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Molecular Mechanisms of Exercise on Cardiac and Skeletal Muscle Function

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Message from the Guest Editor

This Special Issue on "Molecular Mechanisms of Exercise on Cardiac and Skeletal Muscle Function" aims to explore the intricate molecular pathways through which exercise exerts its beneficial effects on cardiac and skeletal muscles. Regular physical activity is well-documented to enhance cardiovascular health, improve muscle strength, and promote overall well-being. However, the underlying molecular mechanisms that mediate these effects remain an active area of research. This Special Issue will delve into recent advances in understanding how exercise influences gene expression, protein synthesis, metabolic pathways, and cellular signaling in muscle tissues. Contributions are invited from researchers focusing on diverse aspects such as mitochondrial function, oxidative stress, inflammation, hypertrophy, and adaptation processes. By compiling cutting-edge research, this Special Issue seeks to provide a comprehensive overview that will enhance our understanding of the molecular basis of exercise-induced muscle adaptations and inform future therapeutic strategies for muscle-related diseases.



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Special Issue



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