

Special Issue

Neurotrauma: Mechanisms, Pathways, and Emerging Therapeutic Interventions

Message from the Guest Editors

Neurotrauma encompasses traumatic brain and spinal cord injuries. Its pathophysiological mechanisms, particularly primary injuries followed by secondary cascades like inflammation, oxidative stress, and excitotoxicity, merit further elucidation and serve as treatment targets. This Special Issue of *Biomedicines* focuses on the molecular and cellular pathways associated with neurotrauma. We aim to address advancements in diagnostic biomarkers, the utility of advanced imaging techniques, and the current and emerging treatments for neuroprotection and regeneration. We invite submissions of original research, reviews, and comprehensive studies that provide insights into these important areas. **The scope of this Special Issue includes but is not limited to:**

- Primary and secondary injury mechanisms in neurotrauma;
- Molecular and cellular pathways in neurotrauma;
- Role of inflammation post-neurotrauma;
- Identification of new diagnostic biomarkers;
- Utility of advanced imaging techniques in neurotrauma;
- Therapeutic strategies focusing on neuroprotection and regeneration;
- Reviews on current and emerging trends in neurotrauma research.

Guest Editors

Dr. Kevin Pierre

Department of Radiology, University of Florida, Gainesville, FL, USA

Dr. Brandon Lucke-Wold

Department of Neurosurgery, University of Florida, Gainesville, FL, USA

Deadline for manuscript submissions

closed (30 April 2025)



Biomedicines

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/184871

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

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





Biomedicines

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni

1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 21 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).