Special Issue

Trained Immunity and Endotoxin Tolerance in Inflammatory Diseases

Message from the Guest Editors

Innate immune cells have been shown to be able to articulate non-specific memory-like responses known as trained immunity, manifested with increased responsiveness against secondary pathogenic insults. Contrary to trained immunity, endotoxin tolerance is a well-known immune reaction characterized by declined responsiveness and increased repairing/anti-inflammatory reactions. Both of these opposing adaptive features of the innate immune system are shaped by different external and internal stressors, promoted mainly by epigenetic changes with resulting changes in metabolism and mediated particularly by the PI3K/mTOR pathway. Recent advances have revealed that trained memory as well as tolerance may alter several cellular functions. This then has a major impact on the progression or suppression of different inflammatory diseases. The inappropriate induction of one of these antagonistic adaptive manners may result in maladaptive reactions which trigger life-threating events. As such, we invite all the colleagues to submit their findings in this Special Issue to further provide more insights on the role of the trained immunity and tolerance development in inflammatory disorders.

Guest Editors

Dr. Trim Lajqi
Dr. Christian Gille
Dr. Hannes Hudalla

Deadline for manuscript submissions

closed (31 May 2024)

Biomedicines

an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed

mdpi.com/si/136262

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

mdpi.com/journal/biomedicines

Biomedicines

an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed

mdpi.com/journal/biomedicines

MDPI

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, CAPlus / 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).