

Proteomics & Mass Spectrometry Facility

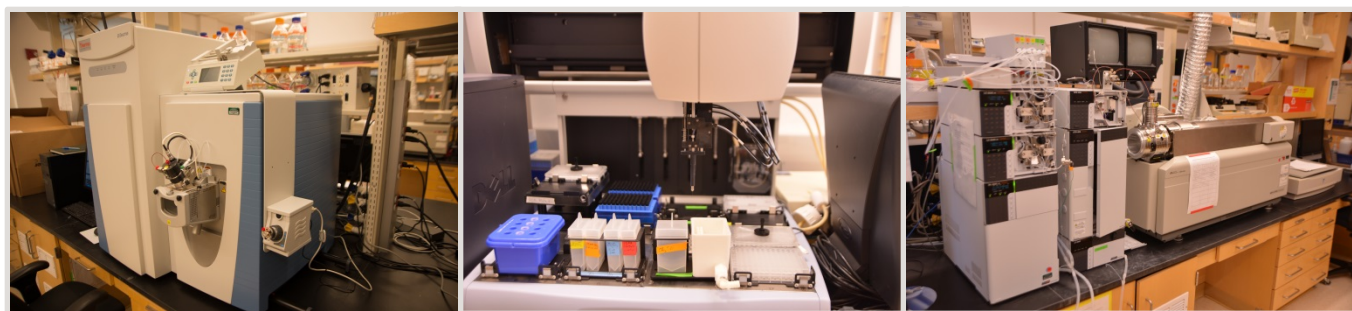
Developing new tools and providing high quality analysis of proteins, lipids and metabolites using mass spectrometry and related analytical techniques.



With highly-specialized capabilities and research initiatives, the facility is well positioned to serve as a regional, national and international resource in the fast developing fields of proteomics and metabolomics.

Mission of the Proteomics and Mass Spectrometry Facility

- Provide scientists with access to state-of-the-art instrumentation and technology with which to attain and expand their research endeavors.
- Offer high-quality services in biomolecule separation, identification and structural analysis to internal and external clients.
- Provide training to internal and external scientists interested in developing knowledge and skills in the areas of proteomics and mass spectrometry.
- Produce first-rate publication quality data for all clients.



Transformative Systems

The Proteomics & Mass Spectrometry Facility has processed thousands of service samples submitted by research laboratories located at the Danforth Center as well as from academic and commercial institutions worldwide.

In addition, the facility has initiated research activities designed to expand analytic capabilities and has established collaborations with many principal investigators at various institutions. These activities have produced exciting results and publications, which are a testament to the facility's high standards and growing reputation.



DONALD DANFORTH
PLANT SCIENCE CENTER
DISCOVERY | COMMUNITY | IMPACT

The Facility

The Proteomics & Mass Spectrometry Facility is well equipped with state-of-the-art analytical instrumentation designed to facilitate the exploration of complex biological systems. The facility setup allows for the completion of many routine analyses including protein and small molecule separation, purification, identification, as well as other more advanced mass spectrometric characterization.

Available instrumentation includes multiple separation platforms, both liquid and gel-based, as well as imaging and spot picking systems, a robotics liquid handling workstation and a variety of complementary mass spectrometers.

The facility is also actively involved in specific research projects, grant applications, training and educational activities.

Current Instrumentation Includes

- LTQ Orbitrap Velos Pro
- Q-Exactive
- 6500 QTRAP with Selexion
- 5975C GC-MS
- ITQ-900 GC-MS with FID
- Thermo Trace GC-FID
- LCQ Ion Trap LC-MS
- Proteome Discoverer
- Typhoon 9410 Imager
- SIEVE
- Elements
- Agilent, Shimadzu HPLCs
- TissueLysenII
- Waters UPLC system
- Dionex Ion Chromatography System
- MASCOT
- Scaffold, Scaffold PTM, Scaffold Q
- Progenesis LCMS
- Progenesis SameSpots

For more information, contact:

Brad Evans, Ph.D.

Director, Proteomics & Mass Spectrometry Facility

(314) 587-1464

bevans@danforthcenter.org

