



The NIH Common Fund Metabolomics Consortium



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Consortium Goals

1. *Establish an enduring public repository* for metabolomic data
2. *Overcome technical hurdles* in analyzing and interpreting metabolomics data, including the ability to determine metabolite identities
3. *Develop consensus* for, and promote adoption of, best practices and guidelines to promote accuracy, reproducibility, and re-analysis of metabolomics data in collaboration with the national and international communities.



Scan for additional
information on
consortium cores

Consortium Cores

National Metabolomics Data Repository, Metabolomics Workbench <http://metabolomicsworkbench.org>

Shankar Subramanian, University of California San Diego, National Metabolomics Data Repository NextGen Metabolomics Workbench

Five Compound Identification Cores

Arthur S. Edison, University of Georgia, Genetics and Quantum Chemistry as Tools for Unknown Metabolite Identification

Alexey Nesvizhskii, Charles R. Evans, University of Michigan, Michigan Compound Identification Development Cores (MCIDC)

Oliver Fiehn, University of California Davis, West Coast Metabolomics Center for Compound Identification

Dean Paul Jones, Shuzhao Li, Gary W. Miller, Edward T. Morgan, Emory University, Mega-scale Identification Tools for Xenobiotic Metabolism

Thomas O. Metz, Pacific Northwest National Laboratory, Pacific Northwest Laboratory Compound Identification Core

Seven Data and Tools Cores

John Weinstein, Rehan Akbani, Bradley M. Bloom, University of Texas MD Anderson Cancer Center, Computational Tools for Analysis and Visualization of Quality Control Issues in Metabolomic Data

Jamey Young, Doug Allen, Vanderbilt University, Tools for Leveraging High-resolution MS Detection of Stable Isotope Enrichments to Upgrade the Information Content of Metabolomics Datasets

XiuXia Du, University of North Carolina Charlotte, Cross-platform and Graphics Software Tool for Adaptive LC/MS and GS Metabolomics Data Processing

Shuzhao Li, Emory University, Gary Siuzdak, Scripps Research Institute, Mummichog 3, Aligning Mass Spectrometry Data to Biological Networks

Alla Karnovsky, University of Michigan, George Michailidis, University of Florida, Methods and Tools for Integrative Functional Enrichment Analysis of Metabolomics Data

Katerina Kechris, Debashis Ghosh, University of Colorado Denver, Addressing Sparsity in Metabolomics Data Analysis

Garry Patti, Washington University at St. Louis, A Comprehensive Platform for High-Throughput Profiling of the Human Reference Metabolome

Consortium Coordinating Center <http://metabolomics.info>

Richard A. Yost, Michael Conlon, University of Florida, Metabolomics Consortium Coordinating Center

Participating in the Consortium

- ☐ Consortium workgroups are open to all. Workgroups identify hurdles, develop best practices, contribute to repository development, and build consensus. Current workgroups include:
 - Software standards for Metabolomics Tool Development, Jamey Young, Vanderbilt University, chair.
 - Quantum Mechanical Computing Best Practices, Art Edison, University of Georgia, chair
 - Unknown lipids data exchange, Charles Evans, University of Michigan, chair
- ☐ The Metabolomics Workbench is open to all. Find, use, and contribute FAIR metabolomics data. See <https://www.metabolomicsworkbench.org/data/>
- ☐ For more info, or to participate in a workgroup, visit <http://metabolomics.info>, contact us at info@metabolomics.info, or follow us on Twitter [@metabinfo](https://twitter.com/metabinfo)