

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.

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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



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*International Journal of
Molecular Sciences*
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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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