Special Issue

Omics Approaches to Immune-Mediated Inflammatory Diseases: Towards Novel Biomarkers and Potential Therapeutic Targets

Message from the Guest Editor

Chronic immune-mediated inflammatory diseases (IMIDs), including autoimmune and non-autoimmune conditions—rheumatoid and psoriatic arthritis, systemic lupus erythematosus, inflammatory bowel disease, Crohn's disease, ulcerative colitis, multiple sclerosis, etc. Recent technological advances have facilitated high-throughput omics approaches (genomics, transcriptomics, epigenomics, proteomics, metabolomics) for the evaluation of critical molecular compartments involved in the development and perpetuation of IMIDs. Unveiling key players governing their pathogenesis and progression may pave the way for the detection of novel biomarkers for disease prognosis and therapy response monitoring while suggesting potential therapeutic targets. Bulk and single-cell omics, multi-omics flow cytometry, nextgeneration microscopy and systems biology are among current approaches expected to provide useful tools to be applied in daily clinical practice. This Special Issue aims at gathering recent data from omics studies on IMIDs that could possibly serve as novel biomarkers and/or therapeutic targets.

- IMIDs
- IBD
- Crohn's disease
- bulk and single-cell omics

Guest Editor

Dr. Maria-Ioanna Christodoulou

- 1. Department of Life Sciences, European University Cyprus, Nicosia 2404, Cyprus
- 2. School of Infection and Immunity, University of Glasgow, Glasgow G12 8TA, UK

Deadline for manuscript submissions

closed (31 October 2022)



an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 6.8 Indexed in PubMed



mdpi.com/si/104102

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

mdpi.com/journal/biomedicines





an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 6.8 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access iournal 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

- 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 17 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).