



an Open Access Journal by MDPI

Molecular Mechanism Underlying Rare Inherited Neurological Diseases

Guest Editors:

Dr. Agnieszka Ługowska

Institute of Psychiatry and Neurology, Department of Genetics, Warsaw, Poland

Prof. Dr. Johannes Berger

Pathobiology of the Nervous System, Center for Brain Research, Medical University of Vienna, Vienna, Austria

Deadline for manuscript submissions: closed (31 October 2022)



mdpi.com/si/62460

Message from the Guest Editors

Dear Colleagues,

The disease is considered rare when it affects less than 1 person in 2,000 live births. Currently, about 6,000 rare diseases are distinguished, but the awareness of medical and general society is still insufficient. Among these diseases are genetically inherited diseases related to various disorders of the nervous system. The molecular mechanisms underlying these diseases are differential. Some of them have a metabolic basis, such as lysosomal diseases, peroxisomal diseases, mitochondrial diseases, other metabolic leukodystrophies, disorders of metal metabolism, disturbances of vitamin metabolism, disturbances of neurotransmitter metabolism and many others. There is also a huge group of monogenic neurodegenerative and neuromuscular diseases. Recently, studies on oxidative stress and immune system response display a great role in elucidating the bases of neurological diseases. Due to often irreversible changes in the nervous system, the therapies should be implemented at a very early stage of the disease. This demands development on a and reliable diagnostic methods to improve the efficacy of treatment







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