



Focus on Hippocampus Biology: From Neurophysiology to Dysfunctions

Guest Editor:

Dr. Manuela Dicarlo

Department of Precision and
Regenerative Medicine and
Ionian Area (DiMePRE-J),
University of Bari Aldo Moro,
Piazza Giulio Cesare 11, 70124
Bari, Italy

Deadline for manuscript
submissions:

closed (31 May 2024)

Message from the Guest Editor

Dear Colleagues,

The hippocampus is a fascinating brain region that is majorly devoted to spatial and episodic memory, learning, spatial navigation, and emotional behaviour. Electrophysiological, biochemical, and molecular techniques have evidenced that these hippocampus-dependent functions are guaranteed by the complex and plastic neural circuits that connect the main hippocampal regions (*i.e.*, Cornu ammonis and dentate gyrus) with their surrounding cerebral areas, and the adult neurogenesis in the dentate gyrus. However, hippocampal networks exhibit pronounced vulnerability to deleterious conditions such as ischemia, chronic stress, neuroinflammation, aging, etc., which may damage the hippocampal cytoarchitecture and lead to various neurological and psychiatric disorders.

Therefore, this Special Issue of the *International Journal of Molecular Sciences* aims to advance investigations into the hippocampus and warmly encourages the submission of original research articles and exhaustive reviews that examine the physiopathology of the hippocampus from a molecular and cellular perspective.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. José L. Quiles

Department of Physiology,
Institute of Nutrition and Food
Technology “Jose Mataix”,
Biomedical Research Center,
University of Granada, Avda.
Conocimiento s/n, 18100 Armilla,
Granada, Spain

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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 and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

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