

Special Issue

Stem Cells and Regenerative Medicine: In Vitro and In Vivo Studies

Message from the Guest Editor

In recent years, stem cell therapy has become a very promising and advanced scientific research topic. Stem cells have the capability to self-renew and to differentiate into several cell types, and are involved in physiological regeneration processes.

With so many stem cell replacement therapies currently going through clinical trials, there is a compelling need to understand the mechanisms behind a successful therapy. In this context, the use of biomaterials to manipulate stem cells providing control of their behavior and homing has received great interest, becoming a pivotal step for the development of innovative stem cell transplantation solutions.

This Special Issue aims to provide the latest updates on stem cells and their in vitro and in vivo applications in the regenerative medicine field, opening novel and advanced strategies for tissue-repairing processes and many other clinical applications.

Keywords: stem cells; stem cell homing; stem cell tracking; regeneration; tissue injury; biomaterials

Guest Editor

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