

Mass Spectrometry: A Powerful Tool for Comprehensive Metabolomic Profiling of Cells and Tissues

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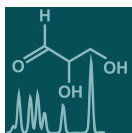
Message from the Guest Editors

Comprehensive metabolomic profiling of cells and tissues can help us discover new drug targets, find biomarkers for disease diagnosis, and study absorption, distribution, metabolism and excretion (ADME) of drugs.

MS is one of the most powerful analytical platforms. However, achieving high-coverage analysis of metabolites in cells and tissues is still very challenging. It is desirable to develop more sensitive MS technique for realizing comprehensive metabolomic analysis of cells and tissues. More than that, there are various of other challenges in cell and tissue metabolomic profiling: data processing, linking with other -omics techniques and metabolite identification.

This Special Issue highlights the development of MS for comprehensive analysis of metabolites in cells and tissues. The Special Issue covers, but is not limited to, untargeted metabolomic profiling of cells and tissues, targeted metabolites analysis in cells and tissues, single cell metabolomics, developing new algorithms to improve data processing and metabolite identification rate, novel chemical derivatization method development, and application of cellular and tissue metabolomics in clinical diagnosis.





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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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