

Special Issue

Drosophila Models for Neurodegenerative Diseases: Achievements and Prospects

Message from the Guest Editors

Neurodegenerative diseases affect an ever-increasing aging population. The disorders range from motor dysfunction to psychiatric troubles and dementia. So far, no cure is available, but steady progress is being made. Part of this progress is due to studies in the fruit fly *Drosophila* which have led to major insights into the cellular and molecular mechanisms underlying neurodegeneration.

Here, we aim to shed light on the benefits of using *Drosophila* to complement, or even overcome the limitations of studies carried out in humans and other animal models. The advantages of *Drosophila* are primarily the ease with which it is possible to perform *in vivo* studies that cover all aspects of the diseases from genes to circuits and behavior; the well-described anatomy and cellular organization of its brain, which is now close to being completely described at the level of neural circuits and synaptic connections; and the dazzling variety of genetic tools that are continuously developed and improved to study gene functions and neuronal activity *in situ* at cell and circuit resolution.

Guest Editors

Dr. Serge Birman
Dr. Emi Nagoshi
Dr. Frank Hirth

Deadline for manuscript submissions

closed (31 December 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/43494

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](http://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](http://mdpi.com/journal/ijms)

About the Journal

Message from the Editorial Board

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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.

Editors-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

Prof. Dr. José L. Quiles

Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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)

