

## Special Issue

# Neuromechanics: The Relationship between Neural Control and Musculoskeletal Biomechanics

### Message from the Guest Editor

In this Special issue, the relationship between motor control and musculoskeletal biomechanical is addressed. To generate the movement of simple or complex body segments, neurological and biomechanical control is required. To control a targeted movement, an infinite number of segmented trajectories are available, all under the control of several actuators (muscles) that should be co-ordinated. Understanding how an individual's central nervous system directs all different levels of redundancy and how it manages the different biomechanical constraints to select a solution to perform the movement remains a scientific challenge. The aim of this Special issue is to summarize the most important neuro-biomechanical parameters influencing human performance related to the health sciences and sports in individuals with different ages and with various clinical conditions. **Keywords:**

- gait analysis
- human movement science
- motor control
- posture

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### Guest Editor

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### Deadline for manuscript submissions

closed (30 June 2025)



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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

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