Special Issue

Cardiovascular Diseases and Stem Cell Modeling

Message from the Guest Editor

Pluripotent cells have emerged as a powerful tool to model disease, with seminal work laying the foundation for understanding etiologies of cardiac and vascular pathologies. Discovery of the Yamanaka reprogramming factors pioneered induced pluripotent stem cell (iPSC)-driven applications that have benefited cardiovascular research by providing insights into mechanisms of cardiovascular differentiation, the role of three dimensional architecture in fate commitment, and the paracrine contribution of secretome composition and extracellular vesicles. Ongoing studies are focused on investigating and defining mechanisms of maturation for paradigms of cardiac and vascular differentiation in order to recapitulate cells that are representative of in vivo phenotypes, thus expanding the utility of iPSC applications. With this in mind, the goal of this special issue is to summarize contemporary knowledge regarding use of stem cells to model cardiovascular diseases, highlight recent advances of stem cell platforms in the context of understanding cardiovascular pathologies, and stimulate thought on future directions of the field.

Guest Editor

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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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