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Structure and Function of Small Heat Shock Proteins

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Message from the Guest Editor

Small heat shock proteins form a very large and diverse family of proteins ubiquitously expressed in viruses, archaea, bacteria, plants, and animals. Together with other chaperones small heat shock proteins control proper protein folding and prevent accumulation of denatured proteins in the cells. Small heat shock proteins are involved in many intra- and extracellular processes including control of redox state, proteasomal and autosomal protein degradation, apoptosis, regulation of cytoskeleton and muscle contraction, immunological response and many others. Mutations of small heat shock proteins correlate with many congenital disorders including cataract, different neurodegenerative diseases, cardiomyopathies and myopathies. Moreover, small heat shock proteins can be used as markers of different human diseases including cancer.

We call for original research and reviews and perspectives that to explore the current knowledge on the structure and function of small heat shock proteins and their probable involvement in different cellular processes and human diseases.









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Message from the Editor-in-Chief

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