The College of Engineering and the Morsani College of Medicine Create a Department of Medical Engineering

The new department will be home to USF’s growing biomedical engineering program

Tampa, Fla. (Dec. 20, 2016) — The College of Engineering and the Morsani College of Medicine at the University of South Florida have established the Department of Medical Engineering, a unique transdisciplinary concept that will combine the related aspects of engineering and medicine while providing access to real-world health care environments for education and research.

The faculty will consist of both physicians and engineers specializing in chemical and mechanical engineering, biomedicine and nanotechnology with initial concentrations in a broad range of biomedical engineering areas such as nanotechnology for drug delivery, orthopedics, and cardiology, neurology and cancer.

“The new program will focus on how best to help patients and improve medical care,” said Robert H. Bishop, dean of the USF College of Engineering. “We are creating an environment where intellectual collisions can readily occur between engineering professors, medical doctors, researchers, and students leading to innovative solutions that save lives and improve the quality of health care. In addition, occupations in biomedical engineering are typically high paying and are showing above average growth in the United States.”

While most biomedical engineering programs are based only within engineering, medical engineering at USF will offer a unique concept that pairs engineers with doctors and medical residents in a clinical setting. Graduate students will spend time at Tampa General Hospital meeting with surgeons and going into the operating room as observers. In addition to completing a thesis, graduate students will be encouraged to obtain a patent and publish an article in a peer-reviewed journal.

“This medical engineering department will enhance opportunities for doctors and engineers to learn from one another in real-world clinical environments,” said Dr. Charles J. Lockwood, senior vice president for USF Health and dean of the Morsani College of Medicine. “It will facilitate joint work on applied research, including drug discovery and delivery and the development of medical devices and imaging to solve health care problems and improve patient care.”
The success of the USF biomedical engineering (BME) graduate program, which has grown more than 50 percent over the last five years and is currently the largest BME graduate program in Florida, will lead to the launch of a bachelor’s program in biomedical engineering at USF in the near future.

Robert Frisina, PhD, director of the Biomedical Engineering Program, will serve as interim chair of the Medical Engineering Department. An advisory group of National Academy members is being formed to help attract world class faculty to the new program.

The University of South Florida is a high-impact, global research university dedicated to student success. USF is a Top 25 research university among public institutions nationwide in total research expenditures, according to the National Science Foundation. Serving over 48,000 students, the USF System has an annual budget of $1.6 billion and an annual economic impact of $4.4 billion. USF is a member of the American Athletic Conference.