

Special Issue

Understanding the Molecular Mechanisms of Retinal Ganglion Cell Death after Optic Nerve Damage

Message from the Guest Editor

The optic nerve is a bundle of axons from retinal ganglion cells (RGCs). Once it is injured, retrograde axonal degeneration occurs, and RGCs finally fall into cell death. Clinically, most optic neuropathies are still resistant to treatments, and beneficial regimens have yet to be established. A variety of animal models, including glaucoma, traumatic optic neuropathy, ischemic optic neuropathy, experimental autoimmune encephalomyelitis, etc., has been applied to elucidate pathological mechanisms. Notably, it has been suggested that RGC death is linked to inflammatory reaction, autophagy, oxidative reaction, mitochondrial dysfunction, and glucose and lactate metabolisms. This Special Issue explores recent advances in order to understand molecular mechanisms of RGC death better and solicits novel perspectives by expert review.

Guest Editor

Dr. Takuji Kurimoto

Division of Ophthalmology, Department of Surgery, Kobe University Graduate School of Medicine, Kobe, Japan

Deadline for manuscript submissions

closed (28 February 2022)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/71764

*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](https://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



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



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 (Organic Chemistry)