



Drug Screening or Toxicology Research Based on 3D-Cultured Cell Models

Guest Editor:

Dr. Dukjin Kang

Biometrology Group, Korea
Research Institute of Standards
and Science, Daejeon 34113,
Republic of Korea

Deadline for manuscript
submissions:

closed (28 February 2022)

Message from the Guest Editor

Dear Colleagues,

In this Special Issue, we intend to widen our knowledge about the potential of grafting 3D cultured cell models onto the areas of drug screening and toxicology. From a fundamental hurdle in a two-dimensional (2D) cell culture approach, which is a lack of representation of the microenvironment of in vivo tissue, to date, the demand for the development of three-dimensional (3D) cell culture platforms in both/either drug screening and/or toxicology is gradually magnified. In this regard, it is confidently expected that the similarity of 3D cell cultures to in vivo tissue provides the reliability in drug screening with in-depth understanding of the toxic nature of substances. Herein, we hope that this Special Issue opens up a new promising way to underpin the capability of 3D cultured cell platforms (e.g., spheroids, hanging drop, bioreactors, cell culture scaffolds, and any of the 3D co-cultured fashions) toward either drug screening or toxicology research with a multidisciplinary approach.

- three-dimensional cell cultures
- spheroids
- scaffolds
- bioreactors
- drug screening
- toxicology





an Open Access Journal by MDPI

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

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.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [PMC](#), [CAPUS / SciFinder](#), and [other databases](#).

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

Contact Us

Biomedicines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/biomedicines
biomedicines@mdpi.com
[X@Biomed_MDPI](#)