

## Special Issue

# The Role of Oxidative Stress in Ischemic Stroke

### Message from the Guest Editor

In recent years, redox biology, the study of oxidation–reduction processes associated with life, has been an area of great interest due to its participation in fundamental aspects of both physiological and pathological conditions. Oxidative stress (distress), a condition characterized by the presence of high amounts of reactive oxygen/nitrogen species, is recognized as the main event leading to brain damage after cerebral ischemia. Ischemic stroke is among the leading causes of disability and mortality worldwide. The Special Issue is dedicated to advancing knowledge of the role played by alterations in redox biology in ischemic stroke. Because oxidative stress involves multiple post-ischemic cascades that lead to cell death, we aim to encompass everything from molecular mechanisms and pathophysiology to clinical management and neuroprotective strategies. We invite collaborators to examine how oxidative stress occurs, what mechanisms of cell death are activated, and how they can be manipulated to induce neuroprotection. Better understanding of these pathways may provide new therapeutic strategies in clinical stroke treatment.

### Guest Editor

Prof. Dr. Ramón Rama

Department Cellular Biology, Physiology and Immunology, University of Barcelona, 08007 Barcelona, Spain

### Deadline for manuscript submissions

closed (25 November 2024)



## Brain Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.6  
Indexed in PubMed



[mdpi.com/si/205659](https://mdpi.com/si/205659)

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

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

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





# 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.