Special Issue

Mitochondrial Dysfunction: A Metabolic, Cardiovascular, Neurodegenerative and Neuromuscular Issue

Message from the Guest Editors

Mitochondrial diseases are a large group of genetically determined multisystem disorders, characterized by extreme phenotypic heterogeneity, attributable in part to the dual genomic control of the mitochondrial proteome. The correct use of biochemical and histology testing, in combination with imaging studies, has proved helpful in genotype-phenotype correlations. However, new therapeutic research approaches are improving our knowledge in the functions of mitochondrial genes, their expression pattern, features of gene defects or risk of transmission. This Special Issue focuses on mitochondrial dysfunction in neurodegenerative and cardiovascular diseases, aging, cancer and signaling pathways leading to mitochondrial biogenesis and mitophagy. We will welcome original research articles, comprehensive reviews and novel communications dealing with the molecular pathways underlying the role of mitochondria in disease mechanisms or expanding genotype-phenotype correlations.

Guest Editors

Dr. Stefano Doccini

Molecular Medicine, IRCCS Fondazione Stella Maris, via dei Giacinti 2, Calambrone, 56128 Pisa, Italy

Dr. Federica Morani

Department of Biology, University of Pisa, 56126 Pisa, Italy

Prof. Dr. Wieslawa Jarmuszkiewicz

Department of Bioenergetics, Adam Mickiewicz University, 61-614 Poznan, Poland

Deadline for manuscript submissions

closed (20 April 2023)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/110892

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





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





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)

