

Special Issue

Advances in Endoplasmic Reticulum Stress and Apoptosis

Message from the Guest Editors

The endoplasmic reticulum (ER) acts as an essential integrator of external and internal stimuli in order to preserve cellular homeostasis. This process is tightly regulated by a complex network of signalling pathways called the unfolded protein response (UPR). The accumulation of incorrectly folded proteins or metabolic imbalance in ER lumen leads to ER stress, which primarily triggers the adaptive functions of UPR to avoid cell damage. If readjustment efforts fail, unresolved ER stress can lead to cell death mechanisms including apoptosis and other newly described cell killing processes. Autophagy was also claimed to be initiated by ER stress as a protective pathway from cell damage. The goal of this Special Issue is to showcase both the development and the current challenges/benefits of studying ER stress and the related signalling pathways. This Special Issue will include both review articles and original research papers to address the diversity of pathways in cell death initiated by ER imbalance and their integration in various diseases.

Guest Editors

Dr. Orsolya Kapuy

Department of Molecular Biology, Semmelweis University, 1094 Budapest, Hungary

Dr. Beáta Lizák

Department of Molecular Biology and Pathobiochemistry, Semmelweis University, 1094 Budapest, Hungary

Deadline for manuscript submissions

closed (20 February 2025)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/169144

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

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





International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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.

Editor-in-Chief

Prof. Dr. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, 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, MEDLINE, Embase, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)