Special Issue

New Advances in Cellular and Molecular Mechanisms Involved in Retinal Diseases

Message from the Guest Editor

Recent advances in DNA sequencing, gene editing, iPS cells, and AI have introduced powerful tools and materials to identify disease-causing variants and quickly pursue functional studies in vitro and in vivo to elucidate the molecular mechanisms of disease onset. Over 270 genes have been identified for inherited retinal diseases. However, functional studies to confirm these variants in disease onset and to find seed information for the development of therapeutics have not successfully caught up. This is mainly due to the variety of proteins involved in retinal diseases. The approach to characterize an enzyme protein would be different from approaching transcription factors or other types of proteins.

The purpose of this Special Issue is to highlight recent findings and the techniques used to identify retinal disease causes, and different approaches taken to elucidate the molecular mechanisms of disease onset. The relevant retinal diseases include inherited retinal diseases, glaucoma, optic neuropathy, and age-related macular degeneration.

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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