Special Issue

Mechanics of Stem Cells in Regenerative Medicine

Message from the Guest Editor

Tissue and organ failure are becoming a major health problem around the world. To this end, pluripotent stem cells can provide unlimited cell supply in a laboratory setting for *cell-based therapy*. However, cell lineage control can become a limiting factor. In particular, physical forces, whether endogenously generated or externally applied, play a vital role in cell fate decisions. Recent developments in single-molecule techniques may allow force modulation with a pico-Newton resolution that can be applied in stem cell fate decision making. Further research is necessary to understand the underlying mechanisms of cell lineage specification for application in regenerative medicine. In this Special Issue, we welcome both original works as well as review articles related to the mechanics of pluripotent stem cells in regenerative medicine. In addition, studies focused on multipotent stem cells in regenerative medicine are welcome.

Guest Editor

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Deadline for manuscript submissions

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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. Cells encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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