



an Open Access Journal by MDPI

Advancements in Tissue-Engineered Muscle

Guest Editor:

Dr. Filiz Ates

Institute of Structural Mechanics
and Dynamics in Aerospace
Engineering, Aerospace
Engineering and Geodesy,
University of Stuttgart, Stuttgart,
Germany

Deadline for manuscript
submissions:

31 October 2024

Message from the Guest Editor

Muscle tissue, essential for voluntary movements, presents unique challenges in tissue engineering. Derived from myoblasts, these cells form fibers in a 3D extracellular matrix, complicating the replication of their structural, functional, and mechanical properties. Muscle tissue engineering promises advancements in regenerative medicine, bioengineering, and biomedical research, facilitating disease modeling, drug screening, and tissue repair. This Special Issue invites contributions on scaffold design, cell sources, differentiation protocols, biophysical and biochemical cues, functional characterization, and clinical applications in regenerative medicine, tissue repair, disease modeling, and biohybrid robotic systems. We seek original research, reviews, and perspectives to foster interdisciplinary progress in muscle tissue engineering. By bringing together cutting-edge research, we aim to foster interdisciplinary approaches and accelerate progress in muscle tissue engineering.



mdpi.com/si/205959



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie

Department of Biomedical
Engineering, Texas A&M
University, College Station, TX
77843, USA

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.

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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Biomedical*)

Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.6 days after submission; acceptance to publication is undertaken in 3.1 days (median values for papers published in this journal in the first half of 2024).

Contact Us

Bioengineering Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/bioengineering
bioengineering@mdpi.com
[X@Bioeng_MDPI](https://twitter.com/Bioeng_MDPI)