Special Issue

Advances in Cerebral Aneurysm Surgery: The Latest Technologies and Techniques

Message from the Guest Editor

Cerebral aneurysms are treated by reconstructive and deconstructive techniques. To remain among a first-line treatment option, the therapeutic procedure of microneurosurgical aneurysm clipping requires permanent refinements, including technical advances in operation planning and simulation, improvements in intraoperative monitoring and imaging, microneurosurgical high-end wet-lab trainings, and the mastering of cerebral bypass surgery as a firstline treatment as well as a bail-out procedure. Hybrid neurovascular surgery in expert hands is a promising strategy and will enhance patient safety by merging surgical and endovascular techniques in one procedure. Aneurysm rupture analysis using fluid structure interactions in vivo, in vitro, and in virtual simulations will add to our understanding of which aneurysms require active surgical treatment. The scope of this Special Issue is therefore the discussion of current and future strategies to improve procedural safety, angiographic results, and clinical outcomes in patients suffering from both ruptured and unruptured cerebral aneurysms.

Guest Editor

Prof. Dr. Andreas Gruber

Department of Neurosurgery, Kepler University Hospital, Johannes Kepler University Linz, Wagner-Jauregg-Weg 15, A-4020 Linz, Austria

Deadline for manuscript submissions

20 February 2026



Brain Sciences

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.6
Indexed in PubMed



mdpi.com/si/246956

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

mdpi.com/journal/ brainsci





Brain Sciences

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.6 Indexed in PubMed



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.

