

Special Issue

Advances in Cardiovascular Tissue-Engineering

Message from the Guest Editors

Cardiovascular tissue engineering theoretically offers the possibility of treating a wide range of structural diseases of the heart and vascular system. In addition to holistic organ transplantation, many approaches focus on the stepwise regeneration or bioartificial replacement of partial cardiovascular structures, e.g., heart valves, cardiac patches, bioartificial vessels, or stem cell transplantation in areas of myocardial infarction. In addition to the technical challenges of biological manufacturing, the current focus is also on the risks of these future therapies; tumorigenicity, graft rejection, immunogenicity, and cell migration are major problems of tissue engineering that have not yet been fully solved. Therefore, this Special Issue focuses on the interdisciplinary research in and development of cardiovascular science and engineering by bringing together cutting-edge contributions from worldwide experts on translational medicine, engineering, cell and gene therapy, bioprinting, bioreactor design, bioprocess development, and the manufacturing of stem-cell-based therapies.

Guest Editors

Dr. Rouven Berndt

Clinic of Cardiovascular Surgery, University Hospital Schleswig-Holstein, 24105 Kiel, Germany

Dr. Chung-Hao Lee

Department of Bioengineering, University of California, Riverside, CA 92521, USA

Deadline for manuscript submissions

closed (31 May 2024)



Bioengineering

an Open Access Journal
by MDPI

Impact Factor 3.7

CiteScore 5.3

Indexed in PubMed



mdpi.com/si/129920

Bioengineering
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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](http://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, 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 17 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).

