

## Special Issue

# Physiological Adaptations and Improvements in Sports Performance through Training in Adverse Environments

### Message from the Guest Editor

The upcoming issue, titled "Physiological Adaptations and Improvements in Sports Performance through Training in Adverse Environments", aims to explore how athletes adapt to challenging environmental conditions and the resulting impact on their performance. The scope includes a comprehensive analysis of the acute and chronic physiological responses to training in extreme environments, such as changes in cardiovascular, respiratory, and muscular systems. It will cover topics like heat acclimatization, cold exposure, altitude training, and simulated hypoxia, examining their effects on endurance, strength, and overall athletic performance. Additionally, this Special Issue will address the practical applications of these training methods, offering insights into optimizing training protocols for various sports disciplines. Research findings, case studies, and expert reviews will provide a holistic understanding of how adverse environmental training can be leveraged to gain competitive advantages, improve resilience, and ensure athlete safety and well-being.

### Guest Editor

Dr. Ismael Martínez Guardado

Faculty of Physical Activity and Sport Science (INEF), Universidad Politécnica de Madrid, Calle de Martín Fierro, 7, 28040 Madrid, Spain

### Deadline for manuscript submissions

closed (31 December 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/211612](https://mdpi.com/si/211612)

*Journal of Functional  
Morphology and Kinesiology*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[jfmk@mdpi.com](mailto: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 22.5 days after  
submission; acceptance to publication is undertaken in 2.4  
days (median values for papers published in this journal in  
the second half of 2025).