

Special Issue

Cross-Talk between Mitochondria and Proteasomes in Diseases

Message from the Guest Editor

The ubiquitin-proteasome system (UPS) and autophagy play a crucial role in the maintenance of protein homeostasis through their ability to eliminate damaged and misfolded proteins. In most eukaryotic cells, mitochondria form a dynamic network and are subject to continuous fission and fusion. Unopposed fission or fusion, in response to the deletion of specific factors, results in a reduction in mitochondrial functionality. The fusion of mitochondria promotes repair and complementation processes, while damaged mitochondria are segregated from the network by fission, promoting mitophagy. Imbalanced mitochondrial dynamics and function are crucial underlying mechanisms for cellular toxicity, also leading to proteasome overload and reduced proteasome function. On the other hand, proteasome impairment results in mitochondrial dysfunction. Thus, there is a mutual interdependence between mitochondrial and proteasomal function. In this Special Issue, advances will be presented in our understanding of the relationship between mitochondria and proteasomes, particularly focusing on their role in diseases and describing possible therapeutic strategies.

Guest Editor

Dr. Yanhua Yao

Department of Biochemistry and Molecular Cell Biology, School of Medicine, Shanghai Jiao Tong University, Shanghai 200025, China

Deadline for manuscript submissions

closed (15 September 2021)



Life

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/67283

Life

Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
life@mdpi.com

mdpi.com/journal/

[life](https://mdpi.com/journal/life)





Life

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.0
Indexed in PubMed



[mdpi.com/journal/
life](https://mdpi.com/journal/life)



About the Journal

Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona
Institute of Science and Technology, 08028 Barcelona, Spain

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, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)