

# Special Issue

## Biomechanics of Aging

### Message from the Guest Editors

The field of biomechanics plays a crucial role in understanding the musculoskeletal changes, mobility limitations, and increased risk of falls associated with aging. A deeper understanding of these biomechanical changes can inform the development of interventions and strategies to promote healthy aging and improve older adults' quality of life. This Special Issue aims to emphasize the biomechanical aspects of aging, including but not limited to the study of musculoskeletal biomechanics, gait analysis, balance control, and the impact of interventions such as exercise and assistive devices. Potential topics include, but are not limited to, the following:

- Biomechanical changes in muscle, bone, and joints with aging;
- Gait and balance biomechanics in older adults;
- Role of biomechanics in fall and injury prevention;
- Effects of exercise and physical activity on the biomechanics of aging;
- Biomechanical analysis of assistive devices and technologies for older adults;
- Computational modeling of musculoskeletal aging;
- Influence of age-related diseases (e.g., osteoarthritis, osteoporosis) on biomechanics;
- Rehabilitation biomechanics for older populations.

### Guest Editors

Dr. Márcio Fagundes Goethel

Center of Research, Education, Innovation and Intervention in Sport,  
Faculty of Sport, University of Porto, 4200-450 Porto, Portugal

Dr. Filipa Sousa

Center of Research, Education, Innovation and Intervention in Sport,  
Faculty of Sport, University of Porto, 4200-450 Porto, Portugal

### Deadline for manuscript submissions

26 February 2026



## Life

an Open Access Journal  
by MDPI

Impact Factor 3.4  
CiteScore 6.0  
Indexed in PubMed



[mdpi.com/si/239925](https://mdpi.com/si/239925)

*Life*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[life@mdpi.com](mailto: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)