Special Issue

Modulation of Senescence and Differentiation in Human Mesenchymal Stem Cells

Message from the Guest Editors

Mesenchymal stem/stromal cells (MSCs) are adult stem cells used in regenerative medicine to treat various pathologies due to their self-renewal ability and multilineage differentiation. However, MSCs undergo cellular senescence during their in vitro expansion, and they may become senescent in vivo due to the influence of multiple molecular, cellular, and environmental interactions. Many studies have been carried out to investigate the biological properties of MSCs and the possibility of modulating their behaviour pre- and posttransplantation. Only a few have successfully managed to reach clinical availability, implying that we probably do not yet have a full understanding of the biology of MSCs. For this Special Issue, we invite authors to submit highquality original research articles that further expand our knowledge of and provide us with insights into MSCs. We are particularly interested in studies deepening our understanding of senescence and differentiation in tissue-specific MSCs, as well as those exploring the modulation of these processes through natural and synthetic molecules with the aim of improving MSC potential in tissue engineering and regenerative medicine.

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About the Journal

Message from the Editorial Board

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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