Special Issue

Neural Correlates and Molecular Mechanisms of Memory and Learning

Message from the Guest Editors

The neurobiological and molecular foundation of learning and memory is an issue that has attracted researchers for decades. Through the use of many different learning and memory paradigms in different organisms, we are beginning to have a deeper understanding of the molecular changes that allow neurons within the amygdala, the hippocampus, and prefrontal cortex, to create and store memories and improve learning. The investigation of the biological basis of learning and memory requires a clear representation of molecular and cellular changes associated with brain plasticity, as memory formation depends on changes in synaptic efficiency that permit strengthening of associations between neurons. We also know that, at the cellular level, the storage of long-term memory is associated with gene expression, de novo protein synthesis, and the formation of new synaptic connections. This Special Issue welcomes original research or review articles focused on cellular and molecular evidence relating to different brain regions underlying memory and learning mechanisms.

Guest Editors

Dr. Simone Battaglia

1. Department of Theoretical and Applied Sciences, eCampus University, Como, Italy
2. Department of Psychology, University of Turin, Torino, Italy

Dr. Masaru Tanaka

Neuroscience Research Group, Hungarian Academy of Sciences-University of Szeged (MTA-SZTE), Szeged, Hungary

Deadline for manuscript submissions

closed (15 June 2023)

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/si/109532

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

MDPI

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/journal/ijms

MDPI

About the Journal

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.

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

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)