Analytical services are offered by the Pharmaceutical Development and Manufacturing Center of Excellence and are available mainly on the east campus of East Carolina University in Science and Technology Building. A Waters Acquity ultrahigh performance liquid chromatograph / Micromass Micro quadrupole time of flight mass spectrometer is housed in the Department of Chemistry in Science and Technology 454 (approx. 300 sq ft). An ExionLC 100 high performance liquid chromatograph / Sciex 3200 Triple Quadrupole mass spectrometer is in the neighboring laboratory in Science and Technology 453 (approx. 400 sq ft). Science and Technology Rooms 347 and 348 (adjoining, approx. 1300 sq ft) house the Pharmaceutical Services laboratory. Major equipment in this laboratory includes:

- Waters Acquity H-Class Ultrahigh Performance Liquid Chromatography
- Thermo Fisher Scientific Charged Aerosol Detector
- Agilent 7900 ICP-MS
- Thermo Fisher Scientific Nicolet is50 FTIR/Raman/NIR Spectrometer
- TA Instruments TAM IV Microcalorimeter
- TA Instruments Nano Differential Scanning Calorimeter

The Pharmaceutical Development and Manufacturing Center of Excellence also includes a separate lab for acid digestion and related solution preparation including chemical resistant hood (Science and Technology 443, approx. 200 sq ft) and a separate lab (BSL-2) for biological sample extraction and preparation (Science and Technology 453, approx. 400 sq ft).

A Bruker Autoflex Speed MALDI-Time-of-Flight mass spectrometer is located in the Brody School of Medicine Building, Room 4S15 (approx. 600 sq ft).

Facilities are overseen by Dr. Jack Pender, Principal Research Scholar and Director of Pharmaceutical Training and Services, and Dr. Kimberly Kew, Senior Research Scholar and Director of Mass Spectrometry Services.