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## New Tools for Metabolomics

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### Message from the Guest Editors

Metabolomics, the process of identifying and quantifying metabolites within a cell, tissue, or organism, provides functional information that represents the sum of actions by genes, RNA, proteins, and external factors. The richness of metabolic information has stimulated research for more than a century, but the technology for delivering more comprehensive data about metabolic components and the corresponding pathway dynamics has only been available for a short time. Nuclear magnetic resonance (NMR) spectroscopy, high-resolution mass spectrometry, integration of methodologies and tools, and powerful software tools have led to rapid advances and accelerated research opportunities. In this Special Edition, we have invited a selection of emerging techniques, established methodologies, and technological innovations in order to provide a timely overview of the current state-of-the-art. By inviting authors that represent a diverse cross-section of research efforts in the field, this issue aims to forecast a vision for the future of tools, methodologies, and technologies that will advance the state-of-the-art of research in the field.



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# Special Issue



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## 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.

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