

Special Issue

Pathophysiological Mechanisms Underlying Neurodegenerative Disorders

Message from the Guest Editor

Neurodegenerative disorders (NDD) are a group of diseases characterized by selective dysfunction and progressive loss of neurons, glial cells, and their networks in different parts of the nervous system. Patients with NDD display progressive cognitive loss and/or motor dysfunction as a consequence. Despite the wide variety of causes of NDD, several research groups have demonstrated that they share common pathways such as the accumulation of insoluble protein aggregates, apoptosis, necrosis, excitotoxicity, and neuroinflammation. Other significant contributors to neurodegeneration include diminished autophagy/lysosomal activity, downstream oxidative stress, and mitochondrial dysfunction. Animal models are effective research tools for figuring out the causes and molecular mechanisms of neurodegenerative diseases as well as discovering new therapeutic agents. This Special Issue aims to present the latest updates on the molecular mechanisms of neurodegenerative diseases in both animal and human studies.

Guest Editor

Prof. Dr. Abdelaziz M. Hussein

Medical Physiology, Mansoura Faculty of Medicine, Mansoura, Egypt

Deadline for manuscript submissions

closed (5 October 2023)



Brain Sciences

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.6
Indexed in PubMed



mdpi.com/si/164600

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

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





Brain Sciences

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.6
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Brain Sciences* (ISSN 2076-3425). *Brain Sciences* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on neuroscience. The scientific community and the general public can access the content free of charge as soon as it is published.

Editor-in-Chief

Prof. Dr. Stephen D. Meriney

Department of Neuroscience, University of Pittsburgh, Pittsburgh, PA
15260, USA

Author Benefits

High Visibility:

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

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.2 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).

Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.