(ORLANDO, July 28, 2010) -- From a computerized anatomy lab to a digital 10-headed microscope, the UCF College of Medicine’s new medical education facility features state-of-the-art technology and digitally enhanced classrooms that reinforce an innovative curriculum with its supporting systems that have already received national recognition.

The Liaison Committee on Medical Education (LCME) noted that the College of Medicine’s developing knowledge management and assessment systems have the potential to be national models. Those systems rely heavily on the latest technology, allowing students to interact with medical information as never before.

Today’s students are active learners who have spent their lives interacting with information rather than just reading it in a book. They rely on high-tech models and hands-on labs to gain medical knowledge, ranging from individual blood cells to entire body organs. The new high-tech medical education building enables students to have electronic resources at their fingertips.

For example, the College of Medicine’s new Anatomy Lab contains 22 dissection tables with ceiling-mounted computer terminals over each table so students have easy access to information during dissections. The 32-inch, finger-touch screens were specially designed for UCF by Mitsubishi based on the medical school’s input and are the first to be used anywhere in the world. A computerized camera allows the professor to record anatomical information from anywhere in the lab and share it with the entire class in the lab as well as students in other lecture halls.

The college’s state-of-the-art classrooms allow students to easily segment themselves into small discussion and problem-solving groups. Such “small group” exercises are key to the college’s integrated curriculum, where students learn to translate classroom instruction into real
world situations. Large, high-definition classroom projectors were created especially for the college and hand-carried by Mitsubishi designers to Orlando from Japan. The intricate high-definition allows students to see clearly the tiniest details of a cell pictured on a classroom screen. Classrooms feature movie-theater-quality acoustics and cameras that automatically follow the speaker throughout the room and record lectures that students can later play on the college’s iTunes-U.

The Microscopy Lab is also outfitted digitally, with a system that allows students to view virtual slides of cells and tissues simultaneously rather than relying on individual microscopes and glass slides. The laboratory also allows groups of students to study the same slide through a 10-headed microscope equipped with digital image capture and multiple video monitors. Such advanced microscopes are traditionally used in pathology labs and hospitals. The lab is also multi-use in design and can be used for medical training for Central Florida health-care professionals.

The Clinical Skills and Simulation Center is focused on practical training for doctors-to-be. Medical students work on life-sized, computerized mannequins that have healthy and abnormal heart beats, various blood pressure readings and can even bleed. Nearby is a computer-assisted clinical practice with 12 examination rooms where students, from their first week of class, interact with “standardized patients,” actors trained to mimic specific symptoms and ailments. Every interaction is monitored by faculty members, either from a nearby computer or through a one-way glass, so the students get immediate feedback on their bedside manner, physical exams skills and patient history techniques.

“We had the opportunity to build a medical school from scratch, to build something that was unique and better than it had ever been before,” said Dr. Deborah German, UCF vice president for medical affairs and dean of the College of Medicine. “So our vision is to be the nation’s premier 21st century college of medicine in the middle of a medical city that would allow Central Florida to become a global health-care destination.”