



cells



an Open Access Journal by MDPI

Neuroplasticity of Central Nervous System in Health and Disease

Guest Editor:

Dr. Giovanni Cirillo

Division of Human Anatomy-
Neuronal Networks Morphology
and Systems Biology Lab,
Department of Mental, Physical
Health and Preventive Medicine
University of Campania “Luigi
Vanvitelli”, 80138 Naples, Italy

Deadline for manuscript
submissions:

closed (31 August 2021)

Message from the Guest Editor

Dear Colleagues,

Neuroplasticity represents the key feature of the central nervous system (CNS) and includes both short- and long-term adaptive synaptic changes that, in turn, modulate the activity of brain networks underlying higher brain functions. Recent advances strongly support the role of activated glial cells in the perturbation of synaptic plasticity. This condition, called maladaptive synaptic plasticity, represents the final result of a cascade of events (neuroinflammation, failure of neurovascular coupling, changes of neurotransmitters homeostasis, failure of rescue mechanisms, metabolic/mitochondrial dysfunction) leading to disruption of the complex neuroglial networks underlying neural homeostasis and connectivity within brain circuits. Accordingly, the possibility to directly modulate synaptic functions and plasticity through induction of both short- and long-term neurobiological after-effects with non-invasive brain stimulation techniques is paving the way for new therapeutic strategies in treating neuropsychiatric disorders.

Dr. Giovanni Cirillo
Guest Editor



mdpi.com/si/74810

Special Issue



cells



an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Alexander E. Kalyuzhny

Neuroscience, UMN Twin Cities,
6-145 Jackson Hall, 321 Church 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](#), [CAPlus / 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](#)