Special Issue

Molecular Mechanisms and Therapeutic Strategies for Metabolic Dysfunction: From Molecules to Population Health

Message from the Guest Editor

This Special Issue aims to provide a comprehensive platform for advancing our understanding of the molecular underpinnings of metabolic dysfunction and its associated comorbidities. By integrating insights from basic molecular biology, multi-omics profiling, genetic association studies, and translational research, we seek to highlight how mechanistic discoveries can inform novel therapeutic interventions and preventive strategies. In doing so, this issue will bridge experimental research and population-scale data, offering a holistic perspective on disease pathogenesis, prevention, and treatment. Research areas may include (but are not limited to) the following:

- Molecular and physiological mechanisms underlying metabolic dysfunction
- Identification of novel therapeutic targets and development of precision medicine strategies
- Genetic and epigenetic determinants of metabolic disorders
- Molecular interplay between metabolic dysfunction and its comorbidities
- Genetic epidemiology approaches to investigate causal relationships between risk factors and metabolic outcomes
- Biomarker discovery and molecular diagnostics for metabolic syndrome

We look forward to receiving your contributions.

Guest Editor

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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