



biology



an Open Access Journal by MDPI

The Emerging Role of Mitochondria in Neurobiology

Guest Editors:

Dr. Filipe V. Duarte

Center for Neuroscience and Cell Biology (CNC), University of Coimbra (UC), Coimbra, Portugal

Dr. Claudia Deus

Multidisciplinary Institute of Ageing (MIA-Portugal), University of Coimbra, Coimbra, Portugal

Deadline for manuscript submissions:

31 March 2025

Message from the Guest Editors

Dear Colleagues,

Mitochondria, often recognised as the powerhouse of the cell, have increasingly been identified as crucial players in neurobiological processes. This Special Issue aims to gather cutting-edge research that elucidates the multifaceted roles of mitochondria in neural function, development, and disease.

We invite contributions investigating mitochondrial dynamics, bioenergetics, and their regulatory mechanisms within the nervous system. Submissions exploring how mitochondrial dysfunction contributes to neurodegenerative diseases (e.g., AD, PD, and ALS) are particularly welcome. Additionally, we seek studies on mitochondrial involvement in neural plasticity, synaptic function, and neurogenesis.

This Special Issue will provide a comprehensive overview of the current state of mitochondrial research in neurobiology, highlighting novel discoveries and technological advancements. We encourage the submission of original research articles, reviews, and methodological papers that contribute to a deeper understanding of mitochondrial roles in the realm of neural health and disease.



mdpi.com/si/208360

Special Issue



an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Jukka Finne

Research Programme in
Molecular and Integrative
Biosciences, Faculty of Biological
and Environmental Sciences,
University of Helsinki, P.O. Box
56, FI-00014 Helsinki, Finland

Prof. Dr. Andrés Moya

Integrative Systems Biology
Institute, University of Valencia
and CSIC, 46980 Valencia, Spain

Message from the Editorial Board

A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

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, PubAg, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Biology) / CiteScore - Q1 (General Agricultural and Biological Sciences)

Contact Us

Biology Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/biology
biology@mdpi.com
[X@Biology_MDPI](https://twitter.com/Biology_MDPI)