

Special Issue

Unraveling the Epigenetic Blueprint: Exploring DNA Methylation and Its Integration with Omics in Health and Disease

Message from the Guest Editors

Epigenetic mechanisms are involved in development, inheritance, and disease. Over the last decade, the field of epigenetics research has grown tremendously, accelerating our understanding of human biology and its interaction with the environment. Several groundbreaking discoveries are continuing to grow in number and scope due to their appealing potential in gene regulation, editing, aging, and preventative interventions for complex diseases. This Special Issue welcomes original research and methodical or review articles and aims to provide an opportunity to highlight studies involving and integrating epigenetics research, including, but not limited to, data generated through techniques such as ChIP-seq, ATAC-seq, whole-genome DNA methylation such as WGBS or RRBS, EPIC arrays, RNA sequencing, single-cell RNA-seq (scRNA-seq), single-cell epigenetics/epigenomics, metabolomics, proteomics, exposomics, therapeutics, aging, growth and developmental trajectories, multiomics, spatial transcriptomics/epigenomics, and techniques elucidating the role of micro-RNAs and non-coding RNAs in epigenetic modulation.

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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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