

## Special Issue

# Amniotic Fluid and Placental Membranes as Sources of Stem Cells: Progress and Challenges

### Message from the Guest Editors

Stem cell research drew the attention toward amniotic membrane and amniotic fluid stem cells, since these sources possess many advantages: first of all cells can be extracted from discarded fetal material, secondly abundant stem cells can be obtained and finally, these stem cell sources are free from ethical considerations and tumorigenicity. Stem cells derived from amniotic fluid and membranes possess embryonic stem cell-like differentiation capability and, similar to mesenchymal stem cells, are also able to modulate the local immune response. Their reduced immunogenicity and immunomodulatory properties allow their use in allo and xeno-transplantation settings. These, and other properties, make these cells attractive for cellular therapy. This Special Issue on “Amniotic fluid and placental membranes as sources of stem cells: progress and challenges” welcomes original research articles that illustrate and stimulate the growing efforts to understand the implication of stem cells in pathological conditions such as cardiovascular and metabolic diseases, inflammatory, autoimmune, skeletal and degenerative diseases.

---

### Guest Editors

Dr. Tullia Maraldi

Department of Biomedical, Metabolic and Neural Sciences, University of Modena and Reggio Emilia, 41125 Modena, Italy

Prof. Dr. Valentina Russo

Faculty of Bioscience and Agro-Food and Environmental Technology, Agriculture and Environment, University of Teramo, Via Renato Balzarini 1, 64100 Teramo, Italy

---

### Deadline for manuscript submissions

closed (19 March 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/50661](https://mdpi.com/si/50661)

*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)