# **Special Issue**

# New Discoveries in Calcium Signaling-Related Neurological Disorders

## Message from the Guest Editor

The ubiquitous intracellular messenger calcium (Ca2+) exerts regulatory control over virtually every activity in eukaryotic cells, particularly in excitable cells. Within neurons, Ca2+ assumes a crucial role in the regulation and modulation of essential physiological processes. spanning from synaptic activity to neuronal plasticity. Given the necessity for a highly refined and precise control of Ca2+ levels within specific cellular compartments in neurons, the organizational structure of the Ca2+ signaling machinery in neurons is notably intricate. The malfunctioning of the Ca2+ signaling pathway, which oversees numerous neuronal processes, has been linked to the onset and progression of significant neural disorders in humans. Conditions such as Alzheimer's disease, bipolar disorder, and schizophrenia have been implicated in instances where the Ca2+ signaling pathway experiences dysregulation. This Special Issue aims to put together all the recent findings on how Ca2+ dysregulation can contribute to the outcome and progression of several neurological disorders.

### **Guest Editor**

Dr. Matheus De Castro Fonseca

Laboratory of Sarkis Mazmanian, Division of Biology and Biological Engineering, California Institute of Technology, 1200 E. California Boulevard, Pasadena, CA 91125, USA

### Deadline for manuscript submissions

31 October 2025



## Cells

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 10.5 Indexed in PubMed



mdpi.com/si/197734

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

mdpi.com/journal/cells





# Cells

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 10.5 Indexed in PubMed



## **About the Journal**

## 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.

### **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

### **Author Benefits**

### **High Visibility:**

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

#### Journal Rank:

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

### **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

