

Special Issue

Retinal Pigment Epithelial Cells in Age-Related Macular Degeneration

Message from the Guest Editor

The biology of atrophic (dry) age-related macular degeneration (aAMD) and its progression to geographic atrophy (GA) is multifactorial and complex. There are no current effective treatments for RPE cell loss in aAMD. Intriguing approaches to treating atrophic AMD include 1) understanding the mechanisms contributing to RPE degeneration in atrophic AMD, 2) developing therapies focused on stimulating RPE development and regeneration, and 3) patient iPSC-based RPE disease modeling for studying disease mechanisms and drug screening. This Special Issue will examine novel regulators stimulating an intrinsic regenerative response in the mature RPE, methods to isolate and maintain RPE cells isolated from rodents and human donor eyes, age-related changes in RPE mitochondrial function, metabolic pathways, and extracellular matrix reorganization, transcriptomic and proteomic analyses of iPSC-derived RPE, and novel animal models recapitulating hallmarks of aAMD pathobiology.

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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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