Special Issue

Molecular Pathogenesis and Therapies for Retinal and Optic Nerve Diseases

Message from the Guest Editor

Most retinal and optic nerve diseases, such as diabetic retinopathy, glaucoma, retinitis pigmentosa, optic neuritis, or optic neuropathy, are sight-threatening diseases that cause vision loss. Neurovascular abnormalities are involved in the pathogenesis of most retinal and optic nerve diseases, and neuronal cell death as well as axon degeneration are irreversible changes that lead directly to vision loss. The establishment of therapeutic approaches, including neuroprotection and regeneration in addition to neurovascular protection, are required to protect the visual function of patients with retinal and optic nerve diseases. This Special Issue focuses on the pathogenesis of and therapeutic approaches for retinal and optic nerve diseases. The areas of this Special Issue are widely covered with basic studies on the molecular level regarding retinal and optic nerve diseases. Hopefully, this Special Issue will be helpful for researchers in their specific fields in scientific manners.

Guest Editor

Dr. Toshiyuki Oshitari

Department of Ophthalmology and Visual Science, Chiba University Graduate School of Medicine, Inohana 1-8-1, Chuo-ku, Chiba 260-8670, Japan

Deadline for manuscript submissions

30 December 2025



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/176244

International Journal of Molecular Sciences Editorial Office 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 9.0 Indexed in PubMed





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 (Organic Chemistry)

