

Special Issue

Mitochondrial Functions and Dynamics

Message from the Guest Editor

It has become increasingly evident that mitochondria play a role far beyond their traditional designation as the powerhouses of the cell. Indeed, mitochondria serve as the second most important calcium reservoir in cells, capable of exchanging calcium with the endoplasmic reticulum. Mitochondria are involved in oxidative stress, redox regulation, apoptosis, and aging. They integrate intracellular signals, contributing to the coordination of cellular functions. Recent studies have highlighted that mitochondria can be exchanged between different cell types and can even be found circulating in the bloodstream. We invite authors to submit articles on recent findings regarding the biochemical and molecular mechanisms of mitochondrial functions.

Topics include mitochondrial biogenesis, bioenergetics, apoptosis, mitophagy, reactive oxygen species, calcium homeostasis, interactions with other organelles, and the link between mitochondrial dysfunction and cellular pathophysiology. Computational studies are also welcome.

Guest Editor

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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.

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