

## Special Issue

# Pediatric Epilepsy: Insights from Genetics to Mechanisms

### Message from the Guest Editors

Pediatric epilepsy (PE) comprises a heterogeneous group of disorders characterized by recurrent, unprovoked seizures with onset in infancy or childhood, often resistant to standard anti-epileptic drugs. Over the past two decades, advances in genomics and next-generation sequencing have significantly expanded our understanding of the molecular basis of PE.

Complementary multi-omics approaches have further illuminated the complex genetic architecture of PE, uncovering key molecular pathways involved in its pathogenesis. Despite these advances, significant challenges remain in translating genetic findings into biological insight and clinical impact. Nowadays, emerging technologies such as single-cell and spatial transcriptomics are revealing the cellular heterogeneity and spatial organization of brain development in both health and disease. This area of research is critically important—not only for advancing our understanding of the biological basis of PE, but also for driving the development of effective therapeutic strategies.

### Guest Editors

Dr. Denise Drongitis

Institute of Genetics and Biophysics "Adriano Buzzati-Traverso",  
National Research Council, 80131 Naples, Italy

Dr. Maria Giuseppina Miano

Institute of Genetics and Biophysics "Adriano Buzzati-Traverso",  
National Research Council, 80131 Naples, Italy

### Deadline for manuscript submissions

31 May 2026



## Biomolecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.8  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/si/248823](https://mdpi.com/si/248823)

*Biomolecules*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[biomolecules@mdpi.com](mailto:biomolecules@mdpi.com)

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





# Biomolecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.8  
CiteScore 9.2  
Indexed in PubMed



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



## About the Journal

### Message from the Editorial Board

*Biomolecules* is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

---

### Editors-in-Chief

Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

---

### Author Benefits

#### Open Access

— free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

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

#### Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)