

## Special Issue

# Recent Progress in Cardiovascular Tissue Engineering and Regenerative Medicine

### Message from the Guest Editors

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.

### 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 Duesseldorf, Germany

### Deadline for manuscript submissions

closed (31 August 2024)



**Bioengineering**

an Open Access Journal  
by MDPI

**Impact Factor 3.7**  
**CiteScore 5.3**  
**Indexed in PubMed**



[mdpi.com/si/164866](https://mdpi.com/si/164866)

*Bioengineering*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[bioengineering@mdpi.com](mailto:bioengineering@mdpi.com)

[mdpi.com/journal/  
bioengineering](https://mdpi.com/journal/bioengineering)





## Bioengineering

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.7  
CiteScore 5.3  
Indexed in PubMed



[mdpi.com/journal/  
bioengineering](https://mdpi.com/journal/bioengineering)



## 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

Prof. Dr. Anthony Guiseppi-Elie

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

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPIus / 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 19.2 days after submission; acceptance to publication is undertaken in 3.3 days (median values for papers published in this journal in the first half of 2025).

#### Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.