



Physio-Pathological Role of ERAD and Its Pharmacological Modulation

Guest Editors:

Dr. Dorianna Sandonà

Department of Biomedical
Sciences, University of Padova,
Italy

Dr. Marcello Carotti

Department of Biomedical
Sciences, University of Padova,
Padova, Italy

Deadline for manuscript
submissions:

closed (30 June 2021)

Message from the Guest Editors

The endoplasmic reticulum (ER) is the site where about one-third of the eukaryotic proteome undergoes maturation and is monitored for proper folding. Protein homeostasis in the ER is assured by multiple quality control (QC) checkpoints that triage each newly synthesized protein, allowing the native ones to proceed toward the final destination and delivering the defective ones to either ER-associated degradation (ERAD), ER-phagy, the Golgi-QC, or the plasma membrane-QC. When ERQC fails, stress response pathways such as the unfolded protein response (UPR) are induced.

The present Special Issue of IJMS will mainly focus on the role of ERAD in the physiological and pathological status of cells and tissues. Indeed, ERAD directly or indirectly influences metabolism and immunity, and regulates specific enzyme concentrations as well as the stoichiometry of oligomeric complexes. Thus, studying the ERAD pathways in different tissues could unveil the molecular mechanism(s) of such diseases, envisaging novel and specific pharmacological interventions modulating ERAD to avoid/improve degradation or correct the protein architecture.





an Open Access Journal by MDPI

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

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.

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 (Inorganic Chemistry)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI