Special Issue

The N-Methyl-D-Aspartate (NMDA) Receptor: From Pathophysiology to Clinical Significance

Message from the Guest Editor

The NMDA (N-methyl-D-aspartate) receptor is excitatory glutamatergic receptor that plays fundamental roles in various neuronal processes. NMDAR is tetrameric assemblies, typically made up of two GluN1 subunits (including the glycine binding site) and two GluN2 subunits (including the glutamate binding site). The arrangement of these subunits to form tetramer is critical to cation channel function and imparts NMDAR with rich diversities, such as ionotropic modulation, channel kinetics, mobility, and signal transduction other than cation mobilization.

This Special Issue will introduce the fields associated with NMDA receptors, explore advances and disadvantages regarding the role of NMDA receptors in diseases and disorders of the CNS, and discuss their abilities as pharmacological tools to regulate glutamatergic transmission in several psychiatric disorders and neurodegenerative diseases associated with NMDA receptors. We invite authors to submit original research and review articles related to these aspects.

Guest Editor

Prof. Dr. Motohiro Okada

Department of Neuropsychiatry, Division of Neuroscience, Graduate School of Medicine, Mie University, Tsu 514-8507, Mie, Japan

Deadline for manuscript submissions

28 February 2026



Biomolecules

an Open Access Journal by MDPI

Impact Factor 4.8 CiteScore 9.2 Indexed in PubMed



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Biomolecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomolecules@mdpi.com

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in Biomolecules so far. We would be delighted to welcome you as one of our authors.

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