Locations for Dual Overhead Bridge Cranes” at INFORMS in Denver, Colorado, October 24–27, 2004.

**Dennis Irwin**, dean, Russ College, was appointed associate fellow, American Institute of Aeronautics and Astronautics; and chair, International Federation of Automatic Control Technical Committee on Aerospace.

**Tammy Jordan**, administrative associate to the graduate chair, School of Electrical Engineering and Computer Science, was awarded Ohio University classified employee of the month for March 2005.

**Savas Kaya**, assistant professor, Department of Electrical Engineering and Computer Science, authored “COSMOS: A New MOS Device Paradigm,” *IEEE Transactions Nanotechnology*, 2004; and presented “Search for Optimum and Scalable COSMOS” and “RF Performance of Strained SiGe pMOSFETs: Linearity and Gain” at the 10th International Workshop of Computational Electronics—IWCE’10 in West Lafayette, Indiana, October 24–26, 2004.

**Nicole Knapp**, administrative coordinator, External Relations and Development, obtained the Certified Administrative Professional rating.

**Greg Kremer**, associate professor, Department of Mechanical Engineering, was named one of twenty 2005 Carnegie Scholars by the Carnegie Academy for the Scholarship of Teaching and Learning.

**Dale Masel**, associate professor, Department of Industrial and Manufacturing Systems Engineering, competed on the game show “Jeopardy!” in December 2004.

**D. W. Matolak**, assistant professor, School of Electrical Engineering and Computer Science, authored “Asynchronous DS-SS CDMA Random Spreading Code Correlation Statistics in the Presence of Timing Error,” *IEEE Transactions on Vehicular Technology*, July 2005; and co-authored and presented “Channel Characterization in the 5 GHz Microwave Landing System Extension Band for Future Airport Surface Communications,” *Proceedings of the 5th Integrated Communications, Navigation,*



Second-year master's student Yue “Lily” Li (L) gets some help from Administrative Associate Tammy Jordan (R) in the EECS grad student office.

and *Surveillance Conference* in Fairfax, Virginia, May 2–5, 2005; and co-authored:

- “Decision Directed Determinate State Multiuser Detector for Asynchronous DS-CDMA Systems,” *Proceedings of the IEEE Wireless Telecommunications Symposium* in Pomona, California, April 28–30, 2005
- “Performance of Hamming Codes in Systems Employing Different Code Symbol Energies,” *Proceedings of the IEEE Wireless Communications and Networking Conference* in New Orleans, March 2005
- “Potential Multicarrier and Spread Spectrum Systems for Future Aviation Data Links,” *Proceedings of the IEEE Aerospace Conference, Session 4.19*, in Big Sky, Montana, March, 2005.

**Richard McFarland**, chief engineer and director emeritus, Avionics Engineering Center, was awarded The Wright Brothers “Master Pilot” Award by the Federal Aviation Administration; and was commissioned as an honorary citizen of the city of Hazard, Kentucky.

**Bhavin Mehta**, associate professor, Department of Mechanical Engineering, et al., filed a patent application on a new microstructure for design and manufacture of bone prosthesis. Using this new microstructure, the bone prosthesis can easily take the anatomically correct shape of the bone, and new bone can be grown within the microstructure using stem cells.

**Michael Prudich**, chair, Department of Chemical Engineering, was elected to two-year term as president of the West Virginia University Academy of Chemical Engineers.

**Jim Rankin**, director, Avionics Engineering Center, was nominated and selected to serve on the National Research Council’s Panel D: Dynamics, Navigation and Control, an avionics panel that is supporting the council’s Steering Committee for the Decadal Survey of Civil Aeronautics.

**Darin Ridgway** and **Tingyue Gu**, associate professors, Department of Chemical Engineering, co-authored “Bioprocess Strategies to Improve

Heterologous Protein Production in Filamentous Fungi,” *Biotechnology Advances*, vol. 23, pp. 115–129, 2005; and “Enhanced Amylase Production by *Bacillus Subtilis* Using a Dual Exponential Feeding Strategy,” *Bioprocess and Biosystems Engineering*, vol. 27, pp. 63–69, 2004.

**Carol Stout**, administrative associate, Department of Industrial Technology, completed 25 years of service with Ohio University in March 2005.

**Gursel A. Suer**, professor, Department of Industrial and Manufacturing Systems Engineering, co-chaired the 35th International Conference on Computers and Industrial Engineering Conference, Istanbul, Turkey, June 19–23, 2005; and co-authored “A hybrid approach of genetic algorithms and local optimizers in cell loading,” pp. 625–641 and “Intra-cell manpower transfers and cell loading in labor-intensive manufacturing cells,” pp. 643–655, *Computers and Industrial Engineering*, vol. 48, no. 3, 2005.

**Margaret Thomas**, lecturer, School of Electrical Engineering and Computer Science, completed seven years as secretary, membership director, and board member for Educators Special Interest Group (EDSIG) for the Association of Information Technology Professionals (AITP); served as vendors chair and activities chair for the Information Systems Education Conference (ISECON) and assisted with the November 2004 conference; received certificate of training for completing the Thomson Course Technology’s “2005 National Conference

for Information Technology Educators” in Orlando, Florida, March 16–18, 2005; and received a professional development award of \$250 as member of the “Critical Thinking” poster session at the “Spotlight on Learning Conference” in Athens, Ohio, April 8, 2005.

**R.L. Williams II**, associate professor, Department of Mechanical Engineering, created Matlab problems and solutions for *Introduction to Robotics: Mechanics and Control*, 3rd Edition, by John J. Craig, edited by Alice Dworkin (Prentice-Hall, 2005); served as Athens Middle School’s MathCounts coach in March 2005 for a 6th place finish in the Ohio competition; presented 10 international conference paper presentations in robotics and haptics; and has co-authored “Implementation and Evaluation of a Virtual Haptic Back,” *Virtual Reality Society Journal*, vol. 7, pp. 94–102, 2004; “Implementation and Evaluation of a Haptic Playback System,” *Haptics-e Journal*, IEEE Robotics and Automation Society, vol. 3, no. 3, pp. 1–6, 2004; “Self-Contained Automated Construction Deposition System,” *Automation in Construction*, vol. 13, pp. 393–407, 2004; and “3D Cable-Based Cartesian Metrology System,” *Journal of Robotic Systems*, vol. 21, no. 5, pp. 237–257, 2004.

**Helmut Zwahlen**, Russ Professor emeritus, Department of Industrial and Manufacturing Systems Engineering, was elected member emeritus for the committee on vehicle user characteristics by the Transportation Research Board of the National Academies. ☺



Savas Kaya talks with middle schoolers at the Russ College’s 2004 Fall Research Fair.