Special Issue

Cellular and Molecular Mechanisms in Aging

Message from the Guest Editors

Aging is a complex biological process influenced by genetic, environmental, and lifestyle factors. Cellular models have become essential tools in unraveling the molecular and cellular mechanisms that drive aging and age-related diseases. These models, including primary cells, immortalized cell lines, and induced pluripotent stem cells (iPSCs), offer unique insights into the functional decline of cells, tissues, and organs over time. In this Special Issue of *Cells*, we invite original research articles, reviews, or short perspectives that explore the uses of cellular models in aging research. Topics of interest include the following:

- Cellular senescence and aging;
- Genomic stability and DNA repair mechanisms;
- Oxidative stress and mitochondrial dysfunction;
- Cellular models of neurodegeneration and cardiovascular aging;
- In vitro models for lifespan and healthspan studies.

We look forward to your contributions to further advance our understanding of aging at the cellular level.

Guest Editors

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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.

Editors-in-Chief

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

Journal Rank:

JCR - Q2 (Cell Biology) / CiteScore - Q1 (General Biochemistry, Genetics and Molecular Biology)

Rapid Publication:

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).