

Special Issue

Cell Division: A Focus on Molecular Mechanisms

Message from the Guest Editors

Cells divide and reproduce via two types of cell division processes: mitosis and meiosis. Both processes require a highly regulated and carefully orchestrated sequence of events that induce remodeling of both the cytoskeleton and cell membranes. These changes ensure the formation of new cellular structures, such as the spindle apparatus necessary for correct chromosome segregation, and the disassembly/remodeling of pre-existing structures, such as the endoplasmic reticulum, Golgi apparatus and nuclear envelope later distributed and reformed in the cells that arise. Cytoplasmic material and smaller organelles, such as mitochondria, must also be distributed correctly within daughter cells. The failure of these mechanisms is the basis of numerous human pathologies such as cancer. Therefore, we welcome original papers and review articles to this Special Issue, with a focus on recent studies that disseminate greater knowledge of cell division and the molecular mechanisms that regulate this process to better understand its role in pathologies.

Guest Editors

Dr. Stefano Sechi

National Research Council (CNR)–Institute of Molecular Biology and Pathology (IBPM), c/o Department of Biology and Biotechnology “Charles Darwin”, Sapienza University of Rome, 00185 Roma, Italy

Dr. Antonino Colanzi

Institute of Experimental Endocrinology and Oncology “G. Salvatore” (IEOS), National Research Council (CNR), 80131 Naples, Italy

Deadline for manuscript submissions

closed (20 July 2025)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/187923

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)





International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



About the Journal

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle
Marche, Via Ranieri 65, 60100 Ancona, Italy

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, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore
- Q1 (Organic Chemistry)