Special Issue

DNA Methylation in Health and Disease

Message from the Guest Editors

Dear colleagues, DNA methylation represents one of the most well-known and stable epigenetic modifications, with patterns of DNA methylation being faithfully copied through cell divisions. However, during most physiological and pathological processes of adaptation, active changes to the DNA methylation landscape occur, and major efforts are made to document them and understand how they can predict or underlie future responses. Recent methodological developments for single cell analyses and thedeconvolution of tissue-level DNA methylation patterns now enable us to characterize these changes at an unprecedented resolution and with unsurpassed accuracy. This Special Issue will highlight advances made in this field by summarizing the roles of DNA methylation in both health and diseases as diagnostic and prognostic biomarkers, by reviewing where they are situated in the genome and how methylation changes come about, and by describing how stable changes can mechanistically impact future cellular and organismal processes.

- DNA methylation
- biomarkers
- epigenetics
- cellular heterogeneity

Guest Editors

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Deadline for manuscript submissions

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About the Journal

Message from the Editorial Board

Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).