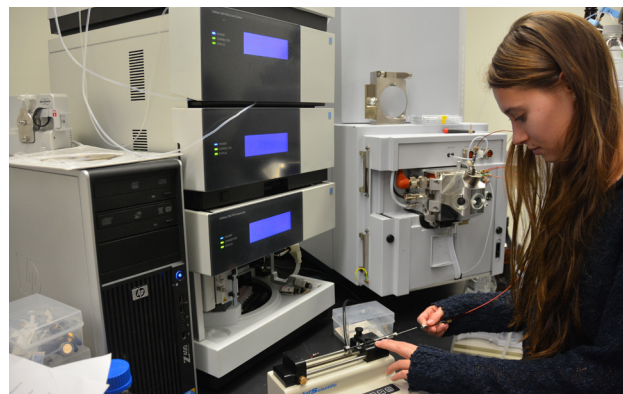


About this Facility

This facility offers a full range of services from single samples to complete shotgun proteomics and metabolomics projects. In addition to providing analytical services, the facility also operates as an open-access resource with 24/7 availability to researchers: users may operate instruments independently for rapid sample analysis and time-sensitive experiments.

[www.montana.edu/masspec/](http://www.montana.edu/massspec/)



Student Working in Mass Spec

Services

- 1 Targeted and Untargeted analysis on Primary metabolism
- 2 Targeted and Untargeted lipidomics
- 3 Compound specific assays using MS & NMR
- 4 Accurate mass using ESI-MS & LC-MS/MS
- 5 MALDI-MS analysis of polymers and similar macromolecules.
- 6 GC-MS analysis for volatile compounds
- 7 Unknown metabolite ID and characterization by MS & NMR

- 8 Protein ID
- 9 Shotgun proteomics
- 10 Data analysis support

Sample types: Organic reactions, soil, enzyme assays, proteins (pure and mixtures), serum, plasma, feces, urine, bile juice, oral lavage, cell digests, insects such as bees, and plants (leaves, roots, bark, pine needles). For a sample type new to the facility, we will be delighted to work with the client on developing suitable extraction protocols.

Instrumentation

The Mass Spectrometry facility operates a wide variety of Mass Spec instrumentation, each with advantages for specific types of analysis. If you have a specific project in mind, contact us to discuss possible options. We are always interested in new applications, so contact us with specialized requests. For a detailed list of instruments and highlights on instrumentation and example applications, please visit: www.montana.edu/massspec/Instrumentation.html

To talk in more detail about how we may be able to help you, contact MONT director David Dickensheets at davidd@montana.edu.

Dr. Brian Bothner is the Mass Spec Director

Mass Spec is a part of MONT, the Montana Nanotechnology Facility, supported by NSF. MONT supports open access to 6 research facilities at MSU and is a part of the National Nanotechnology Coordinated Infrastructure (NNCI) with access to 15 additional sites across the US. If MONT does not have the instrumentation you need, we will find what you're looking for at one of our partner institutions.

www.nnci.net

