

Special Issue

Molecular Mechanisms and Translational Research on Insulin Resistance

Message from the Guest Editor

Insulin resistance lies at the core of numerous metabolic diseases, including type 2 diabetes mellitus, obesity, non-alcoholic fatty liver disease, and cardiovascular diseases, amongst others. With the prevalence of metabolic disorders rising globally, we need to deepen our understanding of the biological mechanisms driving insulin resistance and translate this knowledge into effective clinical strategies. This Special Issue will showcase current advances in molecular research and translational approaches related to insulin resistance.

Authors are invited to submit original research articles, reviews, and clinical studies that address, but are not limited to, the following themes:

1. Disruptions in insulin signaling pathways and metabolic regulation;
2. The role of epigenetics and epitranscriptomics in insulin resistance;
3. The role of inflammatory pathways, oxidative stress, and mitochondrial dysfunction in insulin resistance;
4. Identifying and validating novel biomarkers for insulin resistance;
5. Emerging therapeutic interventions, including pharmacological approaches, for combatting insulin resistance.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

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