

## Special Issue

# Physical Activity Across the Lifespan: Mechanisms, Interventions and Cognitive Function

### Message from the Guest Editors

Physical activity is increasingly recognised as a potent modifiable lifestyle factor for brain health and cognitive function. This Special Issue invites high-quality contributions exploring how movement, exercise, and physical activity influence cognition and brain processes across the lifespan, in both healthy and clinical populations. We are interested in mechanistic studies (neuroplasticity, vascular adaptations, myokines/exerkines, inflammation), interventional research (acute bouts, long-term programmes, real-world movement), and translational work (implementation, dose/duration/type, moderators/mediators). Methodologically advanced designs, such as neuroimaging, wearables and ecological monitoring, and electrophysiology, and biomarker studies are particularly welcome. Lifespan perspectives from childhood/adolescence through mid-life to older adults and contexts including neurodegenerative risk, cognitive decline, and combined physical and cognitive training are encouraged. The goal is to synthesise emerging evidence, deepen mechanistic understanding, and identify pathways for applying physical activity to optimise cognitive health.

---

### Guest Editors

Dr. Daniele Magistro

School of Health Sciences, Faculty of Environmental & Life Sciences, University of Southampton Highfield, Southampton SO17 1BJ, UK

Prof. Dr. Simon Cooper

Department of Sport Science, School of Science and Technology, Nottingham Trent University, 50 Shakespeare St, Nottingham NG1 4FQ, UK

---

### Deadline for manuscript submissions

10 October 2026



## Brain Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.6  
Indexed in PubMed



[mdpi.com/si/263140](https://mdpi.com/si/263140)

*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/  
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 17.6 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second 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.