Resource Summary Report

Generated by FDI Lab - SciCrunch.org on May 25, 2025

South Carolina Medical University Mass Spectrometry Core Facility

RRID:SCR_017959
Type: Tool

Proper Citation

South Carolina Medical University Mass Spectrometry Core Facility (RRID:SCR_017959)

Resource Information

URL: http://cores.musc.edu/Core/MS

Proper Citation: South Carolina Medical University Mass Spectrometry Core Facility (RRID:SCR_017959)

Description: Core provides expertise, services, education, and instrumentation to enhance biomedical research through LC-MS/MS-based proteomics. Services are offered for protein identification; characterization of post-translational modifications; and quantitative proteomics to identify differentially expressed/degraded proteins, regulated sites of post-translational modification, protein-protein interactions, and protein targets of drugs identified in phenotypic screens. Analyses include sample preparation, LC-MS/MS, database searching, generation of reports, and assistance with data interpretation. Faculty and staff assist with experimental design and development/optimization of customized methodology for analysis of post-translationally modified peptides (e.g. phosphorylation and O-GlcNAc modification, N- and O-linked glycosylation, Cys modifications including S-glutathionylation, and glycation of Lys and Arg). Quantitative approaches including metabolic labeling (SILAC), isobaric tagging (iTRAQ/TMT), and label free proteomics (LFQ) are performed on Orbitrap Elite or Orbitrap Fusion Lumos Mass Spectrometers. Developes methodology to identify alterations in post-translational modifications that impact signal transduction, transcription, translation, and response to therapeutics with goal of enabling investigators to discover molecular mechanisms underlying disease progression and therapeutic response.

Synonyms: MUSC Mass Spectrometry Facility

Resource Type: core facility, service resource, access service resource

Keywords: Mass, spectrometry, expertise, service, education, instrumentation, proteomics,

protein, identification, characterization, post translational, modification, target, drug, identification, phenotypic, screen, analysis, disease, service, core, ABRF

Funding: NIH Office of the Director S10 OD010731;
NIGMS P20 GM103542

Resource Name: South Carolina Medical University Mass Spectrometry Core Facility

Resource ID: SCR_017959

Alternate IDs: ABRF_985

Record Creation Time: 20220129T080337+0000

Record Last Update: 20250525T032859+0000

Ratings and Alerts

No rating or validation information has been found for South Carolina Medical University Mass Spectrometry Core Facility.

No alerts have been found for South Carolina Medical University Mass Spectrometry Core Facility.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 1 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Hunt EG, et al. (2024) Acetyl-CoA carboxylase obstructs CD8+ T cell lipid utilization in the tumor microenvironment. Cell metabolism.