

Resource Summary Report

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Van Andel Institute Mass Spectrometry Core Facility

RRID:SCR_024903

Type: Tool

Proper Citation

Van Andel Institute Mass Spectrometry Core Facility (RRID:SCR_024903)

Resource Information

URL: <https://massspec.vai.org/>

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Description: Core is committed to developing scientific partnerships with research labs to develop and deploy LC/MS and GC/MS methods specifically tailored to meet the needs of every project. Provides suite of technologies, experimental design support and staff expertise to deliver metabolomics, lipidomics, and proteomics capabilities to VARI scientists and collaborators. Analytical capabilities are combined with custom informatics and statistics solutions. Specific capabilities include: Metabolomics and Lipidomics liquid chromatography mass spectrometry (LC/MS) systems (Thermo Orbitrap ID-X, Thermo Orbitrap Exploris 240, and Agilent 6470 QQQ) and gas chromatography (GC)/MS systems (Agilent 5977b (2), Thermo 7610 ISQ) dedicated to small molecule analysis; Proteomics nano LC/MS systems (Orbitrap Eclipse and Orbitrap Exploris 480) for protein analysis; Bioinformatics for developing and maintaining informatics pipelines for mass spectrometry data analysis and visualization. Major equipment in the facility includes Thermo Scientific Orbitrap ID-X LC/MS, Thermo Scientific Orbitrap Exploris 240 LC/MS, Thermo Scientific Orbitrap Eclipse nanoLC/MS, Thermo Scientific Orbitrap Exploris 4800 LC/MS, Agilent 6470 Triple Quadrupole LC/MS, Agilent Infinity 1290II UPLC, Agilent 5977B GC/MS, Thermo Scientific ISQ7610 EI/CI enabled GC/M.

Synonyms: , Van Andel Institute Mass Spectrometry Core, VAI Mass Spectrometry Core, Mass Spectrometry Core, VAI Mass Spectrometry Core (MSC)

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

Keywords: ABRF, mass spectrometry, metabolomics, lipidomics, proteomics, services,

Resource Name: Van Andel Institute Mass Spectrometry Core Facility

Resource ID: SCR_024903

Alternate IDs: ABRF_2610

Alternate URLs: <https://coremarketplace.org/?FacilityID=2610&citation=1>

Record Creation Time: 20240120T050237+0000

Record Last Update: 20260819T044606+0000

Ratings and Alerts

No rating or validation information has been found for Van Andel Institute Mass Spectrometry Core Facility.

No alerts have been found for Van Andel Institute Mass Spectrometry Core Facility.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 35 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Kerndl M, et al. (2026) Monocyte infiltration induces CNS arginine catabolism to fuel neuroinflammation. *Nature immunology*, 27(7), 1418.

Wedan RJ, et al. (2026) Cells Engage Endogenous Malonate Synthesis to Drive Mitochondrial Metabolism. *bioRxiv : the preprint server for biology*.

Mechan-Llontop ME, et al. (2026) Bacterial pyruvate metabolism regulates host insulin sensitivity in *C. elegans*. *bioRxiv : the preprint server for biology*.

Norden PR, et al. (2026) Mitochondrial phosphopantetheinylation is required for oxidative metabolism. *Metabolism: clinical and experimental*, 174, 156413.

Norden PR, et al. (2026) Functional partitioning of lipoic acid decouples cellular abundance from mitochondrial utilization. *bioRxiv : the preprint server for biology*.

Panzeri I, et al. (2026) Chronic High-Fat Diet Does Not Alter Overall Cancer Incidence in Trp53R270H/+ Mice. *Cancer research communications*, 6(6), 1336.

Kelly B, et al. (2026) Sulfur partitioning from cysteine controls T cell proliferation and effector function. *Cell*, 189(12), 3669.

Sharma A, et al. (2026) Peroxisomes orchestrate metabolic flexibility and longevity via an interorganelle cascade. *Nature aging*, 6(5), 987.

Forton C, et al. (2026) Gut microbiome-derived tryptophan metabolites predict relapse in alcohol use disorder. *Brain, behavior, and immunity*, 131, 106161.

Zhao Y, et al. (2026) 2'-O-Methylation maintains ribosome structural and translation integrity. *Molecular cell*, 86(8), 1495.

Kasen A, et al. (2025) Seed structure and phosphorylation in the fuzzy coat impact tau seeding competency. *Nature communications*, 16(1), 9240.

Nauta KM, et al. (2025) A noncanonical polyamine from bacteria antagonizes host mitochondrial function. *Nature communications*, 16(1), 11638.

Tripathi A, et al. (2025) Nrf2 drives activation-driven expansion of CD4⁺T cells by modulating glucose and glutamine metabolism. *Cell reports*, 44(9), 116177.

Kaluba FC, et al. (2025) An alternative route for γ -hydroxybutyrate metabolism supports cytosolic acetyl-CoA synthesis in cancer cells. *Nature metabolism*.

Pérez-Mojica JE, et al. (2025) Resolving early embryonic metabolism in *Drosophila* through single-embryo metabolomics and transcriptomics. *Nature metabolism*.

Murata SA, et al. (2025) High Baseline Plasma Anthranilic Acid Predicts Remission Upon Acute-Series Ketamine Infusion for Treatment-Resistant Depression. *Biological psychiatry global open science*, 5(4), 100503.

Dahabieh MS, et al. (2025) The prostacyclin receptor PTGIR is a NRF2-dependent regulator of CD8⁺ T cell exhaustion. *Nature immunology*, 26(7), 1139.

Liu M, et al. (2025) Dnmt3a2 expression during embryonic development is required for phenotypic stability. *Communications biology*, 9(1), 44.

Oswald BM, et al. (2025) Dietary restriction reprograms CD8⁺ T cell fate to enhance anti-tumour immunity and immunotherapy responses. *Nature metabolism*, 7(12), 2489.

Jones P, et al. (2025) Dnmt3a2 expression during embryonic development is required for phenotypic stability. *Research square*.