# **Special Issue**

# Bioinspired Locomotion: Multidisciplinary Approaches and Data-Driven Insights

### Message from the Guest Editors

This Special Issue explores the multidisciplinary study of locomotion inspired by animals, focusing on aquatic, intrabody, and field scenarios where conventional propulsion is not possible. In this Special Issue, original research articles and reviews are welcome. Contributions are invited on topics including, but not limited to, the following:

- Development of bioinspired mobile robots with enhanced adaptability and efficiency.
- Application of machine learning and data-driven techniques for locomotion modeling.
- Characterization of animal locomotion in aquatic and unstructured environments.
- Studies on environment-body (e.g., fluid-structure) interactions and their implications for design.
- Navigating complex environments, such as inside the human body or rugged terrains.
- Studying natural locomotion to understand how evolution has optimized movement for specific environments.
- Characterizing suboptimal locomotion in constrained animals, humans, and robots.

Looking forward to receiving your contributions.

### **Guest Editors**

Dr. Mostafa Sayahkarajy

Fachgebiet Biomechatronik, Technische Universität Ilmenau, 98693 Ilmenau, Germany

#### Prof. Dr. Hartmut Witte

Fachgebiet Biomechatronik, Technische Universität Ilmenau, 98693 Ilmenau, Germany

### Deadline for manuscript submissions

30 September 2025



an Open Access Journal by MDPI



mdpi.com/si/228499

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

#### mdpi.com/journal/

J





## J

an Open Access Journal by MDPI



J



### Message from the Editor-in-Chief

### Editor-in-Chief

Dr. Pietro Cipresso

 Department of Psychology, University of Turin, 10124 Torino, Italy
Department of Psychology, Università Cattolica del Sacro Cuore, 20123 Milan, Italy

3. Applied Technology for Neuro-Psychology Lab, IRCCS Istituto Auxologico Italiano, 20145 Milan, Italy

### **Author Benefits**

### **High Visibility:**

indexed within FSTA, CAPlus / SciFinder, RePEc, and other databases.

### **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 37.2 days after submission; acceptance to publication is undertaken in 5.6 days (median values for papers published in this journal in the first half of 2025).

### **Recognition of Reviewers**

: reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.

