HSC News





USC Regulatory Science graduates Kunjan Shah and Yue Shen at Stryker Endoscopy in San Jose, CA.

Quality counts in new master's degree at School of Pharmacy

Laura Sturza, September 22nd, 2015

Quality control is a concern for every major industry. It links customer satisfaction with business success. We've all been asked, "Would you be willing to stay on the line for a brief quality survey?"

In spring 2016, the International Center for Regulatory Science at USC will roll out its newest program, the MS in Medical Product Quality (MPQ), which offers advanced training for health care careers in quality management.

Professionals working in quality assurance and quality control ensure the safety of drugs, biologics and medical devices in the United States and internationally. The biomedical industry and government cannot find enough highly trained personnel.

"We developed this program with feedback from industry," said Program Director Michael Jamieson, DRSc. "They told us these are hard positions to fill."

Indeed, Joaquin Kurz, senior director for Johnson & Johnson's Complaint Management and Post-Market Surveillance program, said "this program fills a critical gap in industry... because traditionally there hasn't been a place where people could get training in medical device quality."

The MS in Medical Product Quality is designed for those interested in a career in medical devices, pharmaceuticals or combination products. Prospective students may already be working in related industries or looking for a change of career. Others may be completing undergraduate or graduate work in biological, pharmaceutical and biomedical sciences or biomedical engineering.

The program develops leaders who can expedite delivery of medical advances to the people who need them while ensuring that safety standards are met. Students learn the theory behind regulations that impact product quality and engage in practical projects that typify industry careers.

Students who want to try out the program prior to admission to the 32-unit MS in MPQ are welcome to take a single class. Upon admission to the program, any courses taken earlier would count toward the degree.

Courses are offered on weekends to accommodate working professionals. Students set their own pace, taking as many courses as they wish each semester. Students who live 50 miles or more from the Los Angeles campus can study by distance. They attend the same classes as onsite students and participate in group projects. The department has successfully offered its distance program to people all over the U.S. for more than 10 years.

Career support is offered to students and alumni, including recruitment events, career fairs and regular distribution of job postings from companies nationally and internationally. Recruiters are aware of the reputation of the department's alumni and are eager to hire their graduates. The department stresses the development of professional skills and works closely with students on launching their successful careers or beginning a new stage of an established career.

Kurz said "leaders are banging down my door" in their search to hire staff with training and experience in a regulated industry. In learning about the new MPQ MS, he added, "I am looking at recruiting some bright young talent out of the program."

Coursework from the 32-unit program includes:

- Introduction to Medical Product Regulation
- Quality Assurance (QA) for Drugs and Biologics
- QA for Medical Devices & Combination Products
- Structure and Management of Clinical Trials
- Method Development and Validation
- Auditing Principles
- Good Laboratory Practices (GLP)
- Risk Management
- Quality Systems and Statistical Process Controls
- Managing Complex Projects

The MS in Medical Quality is part of the USC Regulatory Science program, which is home to the International Center for Regulatory Science (ICRS). ICRS focuses on research, international outreach and education. The center hosts visiting scholars from across the globe who participate in educational activities.