Special Issue

Mechanisms of Inherited Retinal Degenerative Diseases and Emerging Therapies

Message from the Guest Editors

Inherited retinal degenerative diseases are a genetically and phenotypically heterogeneous group of visual disorders, which primarily affect the function of photoreceptor cells and are among the leading causes of clinical blindness in humans. The major challenge now is to functionally characterize these gene products to delineate the biological mechanisms of retinal disease pathogenesis using in vitro and in vivo models, with the goal to design gene-based treatments While advances have been made in elucidating the pathophysiological mechanisms underlying the genetic causes of retinal dystrophies, therapeutic approaches are now being explored to mitigate vision loss in such patients. It is crucial to establish animal models to elucidate retinal and photoreceptor biology in retinal diseases and in the development of novel gene-based and cell-based therapeutic modalities. There is an evolving interest in developing nutrient based neuroprotective therapy in retinal diseases. Newer and improved therapeutic approaches will greatly enhance the quality of life of individuals living with these potentially blinding diseases and facilitate effective disease management.

Guest Editors

Dr. Glenn Lobo

1. Department of Medicine, Medical University of South Carolina, Charleston, SC 29425, USA

2. Department of Ophthalmology and Visual Neurosciences. University of Minnesota, Lions Research Building, 2001 6th St SE, Room 219, Minneapolis, MN 55455, USA

Dr. Altaf A. Kondkar

Department of Ophthalmology, College of Medicine, King Saud University, Riyadh 11411, Saudi Arabia

Deadline for manuscript submissions

closed (31 May 2022)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 8.1 Indexed in PubMed



mdpi.com/si/78644

International Journal of Molecular Sciences MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 8.1 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Inorganic Chemistry)