



Mitochondrial Protein Network: From Biogenesis to Bioenergetics in Health and Disease 2.0

Guest Editor:

Dr. Alessandra Ferramosca

Dipartimento di Scienze e
Tecnologie Biologiche ed
Ambientali, Università del
Salento, Via Provinciale Lecce-
Monteroni, I-73100 Lecce, Italy

Deadline for manuscript
submissions:

closed (30 June 2021)

Message from the Guest Editor

Dear Colleagues,

Mitochondria contain more than 1000 proteins encoded by both mitochondrial and nuclear genomes. Although mitochondria contain autonomous genomes (mitochondrial DNA), the great majority of mitochondrial proteins are encoded by nuclear genes synthesized by cytosolic ribosomes and translocated into mitochondria by multicomponent import machinery. Mitochondrial proteins perform functions crucial for the viability of eukaryotic cells, as they are involved in respiration, metabolite transport, protein translocation, protein quality control, oxidoreductive homeostasis, and numerous other processes. Interestingly, mitochondrial protein machineries, which have diverse functions, are connected in complex and dynamic networks, and the failure of these systems can lead to the development of disease.

The aim of this Special Issue is to reveal the complexity and versatility of mitochondrial activities, integrating mitochondrial energetics and metabolism with protein biogenesis. A deeper investigation of the functional crosstalk between mitochondrial proteins may reveal the importance of this crosstalk in contributing to pathologies caused by dysfunctional mitochondria.





an Open Access Journal by MDPI

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

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.

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 & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI