

Special Issue

Electrical Stimulation of Muscle: Electrophysiology and Rehabilitation

Message from the Guest Editors

This Special Issue aims to provide a comprehensive overview of the effects of electrical stimulation on skeletal muscle, with particular attention to physiological mechanisms, technological innovations, and applications in rehabilitation. The goal is to integrate basic research with clinical practice, highlighting multidisciplinary contributions from physiology, engineering, and rehabilitation sciences. The issue will feature recent advances in stimulation paradigms, electrode design, wearable and implantable technologies, neuromuscular modeling, and biomarkers of treatment efficacy. Special attention will be given to studies exploring adaptive motor unit recruitment, plasticity induced by stimulation, and emerging clinical applications such as functional electrical stimulation and hybrid rehabilitation systems. Authors are invited to submit original research articles or reviews on all aspects of muscular electrical stimulation, from physiological foundations to rehabilitative interventions. Submissions addressing comparative analyses or interdisciplinary approaches are particularly encouraged.

Guest Editors

Dr. Francesca Cordella

Research Unit of Advanced Robotics and Human-Centred Technologies, Università Campus Bio-Medico di Roma, 00128 Rome, Italy

Dr. Andrea Demofonti

1. Research Unit of Advanced Robotics and Human-Centred Technologies, Università Campus Bio-Medico di Roma, 00128 Rome, Italy
2. IRCCS Fondazione Don Carlo Gnocchi, 50143 Florence, Italy

Deadline for manuscript submissions

15 September 2026



Medicina

an Open Access Journal
Published by MDPI

Impact Factor 2.4
CiteScore 4.1
Indexed in PubMed



mdpi.com/si/265020

Medicina
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
medicina@mdpi.com

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





Medicina

an Open Access Journal
Published by MDPI

Impact Factor 2.4
CiteScore 4.1
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Medicina* (ISSN: 1648-9144). *Medicina* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on medicine. The scientific community and the general public can access the content free of charge as soon as it is published.

Editor-in-Chief

Prof. Dr. Edgaras Stankevičius
Medical Academy, Lithuanian University of Health Sciences, Kaunas,
Lithuania

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, MEDLINE, PMC, and other databases.

Journal Rank:

JCR - Q1 (Medicine, General and Internal) / CiteScore - Q1 (General Medicine)