



Molecular Pathogenesis of Neurodegenerative Diseases Targeting Early Diagnosis and Treatment

Guest Editor:

Prof. Dr. Michael Ugrumov

1. Faculty of Psychology, National
Research University “Higher
School of Economy”, Moscow,
Russia

2. Institute of Developmental
Biology of the Russian Academy
of Sciences, Moscow, Russia

Deadline for manuscript
submissions:

closed (15 May 2021)

Message from the Guest Editor

Dear Colleagues,

The fight against neurodegenerative diseases (NDDs) is a global challenge of the 21st century. Priorities in neuroscience include fundamental studies of the cellular and molecular mechanisms of early pathogenesis of NDDs and their peripheral manifestations targeting early diagnosis and preventive treatment. Modeling the progression of NDDs in animals is the only means to study the molecular mechanisms of neurodegeneration and neuroplasticity in the central and peripheral nervous system at the early stage of the disease. In turn, studies of early peripheral genetic and metabolic manifestations of NDDs are carried out not only in animal models, but also in humans. Most of these studies are focused on changes in the chemical composition of bodily fluids, as well as changes in gene expression and the phenotype of peripheral cells. Fundamental knowledge of the cellular and molecular mechanisms underlying NDDs and the development of methods for early diagnosis may open up prospects for the use of preventive neuroprotective treatments that could slow down neurodegeneration and prolong the period of physical and social activity of subjects at risk.





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