



Design and Fabrication of Artificial Stem Cell Microenvironments

Guest Editors:

Dr. Ilida Ortega Asencio

School of Clinical Dentistry, The
University of Sheffield, Sheffield
S10 2TN, UK

Dr. Farshid Sefat

Faculty of Engineering and
Informatics, Biomedical and
Electronics Engineering
Department, University of
Bradford, Bradford BD7 1DP, UK

Deadline for manuscript
submissions:

closed (4 June 2021)

Message from the Guest Editors

It is well-known that the native stem cell niche plays a key role in dictating stem cell fate and that being able to recapitulate specific features of such intricate environment can open the door to the development of more efficient biomaterials for tissue regeneration applications. Many research groups are now directing their efforts towards the design and manufacture of topographically controlled biomaterials that are able to mimic different aspects of the native stem cell niche, looking at both the niche physical/spatial distribution as well as its biochemical/biomechanical conformation. This special issue is focused on the “Design and Fabrication of Artificial Stem Cell Niches” and it aims to capture innovative approaches to designing functional synthetic niche environments in a form of original research papers as well as comprehensive reviews.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie

Department of Biomedical
Engineering, Texas A&M
University, College Station, TX
77843, USA

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

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](#), [CAPlus / SciFinder](#), [Inspec](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Engineering, Biomedical*)

Contact Us

Bioengineering Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/bioengineering
bioengineering@mdpi.com
[X@Bioeng_MDPI](https://twitter.com/Bioeng_MDPI)