



Molecular Chaperones 2.0

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Message from the Guest Editor

Homeostasis is essential for maintaining cell function. For that purpose, proteins must fold to their native state in order to achieve functionality. Many heat shock proteins (HSPs) perform chaperone functions by stabilizing new proteins to ensure correct folding or by helping to refold proteins that were damaged by cell stress. Molecular chaperones belong to the family of conservative proteins with a high homology of the primary structure in both the prokaryote and eukaryote. HSPs are often classified according to their molecular weight and members include HSP90, HSP70, HSP60, and the small HSPs. Molecular chaperones have a large functional diversity, including de novo folding and refolding of misfolded protein. Chaperones also regulate critical cellular processes, such as protein trafficking, degradation, complex assembly, and regulate functional proteins, such as steroid hormone receptors. HSPs provide protection from cellular and environmental stress factors as molecular chaperones to maintain protein homeostasis. This Special Issue will include original research papers and reviews that show the role of molecular chaperones in the functionality of homeostasis in the cell.





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Message from the Editor-in-Chief

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