

*For 2005–2006, the Russ College reported \$14.2 million in research and sponsored programs. Highlights of recent awards or award increments, listed with the researcher name(s) and affiliation(s), are:*

**Tom Arthur** (Avionics Engineering Center): \$179,108 from a leading global products and services company to develop a GPS measurement system for UAV sensor platforms.

**Mike Braasch and Jim Rankin** (Avionics Engineering Center): \$1.1 million from the Federal Aviation Administration and NASA for integrated avionics technology development along with research by MIT and Princeton.

**Mike DiBenedetto** (Avionics Engineering Center): \$86,467 from the Federal Aviation Administration for consulting on the review of flight inspection requirements, concepts, and implementation for distance measuring equipment.

**Mike DiBenedetto** (Avionics Engineering Center): \$50,000 from the Federal Aviation Administration for assistance to the FAA Spectrum Management Office for software tools and antenna characterization.

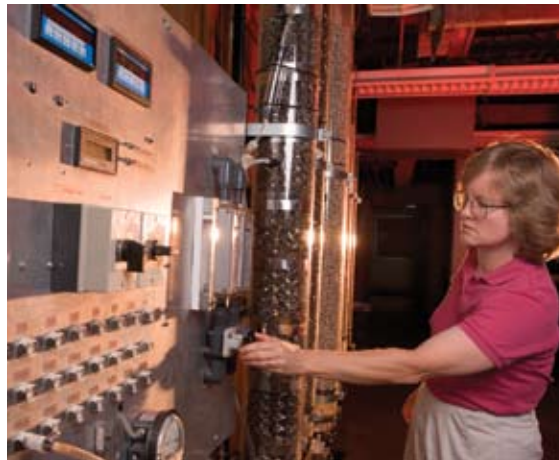
**Dave Diggle** (Avionics Engineering Center): \$750,000 from the Federal Aviation Administration for continued development of Loran as a backup navigation system for aviation.

**Douglas Goetz** (Chemical and Biomedical Engineering): \$100,000 from the American Heart Association to investigate novel approaches to treating heart disease.

**Robert Judd** (Center for Advanced Software Systems Integration): \$200,000 from a leading global products and services company for developing better methods to estimate the cost of a new jet engine early in its design.

**David Matolak** (Electrical Engineering and Computer Science; Avionics Engineering Center): \$397,912 from the NASA-Glenn Research Center to develop new non-stationary statistical models for the fading dispersive channel in the aeronautical 5 GHz spectral band, around airport surface areas.

**Richard McFarland** (Avionics Engineering Center): \$92,637 from a leading provider of consulting, engineering, and technical services for flight evaluation for glide slope and localizers in Lexington, Kentucky.



Chemical and Biomolecular Engineering Chair Valerie Young works in the lab.

**Richard McFarland** (Avionics Engineering Center): \$17,004 from a U.S. airport consulting company for consultation on an instrument landing system project at the Raleigh-Durham International Airport.

**Simbo Odunaiya** (Avionics Engineering Center): \$24,051 from a full-range global airport consulting company for investigation and analysis of the feasibility of relocating a glide slope serving runway at the Portland International Airport in Portland, Oregon.

**Dave Quinet** (Avionics Engineering Center): \$114,096 from an airport consulting company to help determine the guidance quality in support of the O'Hare International Airport Modernization Plan.

**Dave Quinet** (Avionics Engineering Center): \$19,457 from a national transportation infrastructure firm for modeling and flight tests to support the relocated glide slopes for a new taxiway to reduce the possibility of a runway excursion at the Los Angeles International Airport.

**Dave Quinet** (Avionics Engineering Center): \$29,312 from an engineering and construction company to help determine degradation to the guidance signal with the construction of a new rail line near Pusan, Korea.

**Dave Quinet and Simbo Odunaiya** (Avionics Engineering Center): \$25,762 from an air/ground communication and aircraft landing systems company for a training seminar on the utilization and background theory of the Ohio University Navigation and Landing Aids Performance Prediction Model presented to European aviation regulators.

**James Rankin** (Avionics Engineering Center): \$15,992 from the National Institute of Aerospace for development of a strategic plan for general aviation research.

**Trent Skidmore** (Avionics Engineering Center): \$272,311 from a world leader in transportation communications and systems engineering for consulting for the military version of a differential global positioning system approach and landing system.

**Andrey Soloviev** (Avionics Engineering Center): \$50,000 from one of the world's largest private industrial corporations to test GPS/INS systems in an urban environment.

**Eric Steinberg and Shad Sargand** (Ohio Research Institute for Transportation and the Environment): \$84,643 from the Ohio Department of Transportation to investigate forces in wingwalls from thermal expansion of skewed semi-integral bridges.

**Robert Williams, II** (Mechanical Engineering): \$199,845 from the Osteopathic Heritage Foundation for the training of osteopathic medical students in diagnosing medical problems using force and touch feedback from virtual environments.

**Robert Williams, II** (Mechanical Engineering): \$3,000 from the Ohio Space Grants Consortium to support mechanical engineering senior Christopher Dodson in his senior research project, which deals with the kinematic and dynamic simulation of the NASA JSC RoboNaut, the U.S. robot for International Space Station.

**Valerie Young** (Chemical and Biomedical Engineering): \$50,696 from the National Science Foundation to measure the concentration of reactive species that affect mercury concentrations in the Arctic ecosystem.

**Valerie Young** (Chemical and Biomedical Engineering): \$30,000 from the U.S. Department of Agricultural Forest Service to model the 3D dispersion of smoke within the forest during and after prescribed burns to estimate exposure to endangered species.