



Mitochondrial Bioenergetics in Different Pathophysiological Conditions 3.0

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Message from the Guest Editors

Mitochondria are maternally inherited, multifunctional organelles widely known for generating energy in the form of ATP through the inner membrane mitochondrial respiratory chain complexes that form the functional respirasome. Besides the oxidative phosphorylation process, mitochondrial transport, inter-organelle crosstalk, mitochondrial dynamics, biogenesis and degradation all play a critical role in the efficiency and homeostasis of mitochondrial bioenergetics. Damage to these highly energetic and redox-sensitive organelles can result in an increase in the autophagic removal of the mitochondria (mitophagy) and disruption to the mitochondrial network. Mitochondrial dysfunction is now emerging as a major contributor to the pathogenesis of a broad range of human diseases, directly or indirectly, through a wide spectrum of signaling pathways.

Contributions to this Special Issue will provide new insights into mitochondrial bioenergetics to deepen our understanding of its role in health and disease and reveal novel mitochondria-targeting therapeutic opportunities. Original research articles and topical reviews on these and related topics are welcome in this Special Issue.





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Message from the Editor-in-Chief

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