Special Issue

Comprehensive Insights into Metabolic Pathways: Genome-Scale Modeling Techniques

Message from the Guest Editor

This Special Issue, entitled "Comprehensive Insights into Metabolic Pathways: Genome-Scale Modeling Techniques", seeks to explore the cutting-edge developments and applications of genome-scale metabolic models (GEMs) and related techniques in understanding complex biological systems. With the rapid advancement of high-throughput omics technologies, GEMs have emerged as powerful tools for mapping and simulating the intricate networks of metabolic pathways across various organisms. This Special Issue invites researchers to submit original research, reviews, and case studies that highlight innovative approaches to genome-scale modeling, including the integration of multi-omics data, machine learning techniques, and novel algorithms. This Special Issue will focus on the integration of the computational biology, systems biology, and bioinformatics fields along with experimental data to analyze and predict the behavior of complex metabolic systems at the cellular level.

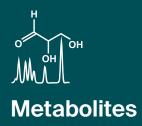
Guest Editor

Dr. Priyanka Baloni

School of Health Sciences, Purdue University, West Lafayette, IN 47906, USA

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Metabolites
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metabolites@mdpi.com

mdpi.com/journal/ metabolites





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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

Dr. Amedeo Lonardo

Internal Medicine, Ospedale Civile di Baggiovara, Azienda Ospedaliero-Universitaria, 41126 Modena, Italy

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