

Special Issue

Molecular Genetics in Neurodegenerative Disorders: 2nd Edition

Message from the Guest Editors

Neurodegenerative disorders (NDs) are characterized by the progressive and inevitable loss of selected neuronal populations in the peripheral or central nervous system, which leads to impairments in motor, behavioral and/or cognitive function. Among the pathomechanisms underlying NDs are genetic mutations, micro- and long-RNA network alterations, glutamate excitotoxicity, redox imbalance, neuroinflammation, mitochondria dysfunction, endoplasmic reticulum stress, autophagy dysfunction and, more recently, epigenetics. However, the exact causes of most NDs are still unknown, and recent studies suggest that therapeutic options in ND management remain limited.

With this Special Issue, we focus on recent advances in: i) genetic research on new gene-specific therapeutic approaches in treating ND patients; ii) the investigation of the mechanisms of epigenetic regulation; iii) the identification of biomarkers able to predict disease progression; iv) the understanding of specific molecular mechanisms, including DNA damage repair, genome instability and RNA metabolism.

Guest Editors

Dr. Orietta Pansarasa

Cellular Models and Neuroepigenetics Unit-IRCCS Mondino Foundation, 27100 Pavia, Italy

Dr. Matteo Bordini

Cellular Models and Neuroepigenetics Unit-IRCCS Mondino Foundation, 27100 Pavia, Italy

Deadline for manuscript submissions

closed (20 November 2024)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/162202

*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)