Special Issue

Endoplasmic Reticulum Stress Signaling Pathway: From Bench to Bedside

Message from the Guest Editors

The endoplasmic reticulum (ER) is the largest membrane organelle found in all eukaryotes and plays a central role in the oxidative folding of the majority of secretory and membrane proteins. To facilitate protein folding, the ER utilizes a number of folding enzymes and molecular chaperones, as well as oxidoreductases, which drive the formation of disulfide bonds to maintain stable protein structure. When the demand for protein folding exceeds the ER folding capacity, unfolded/misfolded proteins accumulate in the ER, leading to the activation of a signal transduction pathway known as the Unfolded Protein Response (UPR). Physiologically, the balance between ER stress and the UPR is critical to maintaining healthy cell and tissue functions. This Special Issue seeks to unveil the molecular mechanisms through which cells respond to counter ER stress, explore the involvement of ER stress in the progression of diseases, and identify novel targets or molecules within the ER stress signaling pathway to treat human diseases.

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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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