

Special Issue

Applications of 3D Cell Culture in Biomedicines

Message from the Guest Editor

In recent years, research on fabrication and application of living tissues and organs has been widely conducted using 3D culture techniques. In other words, a culture environment similar to a living organism can be reconstructed in vitro and created using MEMS (micro electro mechanical system) technology. In addition, it has been possible to induce pluripotent cells (ES cells and iPS cells) and tissue stem cells into target 3D models by improving culture methods and conditions. The obtained tissues and organs are expected to be applied in many fields of biomedicine, regenerative therapy, and drug discovery. Here, we call for reports on 'Applications of 3D Cell Culture in Biomedicines' in various fields of biomedicines. Examples of topics of interest include:

- 3D cultures (culture technology, biomaterials, culture device, culture device design, simulation, etc.).
- 3D tissue and organs (biomedicine, regenerative therapy, and drug discovery, in vitro, in vivo, ex vivo).

Therefore, this Special Issue seeks to publish high-quality articles, including original research and reviews.

Guest Editor

Dr. Yoshitaka Miyamoto

Department of Precision Biomedical Engineering, Institute of Biomaterials and Bioengineering, 2-3-10 Kanda-Surugadai, Chiyoda-ku, Tokyo 101-0062, Japan

Deadline for manuscript submissions

closed (30 June 2025)



Biomedicines

an Open Access Journal
by MDPI

Impact Factor 4.5
CiteScore 7.8
Indexed in PubMed



mdpi.com/si/171841

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, CAPLus / 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).