

Topical Collection

Advances in Cell Culture and Tissue Engineering

Message from the Collection Editors

Cell culture systems are one of the most important tools in cellular and molecular biology, tissue engineering, drug discovery, and beyond. They are essential to address basic research questions, and to pave the way for therapeutic approaches. One crucial requirement of cell culture systems is their ability to resemble key aspects of their in vivo counterpart. As a result, many advances have been made towards complex 2-dimensional/3-dimensional cell cultures, ex-vivo cultures, the modeling of microenvironments, and the engineering of tissues. This Special Issue thus aims to highlight these recent developments in cell culture systems and tissue engineering including 2-dimensional/3-dimensional cell culture systems, in studies according to (patho)physiological events, as well as toxicity studies. Such cell culture systems provide excellent model systems for the investigation of the physiological and pathophysiological responses of cells in great detail and over time, the metabolism of cells, the effects of drugs or toxic compounds on the cells, and mutagenesis and last but not least carcinogenesis.

Collection 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.

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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).