



Mitochondria and Energy Metabolism in Health and Disease

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Message from the Guest Editor

This Special Issue is devoted to the study of the role of mitochondria not only from the point of view of their function in the cell as the main participant in energy metabolism, but also regarding the implementation of their alternative functions, such as participation in apoptosis and cell proliferation, regulation of the redox state of the cell and the second-level messengers, heme and steroid synthesis in health and disease. Despite the fact that a wealth of information regarding these well-coordinated processes in healthy cells has been accumulated, unresolved issues regarding the large-scale functioning of mitochondria and the mechanisms of energy metabolism in various pathologies, such as type 2 diabetes, cardiovascular disease, cancer, and neurodegenerative diseases, there is still much left to uncover. Thus, the purpose of this Special Issue is to take a fresh look at the relationship between energy metabolism and associated processes in the development of pathophysiological mechanisms in the cell. And help in choosing approaches to use mitochondria as targets for the most effective therapy for various diseases.





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