



cells



an Open Access Journal by MDPI

Cellular and Molecular Basis of Epilepsy

Guest Editors:

Dr. Katarzyna Sociała

Department of Animal Physiology and Pharmacology, Maria Curie-Skłodowska University, Akademicka 19, 20-033 Lublin, Poland

Prof. Dr. Piotr Właż

Department of Animal Physiology and Pharmacology, Institute of Biological Sciences, Maria Curie-Skłodowska University, Akademicka 19, 20-033 Lublin, Poland

Deadline for manuscript submissions:

closed (31 January 2024)

Message from the Guest Editors

Epilepsy is a heterogeneous group of neurological disorders characterized by recurrent unprovoked seizures, caused by abnormal electrical activity of the whole brain or one of its structures. The etiology of epilepsy is complex and includes structural and metabolic abnormalities, genetic factors, and unknown causes. The mechanism of epileptogenesis, i.e., the process of structural and functional changes transforming the normal brain to one that can generate abnormal neuronal activity, is also multifactorial and unclear. Treatment of epilepsy is still a challenging issue. Pharmacotherapy continues to be the mainstay of epilepsy treatment but about 1/3 of patients remain resistant to the treatment. Moreover, the currently available antiseizure drugs possess only symptomatic activity and they do not suppress epileptogenesis.

This Special Issue will collect original research articles and reviews on the cellular and molecular mechanisms underlying the pathophysiology of seizure, epilepsy and epileptogenesis. Papers on the development of new antiseizure drugs and treatment strategies will be also considered.



mdpi.com/si/116953

Special Issue



cells



an Open Access Journal by MDPI

Editors-in-Chief

Dr. Alexander E. Kalyuzhny

Dental Basic Sciences, University of Minnesota, 308 Harvard St. SE, Minneapolis, MN 55455, USA

Prof. Dr. Cord Brakebusch

Biotech Research & Innovation Centre, The University of Copenhagen, Copenhagen, Denmark

Message from the Editorial Board

Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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](#), [CAPus / SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q2 (Cell Biology) / CiteScore - Q1 (General Biochemistry, Genetics and Molecular Biology)

Contact Us

Cells Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/cells
cells@mdpi.com
[X@Cells_MDPI](#)