Special Issue

Stem Cell Research and Bioinformatics in Regenerative Medicine

Message from the Guest Editors

Regenerative processes require a well-orchestrated integration of the complex biological and molecular events to restore or establish normal function of tissue or organs. Regenerative approaches include genome editing or gene therapy, trans-differentiation or in vivo reprogramming, cell therapy and transplantation, 3D bioprinting, organoids or use of combined products. The application of multi-omics sequencing technologies at the genome, transcriptome and epigenome levels could help to precisely identify the mechanisms and potential molecules to improve the performance of stem cells and their derivatives with therapeutic properties in the treatment of a variety of diseases. This Special Issue aims to focus on new discoveries about regenerative processes through multi-omics techniques and stem cell-based therapies for human diseases towards the ultimate goal of addressing unmet clinical needs.

- Stem cell-mediated tissue regeneration and disease modelling;
- Stem cell differentiation approaches and mechanisms;
- Application of bioinformatics methods in tissue regeneration;
- Combination of the stem cells and other therapy.

Guest Editors

Dr. Gianluca Santamaria

1. Department of Experimental and Clinical Medicine, University "Magna Graecia" of Catanzaro, Campus "S. Venuta", Germaneto, Catanzaro, Italy
2. Department of Medicine I Molecular Cardiology, Klinikum Rechts der Isar—Technical University Munich, Ismaninger Strasse 22, Munich, Germany

Dr. Maria Teresa De Angelis

Department of Experimental and Clinical Medicine, University "Magna Graecia", Catanzaro, Italy

Deadline for manuscript submissions

closed (30 July 2024)

Biomedicines

an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed

mdpi.com/si/178716

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

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

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).