

Special Issue

The Role of Epigenetics in Cell Fate Determination, Cancer Development, and Aging

Message from the Guest Editors

This Special Issue aims to gather a collection of high-quality original research and review articles that illuminate the intricate roles of epigenetics in controlling cell fate, driving cancer initiation and progression, and modulating aging. We seek to highlight novel mechanisms, cutting-edge technologies, potential diagnostic biomarkers.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

Epigenetic control of stem cell self-renewal and differentiation.

Epigenome editing and the reprogramming of cell fate.

The role of chromatin remodelers and epigenetic modifiers in development.

Epigenetic drivers and markers in cancer etiology and tumor heterogeneity.

Epigenetic clocks and their connection to biological aging.

Mechanisms driving aberrant epigenetic alterations during aging.

The interplay between metabolism, environment, and the epigenome in aging and disease.

Advances in single-cell epigenomics and other novel technologies.

Guest Editors

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Message from the Editorial Board

A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

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