Special Issue

Calcium Homeostasis in Skeletal Muscle Function, Plasticity and Disease

Message from the Guest Editors

Whether in health or in disease, calcium as a second messenger, plays a very important role in muscle development, regeneration and function. Like any other field of human research, aging is one of the hot topic in skeletal muscle studies. However, muscle weakness can occur not only in old age but accompanying phenomenon is many myopathies and the role of Ca2+ in these processes should be clarified. Fortunately, new technological challenges and innovations on the use of calcium sensors appears time-to-time and opens new possibilities to deepen our knowledge about the role of calcium in muscle physiology. The aim of the present special issue is to collect novel data regarding the role of calcium in the functions of skeletal muscle. We specifically encourage the submission of manuscripts presenting innovative approaches to identify novel strategies to maintain and/or improve muscle functions in aging and in myopathies. Keywords:

- skeletal muscle
- intracellular calcium
- excitation contraction coupling
- muscle force
- myopathies
- aging

Guest Editors

Dr. Péter Szentesi

Department of Physiology, Faculty of Medicine, University of Debrecen, Nagyerdei krt 98., H-4002 Debrecen, Hungary

Prof. Dr. László Csernoch

Department of Physiology, Medical Faculty, University of Debrecen, H-4002 Debrecen, Hungary

Deadline for manuscript submissions

closed (25 March 2024)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/113915

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)

