



## Human Stem Cells in Disease Modelling and Treatment

Guest Editors:

### Dr. Sofia M. Calado

Algarve Biomedical Center  
Research Institute (ABC-RI),  
Universidade do Algarve, 8005-  
139 Faro, Portugal

### Dr. Álvaro Plaza Reyes

Department of Regeneration and  
Cell Therapy, Andalusian  
Molecular Biology and  
Regenerative Medicine Centre  
(CABIMER), Avda. Américo  
Vespucio 24, 41092 Seville, Spain

Deadline for manuscript  
submissions:

**31 October 2024**

### Message from the Guest Editors

Over the last few decades, human stem cells have gained significant attention in biomedical research due to their unprecedented applications, both in terms of disease modelling and therapy. In addition, although rodents have been widely used as a model, they often fail to mirror the pathophysiology of human diseases due to species-specific differences.

This Special Issue of *Biomedicines* aims to highlight the most recent advances in the field of human stem cell modelling, translation, and clinical application. Topics of interest include, but are not limited to, the following:

- Novel applications of human stem cells to study disease mechanisms;
- The use of human stem cells in regenerative medicine;
- Obstacles related to the cGMP compliance of human stem cells in regenerative medicine applications;
- Other limitations in the clinical translation of human stem cells for regenerative medicine.





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*, *CAPLus / SciFinder*, and other databases.

**Journal Rank:** JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q2 (*Medicine (miscellaneous)*)

## Contact Us

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

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/biomedicines](http://mdpi.com/journal/biomedicines)  
[biomedicines@mdpi.com](mailto:biomedicines@mdpi.com)  
[X@Biomed\\_MDPI](https://twitter.com/Biomed_MDPI)