

# RESEARCH FACILITIES OF NATIONAL IMPORTANCE



## THE METABOLOMICS INNOVATION CENTRE

[metabolomicscentre.ca](http://metabolomicscentre.ca)

**The Metabolomics Innovation Centre (TMIC)**, led by the University of Alberta in Edmonton, Alta., was founded in 2011 and continues to position Canada as a global leader in metabolomics — the study of the small-molecule interactions that determine how living organisms interact with their environment. TMIC is Canada's national metabolomics research and service facility, consisting of nine laboratories operated by world-renowned scientists at six premier universities across Canada.

TMIC has more than \$40 million in cutting-edge analytical equipment, more than 40 highly cited bioinformatics tools, more than 60 validated metabolomics tests, 12 patents and 10 spinoff companies. TMIC's annual revenue from services has grown substantially over the past five years, from \$1.5 million to \$4.5 million, and now serves clients in academia, government and diverse industries, such as food production and safety, environmental analysis and precision health (a personalized approach to health).

TMIC offers a variety of targeted (quantitative) and untargeted (global) class and pathway-specific assays to meet the diverse needs of the research community. TMIC also provides a number of specialized services, including custom assay creation, bioinformatics support and metabolomic profiling kits for research use. The facility functions as a one-stop shop for metabolomics analysis — taking a client's samples from extraction, through to analysis, data processing, data interpretation, biological interpretation and manuscript preparation. In 2023, TMIC announced the launch of TMIC 2.0 by welcoming three new nodes. With its expanded technology portfolio, TMIC will continue to pursue its mission to strengthen the metabolomics enterprise in Canada to the benefit of all Canadians.



### Did you know?

- TMIC has created some of the most-used metabolomics databases in the world, including the Human Metabolome Database (five core publications, 4,616 citations to date) and DrugBank (five core publications, 5,896 citations to date).
- Over half of all metabolomics publications globally cite at least one TMIC database, tool, protocol or other publication.
- TMIC offers a free training program known as Research Hotel for visiting scientists, students and postdoctoral fellows. Since 2011, more than 80 talented researchers from all over the world have visited and trained in TMIC facilities.
- TMIC partners with the international Metabolomics Society to publish MetaboNews, the world's most popular metabolomics newsletter.