# **Special Issue**

# Molecular Studies of Muscle Contraction

# Message from the Guest Editor

The main function of muscle is to shorten and generate force through the cyclic interaction between actin and myosin, fuelled by ATP hydrolysis. Many other proteins are involved in the regulation of the contraction and in preserving the architecture of the contractile machinery. These functions are brought about through proteinprotein interactions, in a complex interplay that can be investigated with both experimental and theoretical approaches. The aim of this Special Issue is to host original research papers and reviews on the proteins at work in muscle, both striated and smooth, and on their role in promoting, assisting and regulating the contractile function. Without intending to be exclusive. the papers collected in this issue could report studies on topics such as actomyosin interactions, thin and thick filament-based regulation, cytoskeletal anchoring proteins, and physiological or pharmacological modulation of muscle performance. Any of these investigations should be aimed at understanding the molecular mechanisms underlying either the normal muscle functioning or pathological condition.

### **Guest Editor**

Dr. Massimo Reconditi

Dipartimento di Medicina Sperimentale e Clinica, Università degli Studi di Firenze, Florence, Italy

### Deadline for manuscript submissions

20 April 2026



# International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/224538

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

mdpi.com/journal/ ijms





# International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





# 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.

#### **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

#### **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)

