Special Issue

Advances in the Search for Protective Agents against Amyloid ⊠-Induced Brain Degeneration

Message from the Guest Editor

The enhanced production of neurotoxic amyloid \(\bar{\bar{\pi}} \) peptides in the brain has been reported in the context of brain neurodegenerative processes and neurological disorders. Neurotoxic amyloid \(\text{peptides can be} \) produced by neurons and/or reactive astrocytes generated due to the brain inflammation observed in neurodegenerative processes. The small oligomers of neurotoxic amyloid \(\Big| \) peptides are chiefly responsible for the neurotoxicity of amyloid \(\) peptides in the brain. This Special Issue focuses on agents that afford protection against the rise of neurotoxic amyloid \(\) peptides in the intracellular and extracellular spaces of the brain, which could find potential applications in improved therapies aiming to delay or prevent brain neurodegeneration. These agents can be endogenous biomolecules that scavenge nanomolar concentrations of neurotoxic amyloid

peptides, a primary defense barrier, but also compounds that attenuate the production of these peptides or antagonize the neuronal dysfunctions induced by neurotoxic amyloid \(\mathbb{D}\) peptides. Eventually, this leads to neuronal death.

Guest Editor

Prof. Dr. Carlos Gutiérrez-Merino

Institute of Molecular Pathology Biomarkers, University of Extremadura, 06006 Badajoz, Spain

Deadline for manuscript submissions

closed (20 March 2025)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/151655

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





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





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)

