

## Special Issue

# The Powerhouse: Mitochondria in Health and Disease

### Message from the Guest Editor

With each passing year, greater understanding of the complex regulatory points within the mammalian cell offers opportunities to improve various human health issues via targeted therapies with the potential to prevent medical problems. Alterations in mitochondrial function are closely linked to the development of various diseases and are known to modulate targeted therapies. In this Special Issue, medical researchers are invited to submit high-quality original research articles related to mitochondrial functions in health and disease.

Health-related papers exploring mitochondrial dysfunction and the signaling pathways associated with mitochondrial energetics, dynamics, biogenesis, mitophagy, reactive oxygen species generation, and metabolic events are especially welcomed. In particular, manuscripts reporting on mitochondria-targeted therapies highlighting the significance of mitochondria in disease processes and therapies of multiple systems. These continued research efforts will likely provide a basis for refining the integration of multiple aspects of mitochondrial function in order to move closer to a precision medicine approach for the diagnosis and management of diseases.

---

### Guest Editor

Dr. Eltyeb Abdelwahid

Feinberg Cardiovascular Research Institute, Feinberg School of Medicine, Northwestern University, Chicago, IL 60611, USA

---

### Deadline for manuscript submissions

closed (20 May 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/192122](https://mdpi.com/si/192122)

*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)