



life



an Open Access Journal by MDPI

Ion Channels and Neurological Disease: 2nd Edition

Guest Editors:

Dr. Carlo Musio

Institute of Biophysics (IBF),
Trento Unit, National Research
Council (CNR), Via Sommarive 18,
38123 Trento, Italy

Dr. Marzia Martina

Human Health Therapeutics
Research Centre, National
Research Council of Canada,
1200 Montreal Road, Building
M54, Ottawa, ON K1A 0R6,
Canada

Deadline for manuscript
submissions:

31 December 2024

Message from the Guest Editors

We are pleased to invite you to contribute to this Special Issue in *Life* on the topic "Ion Channels and Neurological Disease: 2nd Edition".

Ion channels are key elements in the control of membrane physiology and neurotransmission as ionic fluxes assure neuronal signal propagation across and between neurons through synaptic transmission. Pathophysiology of ion channels may originate from either mutations of gene-encoding components of the channel structure (channelopathy) or secondary dysfunctions—both conditions affect intrinsic excitability in the cell and synaptic functions leading to pathophysiological signs of diseases.

The aim of this Special Issue is to provide new achievements in the research on pathophysiological changes and structural altered phenotypes in ion channel malfunction. A particular interest could be addressed to drug screening and targeting in order to propose putative therapeutic avenues (including also nutraceuticals and/or ethnopharmacology) that can be developed to treat or alleviate these incurable diseases.

Related Special Issue:
https://www.mdpi.com/journal/life/special_issues/38L6X14SR5.



[mdpi.com/si/203859](https://www.mdpi.com/si/203859)

Special *Issue*



life



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona Institute of Science and Technology, 08028 Barcelona, Spain

Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

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](#), [PMC](#), [CAPlus / SciFinder](#), [AGRIS](#), and [other databases](#).

Journal Rank: JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)

Contact Us

Life Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/life
life@mdpi.com
[X@Life_MDPI](#)