

Special Issue

Early Biological Reactions on Biomaterials Determining Long-Term Tissue Regeneration Effects

Message from the Guest Editors

After implantation of a biomaterial, a plethora of biological host reactions such as platelet-derived cytokine release, inflammatory or general early wound healing responses including adhesion of relevant cells and (neo-) angiogenesis take place, affecting local homeostasis. Some of these interactions have been topics of clinical and scientific discussion (e.g., the role of membranes in bone regeneration), while others are well understood (e.g., physical surface modification of implants). The goal is to specifically tailor tissue-implant interactions in order to achieve an improved and stable long-term tissue integration and regeneration. The focus of this Special Issue is interdisciplinary research on bioactive modifications of known and newly established (including 3D-printed) biomaterials with factors which are relevant for early tissue homeostasis, as well as the creation of a local wound environment that is optimal for the respective healing. In brief, methods are needed that allow the realistic and cost-efficient production of functionally improved biomaterials, contributing to patient care at a high level in the future.

Guest Editors

Prof. Dr. Bilal Al-Nawas

Klinikum der Johannes-Gutenberg-Universität und Fachbereich Medizin, Mainz, Germany

Dr. Peer Wolfgang Kämmerer

Department of Oral and Maxillofacial Surgery, University Medical Centre Mainz, 55131 Mainz, Germany

Deadline for manuscript submissions

closed (15 February 2022)



Biomedicines

an Open Access Journal
by MDPI

Impact Factor 4.5
CiteScore 7.8
Indexed in PubMed



mdpi.com/si/65922

Biomedicines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomedicines@mdpi.com

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





Biomedicines

an Open Access Journal
by MDPI

Impact Factor 4.5
CiteScore 7.8
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni

1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.2 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2026).