



Recent Progress in Cardiovascular Tissue Engineering and Regenerative Medicine

Guest Editors:

Dr. Moritz Benjamin Immohr

Department of Thoracic and Cardiovascular Surgery, Medical Faculty and University Hospital Essen, University of Duisburg-Essen, 45147 Essen, Germany

Dr. Elvira Weber

Department of Cardiac Surgery, Medical Faculty and University Hospital Duesseldorf, Heinrich-Heine-University Duesseldorf, 40225 Düsseldorf, Germany

Deadline for manuscript submissions:

closed (31 August 2024)

Message from the Guest Editors

Dear Colleagues,

Cardiovascular pathologies are one of the leading global causes of disease burden. Especially myocardial ischemia, heart valve pathologies, and heart failure still demand novel patient-tailored treatment innovations. Tissue engineering and regenerative medicine cover a broad field that can advance our current understanding of both the pathogenesis and the therapy of cardiovascular diseases.

Topics of interest cover both disease modelling and therapy innovations and include but are not limited to bioengineering with bioprinting and biomaterials, tissue decellularization and repopulation, stem cell research and cell therapy, 3D-cell culture and organoids as well as xenotransplantation and artificial organs.

We invite researchers to contribute to this special issue with their work addressing current challenges and innovations in the field of cardiovascular medicine, especially methodical articles on myocardial injury, valvular pathologies, vascular biology, and the development of new cardiovascular implants.





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](#), [CAPus / 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)