

## Special Issue

# Mechanical and Biochemical Interplay between Cells and Their Microenvironment

### Message from the Guest Editor

In vivo, cells are embedded in the extracellular matrix (ECM) a specialized and dynamic 3D network composed of a multitude of fibrous and non-fibrous proteins. The ECM provides biochemical and mechanical signals regulating key features of cells like proliferation, migration, differentiation, apoptosis or metabolism; conversely, cells can modulate ECM structure and composition. Alterations of this reciprocal interplay are observed in various diseases notably cancer thus impairing tissue homeostasis. In this special issue, we welcome the submission of manuscripts investigating original mechanisms responsible for the (dys)regulations of cell-ECM crosstalk in various pathophysiological contexts including cancer. We are especially, but not exclusively, interested in manuscripts describing how ECM structure and/or composition are altered and how cells sense and respond to altered ECM. Manuscripts dealing with cell-ECM mechanobiology, ECM-modifying enzymes or describing new therapeutic strategies aiming at modifying ECM structure and composition as well as review papers are warmly welcome.

### Guest Editor

Dr. Christophe Deroanne

Laboratory of Connective Tissues Biology, GIGA-Research, University of Liège, Belgium

### Deadline for manuscript submissions

closed (30 October 2021)



## International Journal of Molecular Sciences

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/68383](https://mdpi.com/si/68383)

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