Special Issue

Mechanotransduction in Cell Functioning and (Patho)physiology

Message from the Guest Editors

Years of intense research established nowadays the general concept that mechanotransduction, i.e., the signalling pathway by which cells sense and interpret microenvironmental physical forces (e.g., tension, compression, distortion, friction) and biophysical cues (e.g., rigidity, topography), affects virtually all cell biological processes, and therefore tissue homeostasis and organ development. We would be glad to receive original research articles, as well as reviews, that may include (but are certainly not limited to) the following topics:

- Cell biological studies in response to mechanotransductive stimuli (in bulk or single cell analyses)
- Extracellular matrix or glycocalyx effects on mechanotransduction
- Forces in mechanotransduction
- Tissue level studies related to mechanobiology
- Mechanobiology and metabolism
- Mechanobiology in chromatin remodelling and epigenetic regulation
- Pathophysiological aberrations associated with mechanotransductive components or structures
- Mechanopharmacology
- Bioinformatic tools integrating proteomic-genomic data and computational modelling applied to mechanotransduction.

Guest Editors

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Dr. Carla Perego
Dr. Carmelo Ferrai

Deadline for manuscript submissions

closed (15 March 2024)

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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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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 15.5 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).