

Special Issue

Effects of Exercise Training on Muscle Function—2nd Edition

Message from the Guest Editors

Exercise training has emerged as a vital tool in optimizing athletic performance and overall fitness. This Special Issue will unravel the intricate mechanisms underlying how these training modalities influence muscle function at various levels.

Resistance training, characterized by progressively more challenging muscular contractions, has shown the capacity to induce muscle hypertrophy, enhance strength, and improve functional abilities. Similarly, HIIT, involving brief bursts of intense exercise followed by recovery periods, has gained attention due to its potential to boost cardiovascular fitness and metabolic efficiency, potentially affecting muscle fibre composition.

Through a collection of research articles and reviews, this Special Issue will provide a comprehensive exploration of the effects of resistance training and HIIT on muscle function. We invite submissions elucidating the molecular, cellular, and physiological adaptations that drive these improvements. Additionally, we encourage investigations into their integration into sports training and protocols, as well as potential synergies between these modalities.

Guest Editors

Dr. Marco Duca

Department of Sport, Exercise, Recreation, and Kinesiology, Clemmer College, East Tennessee State University, Johnson City, TN 37614, USA

Dr. Athos Trecroci

Department of Biomedical Science for Health, University of Milan, 20133 Milan, Italy

Deadline for manuscript submissions

30 March 2026



Life

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/245478

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

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





Life

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.0
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona
Institute of Science and Technology, 08028 Barcelona, Spain

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, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)