

Special Issue

Exerkines as Mediators of Exercise Benefits: Mechanisms, Functions and Applications

Message from the Guest Editors

Exercise induces the release of a various array of bioactive molecules, collectively known as exerkines, which play a crucial role in mediating the health benefits of physical activity. Indeed, these molecules are key regulators of muscle adaptation, metabolism, and systemic homeostasis. Moreover, they influence different physiological processes, including inflammation, mitochondrial function, tissue regeneration, and inter-organ communication, contributing to overall health and disease prevention. In this Special Issue of *Biomolecules*, we aim to explore the molecular mechanisms regulating exerkine release and function, the impact on skeletal muscle physiology, and their broader effects on metabolic and cardiovascular health, ageing, neurocognitive improvement, and neuroprotection. We welcome original research and review articles covering exercise-modulated exerkine signalling, exerkine-mediated crosstalk between muscle and other organs, their role in metabolic disorders, and novel therapeutic applications of exercise-induced factors.

Guest Editors

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Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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