# **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, wholegenome DNA methylation such as WGBS or RRBS, EPIC arrays, RNA sequencing, single-cell RNA-seq (scRNAseq), 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 noncoding RNAs in epigenetic modulation.

### **Guest Editors**

Dr. Priyadarshini Kachroo

Department of Biomedical and Health Informatics, Rutgers School of Health Professions, Rutgers, The State University of New Jersey, Newark, NJ, USA

Dr. Rinku Sharma

Channing Division of Network Medicine (CDNM), Medicine, Brigham and Women's Hospital & Harvard Medical School, Boston, MA, USA

### Deadline for manuscript submissions

31 May 2026



an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 6.8 Indexed in PubMed



mdpi.com/si/211946

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

mdpi.com/journal/biomedicines





an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 6.8 Indexed in PubMed





## **About the Journal**

### Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access iournal 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.

### Editor-in-Chief

### Prof. Dr. Felipe Fregni

- Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
- 2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

### **Author Benefits**

### **High Visibility:**

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

### Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

### **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).