

Special Issue

Multiscale Modeling in Computational Biomechanics

Message from the Guest Editor

Computational biomechanics has been intensively investigated for the study of human body systems (musculoskeletal, cardiovascular, digestive, etc.) at multiple scales. Computational biomechanics is usually coupled with experimental biomechanics to enhance our understanding of the human body shape–function properties and their causal relationships. Thus, novel biomarkers and quantitative indicators have been extracted for clinical decision support and medical device optimization. This Special Issue aims to bring together different scientific communities to present methodological approaches as well as practical applications related to the multiscale modeling of the human body. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

Cell and tissue biomechanics;

Organ biomechanics;

Musculoskeletal biomechanics;

Human locomotion and multi-body dynamics;

Artificial intelligence, deep learning and biomechanics;

Mixed reality and biomechanics;

Clinical decision support;

Multiscale characterization and multi-physical modeling;

Multimodal medical imaging.

Guest Editor

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Deadline for manuscript submissions

closed (30 June 2024)



Bioengineering

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 5.3
Indexed in PubMed



mdpi.com/si/113622

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About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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