



cells



an Open Access Journal by MDPI

Microenvironmental Factors and Functional Modulation in Mesenchymal Stem Cells 2.0

Guest Editors:

Dr. Mohamed Mekhemar

Clinic for Conservative Dentistry and Periodontology, University of Kiel, 24105 Kiel, Germany

Prof. Dr. Karim Mohamed Fawzy El-Sayed

1. Clinic for Conservative Dentistry and Periodontology, University of Kiel, 24105 Kiel, Germany
2. Faculty of Oral and Dental Medicine, Cairo University, Cairo, Egypt

Deadline for manuscript submissions:

closed (31 March 2024)

Message from the Guest Editors

Dear Colleagues,

Mesenchymal stem cells (MSCs) are biological candidates for numerous applications in the fields of regenerative medicine and immunotherapy. Their multilineage differentiation ability and immune modulatory functions promote their application for disease management in different inflammatory, degenerative, and immunological conditions. However, the local cellular microenvironment and the MSC source can control miscellaneous biological features of these cells. The crosstalk between mesenchymal stem cells and numerous microenvironmental factors has been reported to endorse a variety of biological responses and functions. Stimulation or inhibition of MSC receptors and functions by the surrounding microenvironmental factors before or within potential treatment events may serve as an effective method to control the biological function of MSCs as needed in different therapeutic stages of the disease.

This Special Issue aims to be a collection of recent research on microenvironmental factors and functional modulation in mesenchymal stem cells.

We look forward to your contributions.



mdpi.com/si/180462

Special Issue



cells



an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Alexander E. Kalyuzhny

Neuroscience, UMN Twin Cities,
6-145 Jackson Hall, 321 Church St
SE, Minneapolis, MN 55455, USA

Prof. Dr. Cord Brakebusch

Biotech Research & Innovation
Centre, The University of
Copenhagen, Copenhagen,
Denmark

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.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [CAPus / SciFinder](#), and [other databases](#).

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

Contact Us

Cells Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/cells
cells@mdpi.com
[X@Cells_MDPI](#)