

EQUIPMENT:**MUSC Proteomics Center**

Mass Spectrometry Facility Shared Instrumentation: Thermo Scientific™ Orbitrap Fusion™ Lumos™ Tribrid™ Mass Spectrometer with segmented quadrupole, dual pressure ion trap, and high mass accuracy orbitrap mass analyzer with CID, HCD, ETD, EThcD, and UVPD (213 nm) fragmentation capabilities interfaced to an Easy 1200 nano-UHPLC. Thermo Scientific™ Orbitrap Elite™ Hybrid Ion Trap-Orbitrap Mass Spectrometer with CID, HCD, and ETD fragmentation capabilities interfaced to a Dionex UltiMate U3000 nanoLC system for 1D- or 2D-LC. Advion TriVersa Nanomate that can be interfaced to the Orbitrap Elite for direct infusion. Bruker Daltonics AutoFlex III linear MALDI TOF Mass Spectrometer. Waters Xevo TQ-S triple quadrupole mass spectrometer interfaced to a Waters Acquity UPLC M-Class System. Agilent OFF-GEL fractionator. LC Packings Ultimate and Hewlett Packard 1100 HPLC systems.

Imaging Mass Spectrometry Instrumentation: Bruker Scientific tims-TOF fleX™ Mass Spectrometer capable of trapped ion mobility equipped with sources CaptiveSpray ESI and MALDI using a smartbeam 3D™ laser. Bruker Scientific solariX™ Legacy 7 Tesla FT-ICR Mass Spectrometer with a dual ion source for ESI or MALDI. Dionex Ultimate nanoLC system that can be interfaced to the SolariX via the CaptiveSpray ESI source. Bruker Scientific rapifleX™ MALDI Tissue typer equipped with a smartbeam 3D™ laser capable of a 5 micrometer laser spot size with high throughput acquisition rates up to 50 pixels a second. Two HTX Technologies TM-Sprayer™ Tissue MALDI Sample Prep System, an M3 model and high throughput M5 model. Bruker Scientific ImagePrep MALDI matrix sprayer. One Hamamatsu Nanozoomer for high speed tissue scanning up to 40X resolution. One sublimation apparatus for submicrometer MALDI matrix coating. ThermoScientific HM 550 cryostat. Shandon Finesse microtome AS325 with heated water bath. Beckel Industries adjustable temperature oven. One Biocare Decloaking Chamber™ for antigen retrieval.

Common Equipment

Four -80°C freezers, two -20°C freezers, two 4°C refrigerators and one cold room with 80 sq foot of space for sample and solution storage. Two analytical Mettler Toledo balances ATL160 and Acculabs AL64, one Leica Diavert microscope, one Fisher Scientific sonic dismembrator Model CL-18, and three Savant vacuum concentrators.