

Special Issue

Mitochondrial Dysfunctions and Metabolisms

Message from the Guest Editor

Over the last 30 years, significant advances have been achieved towards the elucidation of the mechanistic aspects of mitochondrial diseases, a heterogeneous group of inherited metabolic disorders characterized by defective ATP production through oxidative phosphorylation. They are caused by mutations in both mitochondrial- and nuclear-gene-encoding proteins with a wide variety of functions, ranging from structural subunits and/or assembly factors of respiratory complexes to biosynthesis of prosthetic groups, clearance of toxic compounds, protein quality control and degradation, mitochondrial fusion and fission, and several others. It is therefore not surprising that mitochondrial diseases have an impact, either directly or indirectly, on the overall metabolism, especially in high-energy-demanding cells, such as neurons and cardiomyocytes.

This Special Issue is calling for both original articles and reviews providing insights into the molecular mechanisms leading to metabolic dysfunctions afflicting patients with mitochondrial disorders, and into pharmacological strategies to fight them.

Guest Editor

Dr. Paola Costantini

Department of Biology, University of Padova, Via Ugo Bassi 58/B, 35131 Padova, Italy

Deadline for manuscript submissions

closed (31 August 2024)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/159030

*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)