

Special Issue

The Role of Synaptic Plasticity in Animal Behavior and the Development of Psychiatric Disorders

Message from the Guest Editors

Animal behaviors are driven by the concerted activity of several brain areas, including cortical and subcortical regions, whose neurons are interconnected by billions of synaptic contacts. In these complex networks, synaptic weights can be strongly modified by experience and continuously refined via regulatory mechanisms that preserve homeostatic balance. The phenomenon behind these changes is referred to as synaptic plasticity. Extended evidence supports a central role for synaptic plasticity in the generation of maladaptive and pathological behaviors, such as in addiction or following trauma. Furthermore, many psychiatric disorders have been associated with defective plasticity, including depressive and tic disorders, and novel therapeutic strategies based on non-invasive brain stimulation are being successfully adopted. This Special Issue aims to collect studies on the role of synaptic plasticity in physiological and pathological animal behavior, with particular focus on the development and treatment of psychiatric disorders. Both original research articles and reviews are welcome.

Guest Editors

Dr. Jacopo Lamanna

Faculty of Psychology, Vita-Salute San Raffaele University, 20132 Milan, Italy

Dr. Mattia Ferro

Department of Psychology, Sigmund Freud University, 20143 Milan, Italy

Deadline for manuscript submissions

closed (15 June 2024)



Behavioral Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.1
Indexed in PubMed



mdpi.com/si/139733

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

[mdpi.com/journal/
behavsci](https://mdpi.com/journal/behavsci)





Behavioral Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.1
Indexed in PubMed



[mdpi.com/journal/
behavsci](https://www.mdpi.com/journal/behavsci)



About the Journal

Message from the Editor-in-Chief

With warm greetings, it is a pleasure to invite you to contribute a research article or comprehensive review for consideration and publication in *Behavioral Sciences*. *Behavioral Sciences* is an international, scientific, open access journal providing an advanced forum for discussions and research regarding the intersection between psychiatry, neuroscience, psychology, cognitive and behavioral sciences, and behavioral biology. More information are available at: <https://www.mdpi.com/journal/behavsci>. We would be pleased to welcome you as one of our authors and have the opportunity to consider your work for publication.

Editor-in-Chief

Prof. Dr. Jerrell Cassady

Department of Educational Psychology, Ball State University, Muncie, IN
47306, USA

Author Benefits

High Visibility:

indexed within Scopus, SSCI (Web of Science), PubMed, PMC, Embase, PsycInfo, and other databases.

Journal Rank:

JCR - Q2 (Psychology, Multidisciplinary) / CiteScore - Q1
(Ecology, Evolution, Behavior and Systematics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 32 days after submission; acceptance to publication is undertaken in 3.6 days (median values for papers published in this journal in the second half of 2025).