Special Issue

Biomaterials for Stem Cell Engineering

Message from the Guest Editor

Stem cells have the ability to both self-renew and differentiate into multiple cell types. They also respond to physical, chemical and biological cues in order to differentiate and proliferate. Engineering biomaterials that mimic and can control the chemical and biological signals that guide stem cell fat are of utmost importance. Such biomaterials are being applied to regenerate bone, cartilage, fat and muscle with significant advancements. The purpose of this Special Issue is to highlight the recent advances and development in stem cell tissue engineering to engineer all types of tissues and organs. The issue will discuss all types of biomaterials, including synthetic and natural. Biomaterials that guide stem cell fate through drug delivery or growth factor release are of high interest, and those that guide the regeneration of several organs, including cartilage, bone, tendon, skin, vascular tissue, liver, kidney and pancreas, will be highly considered.

Guest Editor

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Deadline for manuscript submissions

closed (30 September 2023)

Biomimetics

an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 4.2
Indexed in PubMed

mdpi.com/si/166138

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