







an Open Access Journal by MDPI

Recent Developments and Emerging Trends in Metabolic Modelling and Metabolomics

Guest Editors:

Prof. Dr. Johnjoe McFadden Faculty of Health and Medical

Sciences, University of Surrey, Guildford, Surrey, UK

Dr. Khushboo Borah Slater

Faculty of Health and Medical Sciences, University of Surrey, Guildford, Surrey, UK

Deadline for manuscript submissions:

31 December 2024

Message from the Guest Editors

Metabolism is critical to the growth and functioning of any biological system. The knowledge of metabolic phenotypes of living cells provides avenues for the development of new therapies and the identification of biomarkers for various diseases, or in metabolic engineering for industrial applications. Metabolomics and systems-based tools such as metabolic flux analysis and genome-scale modelling are popular approaches for measuring metabolism. There have been continuous efforts in refining and advancing analytical platforms and flux analysis tools to provide detailed insights into cellular metabolism and metabolic fluxes. This Special Issue focuses on recent developments and emerging trends in metabolomic studies and in metabolic modelling. It will cover the application of these tools in various disciplines ranging from human diseases to microbial biotechnology.













an Open Access Journal by MDPI

Editor-in-Chief

Dr. Amedeo Lonardo

1. Formerly Director of the Simple Operating Unit "Metabolic Syndrome", Azienda Ospedaliero-Universitaria, 41126 Modena, Italy 2. Formerly Professor of Internal Medicine, School of Specialization of Allergology and Clinical Immunology, University of Modena and Reggio Emilia, 41121 Modena, Italy

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 shown utility for elucidating have 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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Biochemistry & Molecular Biology*) / CiteScore - Q2 (*Endocrinology, Diabetes and Metabolism*)

Contact Us