

## Special Issue

# Autoantibodies in Infection-Associated Cognitive Deficit: Pathogenic Mechanisms, Clinical Aspects, and Therapeutic Approaches

### Message from the Guest Editors

Autoantibody production in association with infection appears to bear pathogenic potential for cognitive impairment. Molecular mimicry, among other mechanisms, has been proposed to mediate such autoimmune phenomena. However, a detailed mechanistic account of autoantibody-mediated para-/post-infective neuronal and cognitive damage is still missing. Moreover, if and how anti-neuronal antibodies can affect specific cognitive functions is largely unknown. Bridging the gap between the molecular immunology of infection-induced autoimmunity and cognitive neurology would result in better diagnostic and therapeutic procedures. We intend to collect the most recent evidence on:

- Biological and molecular mechanisms originating autoantibodies targeting the brain during and after infections;
- Pathogenic effects exerted by anti-neuronal autoantibodies at the molecular level (not necessarily limited to post-infectious etiology);
- Neuropsychological patterns of cognitive deficits associated with specific microbes and/or autoantibodies;
- Neuroimaging and functional indexes of cognition in para-/post-infectious autoimmunity.

---

### Guest Editors

Dr. Guglielmo Lucchese

1. Department of Experimental Medicine, University of Salento, Lecce, Italy
2. Department of Neurology, University Hospital "Vito Fazzi", Lecce, Italy

Dr. Antje Vogelgesang

Department of Neurology, University of Greifswald, 17489 Greifswald, Germany

---

### Deadline for manuscript submissions

closed (15 May 2022)



## Brain Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.6  
Indexed in PubMed



[mdpi.com/si/87125](https://mdpi.com/si/87125)

*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.