

## Special Issue

# Microvasculature and Skeletal Muscle Crosstalk in Health and Disease

### Message from the Guest Editors

Skeletal muscle is a striking example of an organ that relies on the mutual communication of different tissue systems. Adequate perfusion in the terminal blood vessels ensures sufficient exchange of respiratory gases and substrates with the surrounding skeletal muscle fibers. Concurrently, skeletal muscle fibers send metabolic feedback signals to the microvasculature, inducing structural and functional adaptations at different levels of organization. In the *IJMS* Special issue, we will present an update on the various processes involved in this vascular/skeletal interplay. The focus of the original papers and reviews to realize the tissue crosstalk and adaptive remodelling that results. To increase coherence of the collection we invite articles on the following topics, but are open to additional approaches: 1. Impact of blood flow regulation on microvascular response, 2. arteriogenesis, 3. angiogenesis, 4. diffusion limits, 5. metabolism, 6. myokines and 7. pathologic dysregulation of the microvascular/muscle fiber interaction (e.g. muscle dystrophy, diabetes mellitus). Manuscripts from early career investigator are especially welcome.

### Guest Editors

Dr. Oliver Baum

Charité – Universitätsmedizin Berlin, Berlin, Germany

Prof. Dr. Stuart Egginton

School of Biomedical Sciences, University of Leeds, Leeds, UK

### Deadline for manuscript submissions

closed (31 January 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/128540](https://mdpi.com/si/128540)

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

[mdpi.com/journal/  
ijms](https://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



[mdpi.com/journal/  
ijms](https://mdpi.com/journal/ijms)



## About the Journal

### 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)