Special Issue

Advances in the Regulation of Proteins and Genes for Stem Cells

Message from the Guest Editor

Advancements in genomics and proteomics have significantly enhanced our understanding of stem cell biology, offering insights into their fundamental properties and potential therapeutic applications. Genomics involves the comprehensive analysis of an organism's complete set of DNA, including all of its genes. In stem cell research, genomics has been instrumental in identifying pluripotency markers, understanding differentiation pathways, and ensuring genomic integrity. Proteomics is the large-scale study of proteins, which are vital to understanding cellular functions. In the context of stem cells, proteomics has facilitated the elucidation of differentiation mechanisms, the identification of post-translational modifications (PTMs), and the development of diagnostic tools. Therefore, this Special Issue will summarize the latest genomic and proteomic findings involved in stem cells, both in maintenance and differentiation. The use of genomic and proteomic biomarkers as potential diagnostic markers and therapeutics for the prevention or treatment of intractable diseases will also be addressed.

Guest Editor

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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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