

Special Issue

In Vitro Models of Cardiovascular Diseases and Toxicity

Message from the Guest Editor

Cardiovascular diseases are the leading cause of morbidity and mortality and a substantial economic burden on the healthcare system globally. Several factors participate in their development: some more established and studied (smoking, diabetes, hypercholesterolemia, genetics), others external, come to the fore more recently (pollution, chemical compounds, etc.). Cardiovascular diseases and evaluation of toxicity share a series of mechanisms at the cell level, presenting a quite level of complexity to study in humans or animals. The use of in vitro systems could help obtain specific information on cellular responses, favoring the study of the pathophysiology of diseases as well as evaluating the effects on the cell biology of several chemical compounds. In particular, in vitro models, which take methodologies at the interface of different specialties (e.g., biology, genetics, bioengineering, bioinformatics, physics), could provide a more reliable and close-to-reality response to researchers.

Guest Editor

Dr. Federico Vozzi

Institute of Clinical Physiology, National Research Council (CNR), 56124 Pisa, Italy

Deadline for manuscript submissions

closed (31 March 2025)



Biomedicines

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/163292

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 3.9
CiteScore 6.8
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, CAPLus / SciFinder, and other databases.

Journal Rank:

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

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 2.9 days (median values for papers published in this journal in the first half of 2025).