Q-MAP Queensland - Metabolomics And Proteomics

Our ultra-high resolution Orbitraps offer the highest standard in sensitivity, performance and reproducibility to solve complex Metabolomics and Proteomics challenges.

Orbitrap Eclipse

- Protein identification and quantification at the nanogram level
- Single cell protein identification and quantification using TMT technology
- FAIMS ion source filter for increased sensitivity and extended protein sequence coverage
- Post-translational modification analysis
- Small molecule profiling and MS^3

Orbitrap Exploris 480

- Protein identification and quantification at low microgram or sub-million cells level
- FAIMS ion source filter for increased sensitivity and extended protein sequence coverage
- Post-translational modification analysis

Orbitrap Q Exactive HF

- Protein identification and quantification at milligram or many millions of cells level
- Small molecule open profiling

metabolomics@uq.edu.au
www.qmap.org.au

The University of Queensland Australia
Q-MAP Metabolomics And Proteomics
Metabolomics Australia
Bioplatforms Australia
NCRIS National Research Infrastructure for Australia
An Australian Government Initiative

State of the art equipment

LC-MS/MS

- Two Shimadzu 8060
- Sciex QTRAP 4000
  - Targeted quantitative analyses: *e.g.* central carbon metabolism, short chain fatty acids
  - Fluxomics: *e.g.* $U^{13}C$ *central carbon metabolism*
  - Targeted metabolites belonging to specific metabolic pathways: *e.g.* isoprenoids

GC-MS/MS

- Two Shimadzu TQ 8050 ultra-high sensitivity triple quadrupole GC-MS/MS
- Agilent 5975C GC-MS
  - Open profiling of a library of hundreds of compounds : *e.g.* amino acids, organic acids, sugars, fatty acids
  - Targeted quantitative analyses: *e.g.* alcohols
  - Headspace: *e.g.* volatile organic, permanent & light gases

UHPLC

- Three Thermo Scientific Vanquish Duo UHPLC
- Two Agilent HPLC
- Detectors: FLD, DAD, RID, ELSD, CAD
  - Targeted quantitative analyses: *e.g.* amino acids, organic acids, sugars, alcohols, aromatic compounds, crotonic acid, isoprenoids & more

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The University Of Queensland
Australia

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AUSTRALIA

BIOPLATFORMS
AUSTRALIA

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