



The Role of Specific Alteration in Neurological Disorders: From Molecular Mechanisms to Therapeutic Strategies

Guest Editors:

Dr. Gabriele Deidda

Department of Biomedical
Sciences, Via Ugo Bassi,
University of Padova, Padova,
Italy

Dr. Massimo Pierucci

Department of Psychology,
University of Malta, Msida
MSD2080, Malta

Dr. Anna Cavaccini

Laboratory of Neural Circuit
Assembly, Brain research
Institute, University of Zurich,
8057 Zurich, Switzerland

Deadline for manuscript
submissions:

20 October 2024

Message from the Guest Editors

Dear Colleagues,

Neurological disorders are profoundly characterized by structural and functional alterations in neuronal and non-neuronal networks resulting from complex genetic and environmental factors during intrauterine, perinatal, and/or postnatal life periods. Several neurological disorders have been described so far in humans and reproduced in genetic and/or pharmacological animal models. Importantly, over the last few decades, it has become clear that the identification of specific dysfunctional mechanisms leading to a neurological disorder is of crucial importance and represents the first step for the design of new therapeutic strategies. For example, recent studies in different animal models of neurodevelopmental disorders have clearly shown that the polarity of GABAergic neurotransmission is altered, rendering benzodiazepine treatment ineffective or even exacerbating the pathological phenotype. Thus, experimental identification of the specific alteration (i.e., polarity of GABAergic neurotransmission) has played a pivotal role in the opening of new therapeutic perspectives for these diseases.

Dr. Gabriele Deidda
Dr. Massimo Pierucci
Dr. Anna Cavaccini
Guest Editors





an Open Access Journal by MDPI

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

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.

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 & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI