Russ College students recently established the first student chapter of the Structural Engineers Association of Ohio. Jibril Shehu, B.S.C.E. ’06, M.S. ’09, initiated the group. Civil engineering graduate students Brad Hoffman, B.S.C.E. ’09, and Drew Hatton, B.S.C.E. ’08, developed bylaws and recruited the group’s first 40 members.

Electrical engineering graduate student Joe Morris, B.S.E.E. ’10, received $5,900 from Ohio University’s Council for Research, Scholarship, and Creative Activity for “Novel Ultraviolet Germicidal Light Engine for Water Disinfection,” a project to research, design, and construct a system of ultraviolet light-emitting diodes that inactivate bacteria and viruses in a water storage tank. Morris is now further developing the project and plans to implement it in the village of Maase-Offinso, Ghana, where mechanical engineering students in July installed a solar-powered water pumping system they developed for their senior design course.

Chemical engineering students developed a Chem-E-Car that qualified to compete in the American Institute of Chemical Engineers national competition in November. Group leader Leesha Blake and team members Ashley Angelo, Brian Bell, David Ginley, David Homol, Morganna Keith, and Alysia Watson developed an ammonia electrolytic cell that enables a shoe-sized car to carry a certain load and travel a certain distance.

Kendal Clark, Ph.D. ’10, was part of a team that discovered the world’s smallest superconductor, a sheet of four pairs of molecules less than one nanometer wide. Published as an advance online publication in the journal Nature Nanotechnology, the study provides the first evidence that nanoscale molecular superconducting wires can be fabricated, which could be used for nanoscale electronic devices and energy applications.

Ohio University’s 27th Annual Leadership Awards Gala recognized several Russ College students. William Young II, B.S.E.E. ’02, M.S.E.E. ’05, Ph.D. ’10, received the Outstanding Graduate Student Leaders Award, and Lauren Logan, B.S.E.E. ’10, was a finalist for the Outstanding Senior Leader Award. Other students nominated for awards include Joshua Cosper, B.S.M.E. ’10; Michael Logue, B.S.A ’10; and Shad Williams, B.S.M.E. ’10.
Senior electrical engineering student Ben Ashman, B.S.E.E. ’10, won third place in the IEEE (Institute of Electrical and Electronics Engineers) Region II paper competition in April at Temple University in Philadelphia, Pennsylvania, for his paper “An Investigation into Variable Chirped FM-LADAR: Analysis and Implementation.”

Chemical and Biomolecular Engineering (Graduate - Session 3)
1st: Vedasri Vedharathinam; 2nd: Thunyaluk Pojtanabuntoeng

Electrical Engineering and Computer Science (Graduate - Session 1)
1st: Kendal Clark; 2nd: Ed Steinke, Amanda Bryan, Bakhthiyar Nikombekov

Electrical Engineering and Computer Science (Graduate - Session 2)
1st: Rajesh Bezawada; 2nd: Sudha Vana

Industrial and Civil Engineering
1st: Stephen Busam; 2nd: Phanindher Patlola

Mechanical Engineering
1st: Ernur Karadogan; 2nd: Robert Mecholif, Bradley Arnold, James Hayes, Bob Herpy, Schuyler Redding

Five chemical and biomolecular engineering juniors recently participated in the WERC (Waste-management, Education and Research Consortium) design contest at New Mexico State University in Las Cruces, New Mexico. Nicholas Frank, Arthur Gildea, Matthew Moyer, Fritz Hoffmann, and Nicholas Van Horn were challenged to develop a method to concentrate pond water samples to achieve reduced volume, thus making the samples easier to send to testing laboratories. The U.S. Department of Energy sponsors the international design contest.

Twenty-eight Russ College students were among the 147 Ohio University students to win awards at the 9th Annual Student Research and Creative Activity Fair in May. More than 600 undergraduate, graduate, and medical students and post-doctoral fellows presented their original work at the event. The winners were:

Biomedical Engineering (Graduate - Session 1)
1st: Lucila Sackmann-Sala; 2nd: Chinthasagar Bastian

Biomedical Engineering (Graduate - Session 2)
1st: William Broach; 2nd (tie): William Porter and Chris Stork

Biomedical Engineering (Undergraduate)
1st: Sarah Gutzwiller; 2nd: Hiroyoshi Tanda

Chemical and Biomolecular Engineering (Graduate - Session 1)
1st: Yao Xiong; 2nd: Ramasamy Palaniappan, David Ginley, Leesha Blake, Alysia Watson, Ashley Angelo, Brian Bell, David Homol, Morganna Keith

Chemical and Biomolecular Engineering (Graduate - Session 2)
1st: Karissa Henson; 2nd: Raghu Kumar Alluri

Three Russ College students received Ohio Space Grant Consortium scholarships from NASA for research they proposed to conduct through the Avionics Engineering Center. Electrical and mechanical engineering major Daniel Shapiro, who received a $4,000 senior scholarship, will investigate the feasibility of using ground-based navigation aids to provide avionics datalinks. Electrical engineering major Joseph DiBenedetto and David Edwards, who each received a $3,000 junior scholarship, will study autopilot systems for unmanned aerial vehicles (UAVs) and “sense and avoid” technology for UAVs to operate in the National Airspace System, respectively. All will present their results of their research at the OSGC student symposium in Cleveland in April 2011.