Special Issue

Exercise-Induced Neuroplasticity: Insights from Physiological and Epigenetic Adaptations

Message from the Guest Editors

Neuroplasticity denotes the ability of the central nervous system to organize, modify and adapt its circuits and neuronal connections in response to internal and external stimuli. In this regard, physical exercise has been widely shown to promote brain plasticity through the release of several neurotrophic factors that in turn affect neuronal metabolism, nerve growth, and new synaptic connections as well as trigger intracellular molecular pathways in order to ensure neuronal survival and prevent neurodegeneration. In addition, exercise has been proven to directly affect the expression of neuroplasticity-related genes through epigenetic modifications including DNA methylation, histone modifications and microRNAs (miRNAs). We are pleased to invite you to submit your manuscript to our current Special Issue whose purpose is to investigate molecular and epigenetic mechanisms affecting exercise-induced neuroplasticity; both original research articles and reviews are welcome.

Guest Editors

Dr. Ferdinando Franzoni

Department of Clinical and Experimental Medicine, University of Pisa, 56126 Pisa, Italy

Dr. Giorgia Scarfò

Department of Clinical and Experimental Medicine, University of Pisa, 56126 Pisa, Italy

Deadline for manuscript submissions

closed (30 November 2024)

Biology

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed

mdpi.com/si/196652

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

mdpi.com/journal/biology

Biology

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed

mdpi.com/journal/biology

About the Journal

Message from the Editorial Board

A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

Editors-in-Chief

Prof. Dr. Jukka Finne
Research Programme in Molecular and Integrative Biosciences, Faculty of Biological and Environmental Sciences, University of Helsinki, P.O. Box 56, FI-00014 Helsinki, Finland

Prof. Dr. Andrés Moya
Integrative Systems Biology Institute, University of Valencia and CSIC, 46980 Valencia, Spain

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (General Agricultural and Biological Sciences)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.4 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2025).

MDPI