Special Issue

New Advances in Functional Neurosurgery—2nd Edition

Message from the Guest Editor

Functional neurosurgery has witnessed remarkable advancements in recent years, significantly improving patient outcomes in various neurological disorders. The focus of this Special Issue is on research on the advancement of surgical techniques for the treatment of neuropathic pain, new indications for neuromodulation, such as spasticity and movement disorders, and advances in the management of neurovascular conflict syndromes, alongside the use of artificial intelligence for optimizing patient selection and outcome prediction. Furthermore, key topics are the expanding role of MR-guided focused ultrasound (MRgFUS), the role of deep brain stimulation (DBS) beyond movement disorders, and innovative therapeutic options for drug-resistant epilepsy, such as laser interstitial thermal therapy (LiTT). Additionally, the advancement of intraoperative neurophysiological monitoring in all fields of neurosurgery is of great interest for the purpose of this Special Issue. We believe that this Special Issue will serve as a valuable resource for researchers and clinicians to share their latest findings, and advance the field.

Guest Editor

Dr. Nicola Montano

Department of Neuroscience, Neurosurgery Section, Catholic University of the Sacred Heart, Rome, Italy

Deadline for manuscript submissions

31 December 2025

Brain Sciences

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, PSYNDEX, 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.