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# **Research and Development in Orthopaedic Biomechanics**

Guest Editor:

#### Dr. Leonidas Spyrou

Centre for Research & Technology Hellas (CERTH), 38333 Volos, Greece

Deadline for manuscript submissions: closed (10 May 2024)

#### Message from the Guest Editor

The field of orthopaedic biomechanics is a rapidly evolving area of research and development that significantly contributes to the understanding, diagnosis, prognosis, and treatment of musculoskeletal injuries and disorders.

This Special Issue aims to highlight new knowledge in this field with a focus on applying computational models, experimental methods, and advanced imaging techniques to investigate the biomechanics and mechanobiology of musculoskeletal tissues at all scales, orthopaedic devices, and the interaction of tissues with devices.

One area of focus in orthopaedic biomechanics is the development of more accurate and realistic computational models to simulate the behaviour of the musculoskeletal system and orthopaedic devices under different loading conditions. Another area of interest in orthopaedic biomechanics is the development of experimental techniques to measure the mechanical properties of musculoskeletal tissues and orthopaedic devices. This includes the development of new surgical techniques, implants, prosthetics, orthotics, and rehabilitation protocols that are tailored to the individual needs of patients.









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## **Editor-in-Chief**

#### Message from the Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo** Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy 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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*Applied Sciences* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/applsci applsci@mdpi.com X@Applsci