

Special Issue

Cytokines and Cytokine Receptors in Brain Homeostasis

Message from the Guest Editors

Cytokines and growth factors are produced by all the CNS cell types and play key roles in the proliferation and differentiation of neural stem cells, oligodendrocytes, astrocytes, and microglia, myelin production and maintenance, and synaptic transmission. CNS cytokines and growth factors are essential to CNS-immune system and CNS-hormone system communications. Furthermore, the research on the mechanisms of signaling transmission pathways, i.e., the post-receptor mechanisms of action, of cytokines and growth factors has continued to grow quite rapidly. Lastly, the roles of these molecules in the different aspects of the pathogenesis of some CNS diseases (whether demyelinating or not) have been extensively investigated, although we still know very little about this topic.

This Special Issue examines some of the aforementioned aspects and, as a whole, gives a broad survey of the status of the art in this exciting field. I think that the topic of this Special Issue should be of particular interest not only for neurologists and neurobiologists but also for physicians and specialists in different areas of medicine.

Guest Editors

Prof. Dr. Giuseppe Scalabrino

Department of Biomedical Sciences, University of Milan, 20122 Milan, Italy

Dr. Gerard Martens

Department of Molecular Animal Physiology, Radboud University Nijmegen, Nijmegen, The Netherlands

Deadline for manuscript submissions

closed (28 February 2023)



Biomedicines

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 7.8
Indexed in PubMed



mdpi.com/si/71642

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

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





Biomedicines

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 7.8
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni

1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA

2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 21 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).