Special Issue

Mitochondrial Bioenergetics: From Cellular Metabolism to Therapeutic Target

Message from the Guest Editor

This Special Issue will primarily focus on mitochondrial biology and bioenergetic function, which are implicated in the homeostasis of cellular metabolism and chronic disease pathogenesis. The discoveries and developments stemming from these studies will be extended to provide future research directions for disease treatment strategies. Mitochondria play a vital role in many biological systems that significantly adjust ATP synthase, adapt to cellular stress or lead to multiple diseases. Furthermore, the complex mitochondrial bioenergetic machinery correlates with the oxidative phosphorylation system (OXPHOS), which displays high flexibility to allow the remodeling of mitochondrial capacity to fulfill cellular elements. With the improvement of next-generation sequencing instruments and the advancement of bioinformatic analysis, there has been a great deal of emerging evidence of chronic diseases representing mitochondrial metabolism, ultrastructural integrity, microbiota metabolites targeting mitochondria, tRNA relative congenital disease, etc.

Guest Editor

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Biomedicines (ISSN 2227-9059) is an open access iournal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

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