

Special Issue

Biochemical and Molecular Adaptation to Neuromuscular Conditioning

Message from the Guest Editors

Regular physical activity produces metabolic, physiological, hormonal, and molecular changes involving adaptations into biological systems and tissues. Moreover, regular exercise training not only increases the fitness level but also plays a pivotal role in preventing and in some cases delaying, as a form of non-pharmacological treatment, the insurgence of chronic diseases.

In facts, the adaptive response to regular exercise involves, at the cellular level, the upregulation of the hormonal and enzymatic system modulation in order to increase the protein synthesis and reduce oxidative damage. Nevertheless, the molecular bases for the adaptive changes in skeletal muscle mass, in neural plasticity and metabolic function, remain an area of intense research with the possibility of designing new therapeutic interventions.

For this Special Issue, studies on the impact of exercise on disease and health or sport performance presented in experimental studies focusing on adaptive mechanisms in human and animal models will be appreciated for publication as original or review articles.

Guest Editors

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Deadline for manuscript submissions

closed (28 February 2023)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



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*International Journal of
Molecular Sciences*
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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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