Special Issue

Mass Spectrometry-Based Metabolomics and Lipidomics for Biomarker Discovery and Drug Development

Message from the Guest Editor

Metabolomics and lipidomics, making up the largest part of metabolomics, have become valuable tools to enhance our understanding of disease mechanisms and drug effects, as well as for improving our ability to predict individual variation in drug response phenotypes and shape more targeted responses. Refinements in the identification and characterization of new biomarkers will allow earlier and more accurate diagnosis and prevention of many diseases, which in turn, will be valuable in the discovery of new drugs for both prevention and treatment. The most widely used analytical tools for metabolomics and lipidomics include NMR, LC-MS/MS and GC-MS/MS. Their impacts are expanding dramatically as the use of these and other technologies grows throughout the spectrum of drug discovery and development, and as their applications broaden. This Special Issue is devoted to metabolomics and lipidomics studies to aid in the research on disease mechanisms and on biomarker discovery and drug development. These technologies and their everexpanding applications are proving to be great tools for biomarker discovery and validation.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

The metabolome is the result of the combined effects of genetic and environmental influences on metabolic processes. Metabolomic studies can provide a global view of metabolism and thereby improve our understanding of the underlying biology. Advances in metabolomic technologies have shown utility for elucidating mechanisms which underlie fundamental biological processes including disease pathology. *Metabolites* is proud to be part of the development of metabolomics and we look forward to working with many of you to publish high quality metabolomic studies.

Editor-in-Chief

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