



Next-Generation Sequencing and Proteomics Research for Retinal Diseases

Guest Editor:

Dr. Jayshree Advani

Neurobiology,
Neurodegeneration and Repair
Laboratory, National Eye
Institute, National Institutes of
Health, Bethesda, MA, USA

Deadline for manuscript
submissions:

28 February 2025

Message from the Guest Editor

The retina is considered our window to the outside world. It captures, integrates, and processes visual information. The dysfunction or death of retinal photoreceptors is the major cause of vision loss, leading to several retinal diseases including age-related macular degeneration (AMD), glaucoma, and retinitis pigmentosa (RP). In recent years, Next-Generation Sequencing (NGS) and proteomics technologies have enabled various diseases to be characterized at the molecular level to identify new targets and biomarkers to monitor disease progression and treatment efficacy. The analysis of several retinal diseases using NGS and proteomics methods represents a unique opportunity to understand the pathophysiological mechanisms of such diseases and to develop new therapeutic approaches. This *Biomedicines* Special Issue invites contributions dealing with the identification and characterization of new genes and proteins, and recent advances in the discovery and development of methods in NGS, proteomics, and translation, and their clinical application to retinal diseases. This Special Issue also welcomes articles on transcriptomics research on retinal disease.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Felipe Fregni

1. Neuromodulation Center and
Center for Clinical Research
Learning, Spaulding
Rehabilitation Hospital and
Massachusetts General Hospital,
Harvard Medical School, Boston,
MA 02114, USA
2. Department of Epidemiology,
Harvard T.H. Chan School of
Public Health, Boston, MA 02115,
USA

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within *Scopus*, *SCIE (Web of Science)*, *PubMed*, *PMC*, *CAPLus / SciFinder*, and other databases.

Journal Rank: JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q2 (*Medicine (miscellaneous)*)

Contact Us

Biomedicines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/biomedicines
biomedicines@mdpi.com
X@Biomed_MDPI