Resource Summary Report

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University of Nebraska Lincoln Nebraska Center for Biotechnology Proteomics and Metabolomics Core Facility

RRID:SCR_021314
Type: Tool

Proper Citation

University of Nebraska Lincoln Nebraska Center for Biotechnology Proteomics and Metabolomics Core Facility (RRID:SCR_021314)

Resource Information

URL: https://biotech.unl.edu/proteomics-and-metabolomics#tab1

Proper Citation: University of Nebraska Lincoln Nebraska Center for Biotechnology Proteomics and Metabolomics Core Facility (RRID:SCR_021314)

Description: Provides services using mass spectrometry, including identification and relative quantification of proteins and several advanced methods for profiling and quantitation of small molecules.Provides outreach and education program including workshops,seminars and courses.Proteomics services include Bottom-up Proteomics of whole organisms, organs, organelles, tissues, cell pellets, pulldowns, complex or single protein mixes from solutions or gels;Quantification by label-free or multiplexed labeling techniques with microscale subfractionation to increase coverage;Post Translational Modification Characterization especially phosphopeptide enrichment from whole organism digests, but also ubiquitylation, acetylation, etc.Metabolomics services include Untargeted Quantification of small molecules;Primary metabolism using GC-MS and NIST/Fiehn Libraries;Secondary metabolism using LC-MS and Progenesis QI, NIST Library, mzCloud;Targeted Quantification using HPLC or LCMS.

Abbreviations: PMF

Synonyms: UNL Proteomics and Metabolomics Facility

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

Keywords: USEDit, ABRF, mass spectrometry, protein identification, protein relative

quantification, small molecules, proteomics, metabolomics

Funding:

Availability: open

Resource Name: University of Nebraska Lincoln Nebraska Center for Biotechnology Proteomics and Metabolomics Core Facility

Resource ID: SCR_021314

Alternate IDs: ABRF_1189

Alternate URLs: https://coremarketplace.org/?FacilityID=1189

Record Creation Time: 20220129T080354+0000

Record Last Update: 20250513T062141+0000

Ratings and Alerts

No rating or validation information has been found for University of Nebraska Lincoln Nebraska Center for Biotechnology Proteomics and Metabolomics Core Facility.

No alerts have been found for University of Nebraska Lincoln Nebraska Center for Biotechnology Proteomics and Metabolomics Core Facility.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 34 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

Xu R, et al. (2024) Multiple pathways for glucose phosphate transport and utilization support growth of Cryptosporidium parvum. Nature communications, 15(1), 380.

Henry B, et al. (2024) A combination of four Toxoplasma gondii nuclear-targeted effectors protects against interferon gamma-driven human host cell death. mBio, 15(10), e0212424.

Hayer SS, et al. (2024) Antibiotic-induced gut dysbiosis elicits gut-brain axis relevant multi-omic signatures and behavioral and neuroendocrine changes in a nonhuman primate model. Gut microbes, 16(1), 2305476.

Andrabi SM, et al. (2024) Injectable and rapidly expandable thrombin-decorated cryogels achieve rapid hemostasis and high survival rates in a swine model of lethal junctional hemorrhage. Bioactive materials, 38, 154.

Prado-Fernández MF, et al. (2024) Pereskia sacharosa Griseb. (Cactaceae) Prevents Lipopolysaccharide-Induced Neuroinflammation in Rodents via Down-Regulating TLR4/CD14 Pathway and GABAA ?2 Activity. Current issues in molecular biology, 46(7), 6885.

Rinkenberger N, et al. (2024) Susceptibility of Toxoplasma gondii to autophagy in human cells relies on multiple interacting parasite loci. mBio, 15(1), e0259523.

Batt MC, et al. (2024) An autosomal recessive variant in PYGM causes myophosphorylase deficiency in Red Angus composite cattle. BMC genomics, 25(1), 417.

Vijayan J, et al. (2024) Nitrogen starvation leads to TOR kinase-mediated downregulation of fatty acid synthesis in the algae Chlorella sorokiniana and Chlamydomonas reinhardtii. BMC plant biology, 24(1), 753.

Barboza Bispo R, et al. (2024) Unraveling the Mechanisms of Efficient Phosphorus Utilization in Popcorn (Zea mays L. var. everta): Insights from Proteomic and Metabolite Analysis. Journal of proteome research, 23(8), 3108.

Liu B, et al. (2023) Critical contributions of protein cargos to the functions of macrophage-derived extracellular vesicles. Journal of nanobiotechnology, 21(1), 352.

Akey ME, et al. (2023) Apical Secretory Glycoprotein Complex Contributes to Cell Attachment and Entry by Cryptosporidium parvum. mBio, 14(1), e0306422.

Ogbu CP, et al. (2023) Structural Basis of Clostridium perfringens Enterotoxin Activation and Oligomerization by Trypsin. Toxins, 15(11).

Can H, et al. (2023) Integration of Meta-Multi-Omics Data Using Probabilistic Graphs and External Knowledge. Cells, 12(15).

Palmer NA, et al. (2023) Divergent Metabolic Changes in Rhizomes of Lowland and Upland Switchgrass (Panicum virgatum) from Early Season through Dormancy Onset. Plants (Basel, Switzerland), 12(8).

Dunigan DD, et al. (2023) Early-Phase Drive to the Precursor Pool: Chloroviruses Dive into the Deep End of Nucleotide Metabolism. Viruses, 15(4).

Xu R, et al. (2023) Multiple pathways for glucose phosphate transport and utilization support growth of Cryptosporidium parvum. bioRxiv : the preprint server for biology.

Henry B, et al. (2023) A Combination of Four Nuclear Targeted Effectors Protects Toxoplasma Against Interferon Gamma Driven Human Host Cell Death During Acute Infection. bioRxiv : the preprint server for biology.

Zhang B, et al. (2023) A sorghum ascorbate peroxidase with four binding sites has activity against ascorbate and phenylpropanoids. Plant physiology, 192(1), 102.

Palmer NA, et al. (2023) Dynamic Reconfiguration of Switchgrass Proteomes in Response to Rust (Puccinia novopanici) Infection. International journal of molecular sciences, 24(19).

Ablondi M, et al. (2023) The role of inbreeding depression on productive performance in the Italian Holstein breed. Journal of animal science, 101.