

Special Issue

Neural Circuit Mechanisms of Brain Disorders

Message from the Guest Editor

Normal cognition and behavior rely on the proper functioning of neural circuits. Advanced microscopic techniques—such as two-photon laser scanning microscopy, miniature fluorescent microscopy, and photometry—combined with sophisticated viral tracing tools, optogenetics, chemogenetics, and behavioral assays in animal models, have greatly enhanced our understanding of the complex alterations in neural circuits during the progression of neurological and psychiatric disorders. Unraveling the molecular and cellular mechanisms underlying such selective vulnerability and fine changes in neural circuitry that occurred during early disease stages is crucial for the development of potential neuromodulatory interventions. In this Special Issue, we will discuss how the selective loss of connectivity and impairment of neural circuits, and how molecular and cellular pathways contribute to such changes, lead to various brain disorders.

Guest Editor

Dr. Yun Li

Department of Zoology and Physiology, University of Wyoming,
Laramie, WY, USA

Deadline for manuscript submissions

30 April 2026



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/261398

*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)