THE GRANT

The Swanson School of Engineering at the University of Pittsburgh received a $3.54 million award from the Wallace H. Coulter Foundation in fall 2011, one of only six universities nationwide to receive the foundation’s Coulter Translational Partnership II Award. This five-year grant to the Swanson School’s Department of Bioengineering will fund translational research to develop improvements in health care, with the goal of accelerating the introduction of new technologies into patient care to address unmet clinical needs.

The award from the Coulter Foundation is supplemented by $1.5 million in matching funds from the School of Medicine, the Swanson School of Engineering, and the University’s Office of Technology Management.

Following a one-year startup period, the five-year program was implemented on July 1, 2012.

THE COULTER PROCESS

- Focuses on the number and quality of commercial licenses and spin-off companies created, on business funding obtained and, in the long term, on the number of patients served and jobs created.

- Identifies and funds promising life science projects with commercialization potential. Helps assess and develop their business plan while teaching application of commercialization principles to academics.

- Supports a partnership between a clinical leader and an academic bioengineer to develop the idea into a usable product, insuring that the unmet patient clinical need is always considered while developing a solution that would be easily adopted.

- Selects and mentors projects via an Oversight Committee and Advisors comprised of clinicians experienced in translation, business leaders accomplished in medical device commercialization including regulatory affairs and reimbursement, large medical device company representatives, and local and national angel investors and venture capitalists.

- Led by a multidisciplinary team whose principal investigator is the Chair of the Department of Bioengineering, with a leader from the Schools of the Health Sciences, and the Director, Office of Technology Management as co-principal investigators.

- Directed by a Coulter Program Director (CPD) with industrial, technology commercialization and entrepreneurship experience in health care. The CPD is an integral member of each selected project team and facilitates the translation of ideas into clinical introduction and commercial use. The CPD provides program and project management and facilitates securing additional funding, licensing intellectual property, and developing spin-off companies.
ABOUT THE SWANSON SCHOOL
DEPARTMENT OF BIOENGINEERING

Bioengineering is the application of engineering principles to analyze, design, and manufacture tools, structures, and processes to solve problems in the life sciences. Successful patient-focused and commercialization-oriented collaborations between engineers and physicians who traditionally employ differing methodologies are critical to the burgeoning field and to regional economic development. Pitt’s Department of Bioengineering, established in 1998 as part of the Swanson School of Engineering, is ranked as one of the nation’s top bioengineering programs and has received millions of dollars to fund research for advances including the development of a tiny cardiac-assist device for infants; a blood-treatment tool that can free patients from ventilator dependence; and materials that help generate bone. Academic Analytics, which compares peer institutions and departments based upon quantitative, objective data, lists the Swanson School Department of Bioengineering as number one out of 67 departments nationwide in articles, grants, grant dollars, citations, dollars per grant and citations per faculty. Recently, the Department has initiated a major thrust in Translational Research with the fall 2011 launch of the Coulter TPII Program and the Center for Medical Innovation.

ABOUT THE COULTER FOUNDATION

Wallace Coulter’s deepest passion was to improve health care and make these improvements available and affordable to everyone. Mr. Coulter dedicated his wealth to continuing to improve health care through medical research and engineering, and established the Wallace H. Coulter Foundation to fund these areas. The Foundation funds translational research in biomedical engineering with the goal of accelerating the introduction of new technologies into patient care. His values of endless curiosity, continuous learning, teamwork, consideration and respect for the individual, coupled with the highest level of ethics and integrity are the cornerstone values of The Wallace H. Coulter Foundation. The Foundation established and ran the Translational Partners I Program, in which 9 Universities demonstrated exceptional results, recognized even by the White House. The Foundation has leveraged this success to initiate the TPII program.