Special Issue

Advances in Endoplasmic Reticulum Stress and Apoptosis—Second Edition

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 the ER lumen leads to ER stress, which primarily triggers the adaptive functions of the UPR to avoid cell damage. If readjustment efforts fail, then unresolved ER stress can lead to cell death mechanisms including apoptosis and other newly described cell-killing processes. It has also been posited that autophagy is initiated by ER stress as a protective pathway against cell damage. The aim of this Special Issue is to showcase current developments, challenges, and benefits in studying ER stress and related signalling pathways. This Special Issue will include both review articles and original research papers that address the diversity of pathways in cell death initiated by ER imbalance and their involvement 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

20 May 2026

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/si/232038

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

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

MDPI

About the Journal

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.

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

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