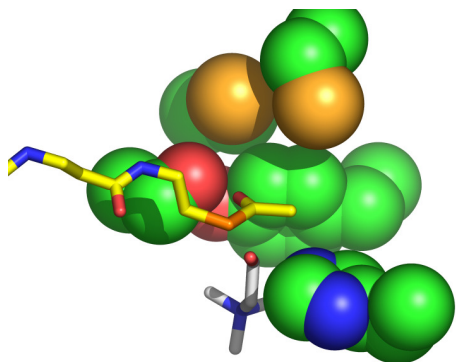


The London Regional Proteomics Centre (LRPC), located in the Department of Biochemistry at the University of Western Ontario, encompasses six core facilities:

- **Functional Proteomics Facility**
- **MALDI Mass Spectrometry Facility**
- **Biological Mass Spectrometry Laboratory**
- **Biomolecular Interactions and Conformations Facility**
- **Biomolecular NMR Facility**
- **Macromolecular Crystallography Facility**

Each facility offers high-quality service and state-of-the-art equipment for research needs in the areas of proteomics, protein structure, and protein function. Proteins and other biomolecules can be analyzed using methods for molecular separation, identification, biophysical characterization and structural determination.



LRPC facilities are accessible to users from the University of Western Ontario, external academic communities, and industrial settings. Users can perform their own sample analyses or use the services of qualified facility staff.

Professional training and expert technical assistance for sample preparation and instrument use are available within each facility.

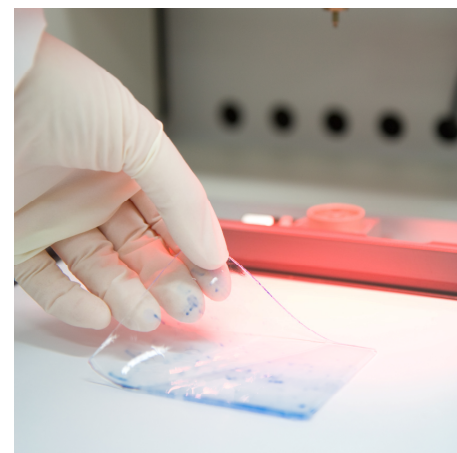
Fees apply for training, use of equipment, and the fee-for-service sample analyses.

If you have identified the facility that will meet your needs, we suggest that you contact their staff directly. If you're not sure, contact the LRPC management at lrpc@uwo.ca. We will be pleased to direct you to the appropriate experts and coordinate the activities of multiple facilities.

LRPC Website: www.lrpc.uwo.ca

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Medical Sciences Building
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London Regional Proteomics Centre



*Department of Biochemistry
Schulich School of Medicine
& Dentistry*

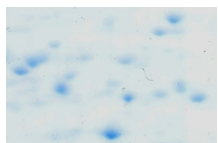


London Regional Proteomics Centre

Functional Proteomics Facility (FPF)

The FPF is equipped with instrumentation for the purification and separation of complex biological samples, particularly suited for subsequent analysis by mass spectrometry. Instrumentation includes:

- FPLC & 2D Gel Electrophoresis systems
- Spot-picker and MASSPrep for automated proteolytic digestion
- ProExpress Imaging System with 2D analysis software
- Infrared imaging system
- PhosphorImager



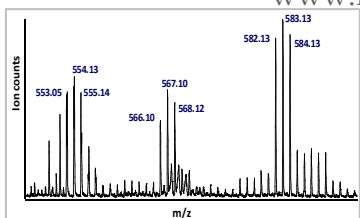
www.lrpc.uwo.ca/fpf
fpf@uwo.ca

MALDI Mass Spectrometry Facility (MMF)

MALDI mass spectrometers are utilized for detection of various samples:

- High-throughput protein identification by peptide mass fingerprint and sequencing
- Determination of post-translational modifications
- Mass determination of peptides, DNA, carbohydrates, ligands, covalent and non-covalent complexes
- MS tissue imaging

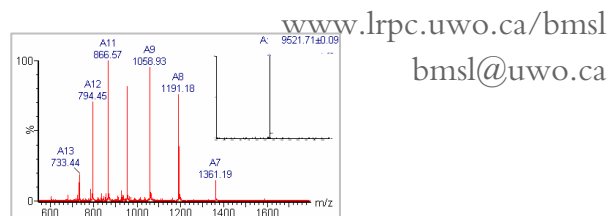
www.lrpc.uwo.ca/maldi
maldi@uwo.ca



Biological Mass Spectrometry Laboratory (BMSL)

The BMSL, a part of the Ontario-Wide Protein Identification Facility (OWPIF), features several mass spectrometers for:

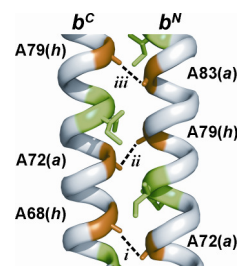
- Mass determination of polar and/or high molecular weight molecules (peptides, proteins, glycoproteins)
- Sequence determination of naturally occurring peptides and fragments from protein digests
- Characterization of modifications



Biomolecular Interactions and Conformations Facility (BICF)

The BICF is equipped for the biophysical analysis of proteins, peptides, and nucleic acids. Determine molecular weights, characterize secondary structures, stabilities, and molecular interactions. Instrumentation includes:

- Analytical ultracentrifuge
- CD spectropolarimeter
- Fluorimeters
- Calorimeters
- Biacore
- Dynamic light scatterer
- HPLCs

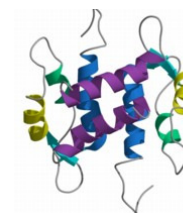


www.lrpc.uwo.ca/bicf
bicf@uwo.ca

Biomolecular NMR Facility (BioNMR)

This facility houses 3 high-field NMR instruments and a variety of accessories that allow a large number of biological NMR experiments to be done, such as:

- Characterization of small molecules
- 3D-structure determination of proteins
- Analysis of drug and receptor interactions
- Monitoring of protein dynamics
- Mapping of binding interfaces

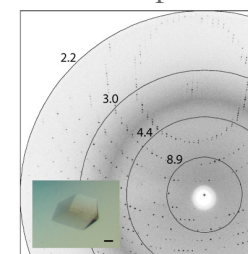


www.lrpc.uwo.ca/bionmr
bionmr@uwo.ca

Macromolecular Crystallography Facility (MCF)

The MCF provides equipment, supplies, and expertise essential for determination of the three-dimensional structures of purified proteins through X-ray crystallography. Clients may also submit samples for crystallization trials and crystallization condition refinement. Equipment includes:

- Crystallization robot
- X-ray generator & an area detector
- Microscopes



www.lrpc.uwo.ca/mcf
mcf@uwo.ca