



Department of Molecular and Cellular Biology
University of Guelph NMR Centre

NMR-Based Metabolomics Tools and Advances in Metabolite Isolation

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One of the early bottlenecks in the field of nuclear magnetic resonance (NMR)-based metabolomics was analysis of complex data. With dozens of small molecules present in a sample, quickly identifying compounds using traditional NMR methods was intractable. To facilitate a bioinformatic approach we established a database to allow users to search for metabolite chemical shifts defined under standard conditions, the Madison-Qindao Metabolomics Consortium Database (MMCD). To take advantage of this resource we have also developed fast, quantitative methods for data collection as well as a robust suite of software for high throughput analysis of NMR based metabolomics datasets. Our most recent development has been the semi-automated metabolite batch extraction device (SAMBED), which allows for rapid metabolite isolation in batch fashion.

SCIE1511, May 24th at 11 am: Tools for NMR-based metabolomics

SCIE1511, May 25th at 11 am: Workshop on data interpretation

James Ellinger will visit the lab of Janet Wood (X53866) from May 23rd-28th