



## Metabolomics and Bioinformatics Approaches to Studying Human Gut Microbiota-Derived Metabolites

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### Message from the Guest Editors

Dear Colleagues,

The human gastrointestinal tract harbors trillions of microbes that influence human health and physiology. One of the key ways that the gut microbiota affects the host's health is by producing bioactive metabolites. Mass spectrometry-based metabolomics, together with advances in bioinformatics, enables the capture of thousands of metabolites.

This Special Issue aims to facilitate the development and applications of metabolomics and bioinformatics approaches in gut microbiome research. It welcomes original research articles, short communications, protocols, reviews, and perspectives on topics including, but not limited to, the following: 1) the development of analytical methodologies to qualify and quantify gut microbiota-derived metabolites; 2) advanced metabolomics and bioinformatics approaches to accelerate data analysis of the microbiome and metabolomics; 3) metabolomics and multiomics studies of bacterial cultures, animal models, and human cohort samples to deepen our understanding of the impact of the gut microbiome; 4) the roles and impacts of the gut microbiome and its derived metabolites on host health and diseases.





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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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