

Special Issue

Biomechanical Properties of Muscle and Tendon in Neurological Conditions

Message from the Guest Editor

We invite submissions for a Special Issue focused on the dynamic interaction between neural control of movement and the biomechanical properties of muscles and tendons. This complex feedback loop is shaped by the type and severity of inborn or acquired neural impairments, where changes in neural control can affect muscle and tendon properties, and vice versa. Additionally, the functional state of the muscle–tendon unit can influence both segmental and suprasegmental control mechanisms. We are seeking original research, theoretical perspectives, and comprehensive reviews that explore this bidirectional relationship. Papers may address the implications for motor control, rehabilitation strategies, and performance enhancement in both human and animal models. By investigating these interconnections, we aim to gain deeper insights into how neural impairments impact musculoskeletal function, as well as how understanding this relationship can inform therapeutic interventions and optimize performance. Contributions should provide valuable perspectives on advancing research in the fields of biomechanics, neurophysiology, and motor control.

Guest Editor

Dr. Mohagheghi Amir

Centre for Cognitive and Clinical Neuroscience, College of Health, Medicine and Life Sciences, Brunel University London, London UB8 3PH, UK

Deadline for manuscript submissions

closed (30 July 2025)



Journal of Functional Morphology and Kinesiology

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 3.7
Indexed in PubMed



mdpi.com/si/227893

*Journal of Functional
Morphology and Kinesiology*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jfmk@mdpi.com

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





Journal of Functional Morphology and Kinesiology

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 3.7
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Giuseppe Musumeci

Department of Biomedical and Biotechnological Sciences, Anatomy,
Histology and Movement Sciences Section, School of Medicine,
University of Catania, 95123 Catania, Italy

Author Benefits

High Visibility:

indexed within ESCI (Web of Science), Scopus, PubMed,
PMC, FSTA, and other databases.

Journal Rank:

JCR - Q2 (Sport Sciences) / CiteScore - Q2 (Physical
Therapy, Sports Therapy and Rehabilitation)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is
provided to authors approximately 26.9 days after
submission; acceptance to publication is undertaken in 1.9
days (median values for papers published in this journal in
the first half of 2025).