





an Open Access Journal by MDPI

Mitochondrial Dynamics in Neurons

Guest Editors:

Dr. Ramon Trullas

 Neurobiology Unit, Institut d'Investigacions Biomèdiques de Barcelona (CSIC), 08036 Barcelona, Spain
 Centro de Investigación Biomédica en Red sobre Enfermedades
Neurodegenerativas (CIBERNED), 08036 Barcelona, Spain

Dr. Anna Colell

Neurobiology Unit, Institut d'Investigacions Biomèdiques de Barcelona, Consejo Superior de Investigaciones Científicas (CSIC), and Centro de Investigación en Red de Enfermedades Neurodegenerativas (CIBERNED), Spain

Deadline for manuscript submissions:

closed (31 July 2022)

Message from the Guest Editors

Dear Colleagues,

The chemical energy provided by the mitochondria is essential for proper neuronal function. The continuous distribution of mitochondrial energy required by neurons involves several biochemical processes that are closely coordinated by mito-nuclear communication, which adjusts neuronal bioenergetics in an activity-dependent manner. These processes include mitochondrial fusion, fission, and transport; mitochondrial quality control; replication, transcription, and translation of mitochondrial DNA. The alteration of any of these processes is at the root of various neurodegenerative diseases (NDs).

This Special Issue aims to cover research on cellular and molecular mechanisms involved in the regulation of mitochondrial dynamics and the mitochondrial DNA copy number in neurons. We will also incorporate research that aims to ascertain the role of mito-nuclear communication, mitochondrial quality control, and mitochondrial dynamics in NDs. The main objective is to bring together research on the different fields of mitochondrial biology to advance our knowledge of the physio-pathological effects of mitochondria in neuronal function.

Dr. Ramon Trullas Dr. Anna Colell



Specialsue









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