



an Open Access Journal by MDPI

Molecular Mediators of Exercise: Cross-Organ Communication Promoting Health and Combating Disease

Guest Editors:

Prof. Dr. Jan Bilski

Department of Biomechanics and Kinesiology, Faculty of Health Sciences, Jagiellonian University Medical College, 31-008 Cracow, Poland

Prof. Dr. Tomasz Brzozowski

Department of Physiology, Faculty of Medicine, Jagiellonian University Medical College, 31-531 Cracow, Poland

Deadline for manuscript submissions: **20 July 2025**

Message from the Guest Editors

Dear Colleagues,

Physical exercise exerts a profound impact on health and disease. The direct benefits of activity are often associated with improved cardiovascular function and muscle adaptation. However, it also triggers a series of signaling pathways that produce bioactive molecules from different organs in the body, contributing to health benefits. Understanding the role of these molecules in tissue communication holds promise for treating disorders associated with metabolic diseases and other systems, including the cardiovascular, pulmonary, digestive, nervous, and reproductive systems. This Special Issue aims to highlight this approach by publishing experimental data and reviews addressing these aspects in various experimental and clinical settings. We welcome the submission of topics related to the impact of exercise on disease and health in experimental and clinical studies, with particular emphasis on physiological mediators, intracellular pathways, and pharmacological agents constituting a background for the pharmacotherapy of various disorders





mdpi.com/si/194406





an Open Access Journal by MDPI

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

Contact Us

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/ijms ijms@mdpi.com X@IJMS_MDPI