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Stem Cell Biotechnology in Ocular Regenerative Medicine and Drug Discovery

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Deadline for manuscript submissions:

closed (5 July 2023)

Message from the Guest Editors

In the Special Issue, we propose presenting the most recent updates on research in regenerative ophthalmology and drug discovery, which are at the cusp of clinical translation, starting from the front to the back of the eye. Different cell therapies involving, e.g., limbal, corneal, endothelial and stromal, and conjunctival stem cells have emerged for ocular surface restoration and corneal endothelial disorders. Lacrimal gland regeneration and trabecular meshwork stem cells are evolving technologies for treating dry eye disease and glaucoma, respectively. The retinal tissue of neural origin raised the need to explore newer modalities of therapy such as cells derived from pluripotent stem cells and gene therapy for inherited retinal disorders. The use of biosynthetic corneas, artificial corneal implants, and the development of the bionic eye with artificial intelligence has offered enticing avenues for eyes afflicted with blinding diseases.

We are pleased to invite all basic and clinic researchers to contribute to the Issue. Topics may include but are not limited to stem cell-based therapies, novel drug therapies, ocular organoids, gene editing, and related therapeutics.



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Special Issue



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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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