

## Special Issue

# Biological and Molecular Aspects of Exercise Adaptation

### Message from the Guest Editor

Regular physical activity causes a range of changes to occur in the body as it acts to re-establish a new dynamic balance, which occurs at the level of redox homeostasis and metabolic states. These adaptations demonstrate numerous health benefits; however, when training is too intense, prolonged, or not followed by adequate rest, it can have the opposite effect. Our aim in launching this Special Issue is to evaluate the molecular aspects of exercise adaptation, focusing on the role of sport type, sex, age, and other biological factors that can influence exercise adaptation. The studies included will help to elucidate the biological processes involved in exercise adaptation. A better understanding of how physical activity exerts beneficial effects will allow the identification of molecules and biological pathways that can be used to monitor the health status of athletes, as well as maximizing health benefits for the prevention and treatment of diseases. This Special Issue will be supervised by , with assistance from Dr. Rosamaria Militello (University of Florence).

### Guest Editor

Prof. Dr. Alessandra Modesti

Dipartimento di Scienze Biomediche Sperimentali e Cliniche, Università di Firenze, Florence, Italy

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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### Message from the Editor-in-Chief

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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### Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle  
Marche, Via Ranieri 65, 60100 Ancona, Italy

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