Special Issue

Inherited Retinal Dystrophies: Genetic Basis, Genetic Diagnosis and Therapy

Message from the Guest Editor

Inherited retinal degenerative diseases (IRDs) are a diverse group of genetic disorders that lead to progressive vision loss and, in many cases, blindness. These conditions, including retinitis pigmentosa, Stargardt disease, and Leber congenital amaurosis, are caused by mutations in more than 270 identified genes affecting photoreceptor cells and the retinal pigment epithelium. Recent advances in next-generation sequencing, genome-wide association studies, and functional genomics have significantly enhanced our understanding of IRD pathogenesis. Novel gene discoveries continue to refine diagnostic approaches, enabling earlier and more precise genetic testing. Additionally, breakthroughs in gene therapy, genome editing (e.g., CRISPR-Cas9), and RNA-based therapies are paving the way for targeted treatments, some of which have already reached clinical application.

We welcome original research articles, reviews, and perspectives from experts in genetics, molecular biology, and ophthalmology. We invite you to contribute to this Special Issue and share your findings to further advance the field of inherited retinal diseases.

Guest Editor

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Message from the Editor-in-Chief

Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

Editor-in-Chief

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