Special Issue

Macrophage Polarization: Learning to Manage It

Message from the Guest Editor

Dear colleagues,

Macrophages are crucial components of innate immunity. They possess high plasticity and the ability to differentiate in response to numerous stimuli. There is a plethora of different specialized functional phenotypes, among which inflammatory (M1) and reparative (M2) subtypes are proposed, which are almost exactly opposite to each other. Two key cytokines, IFN-□ and TNF-□, are responsible for M1, or classical activation, while alternate activation in M2 is mediated mainly by IL-4 and IL-13. Interestingly, microRNAs and some immunomodulators are critical regulators of macrophage polarization. The link with many human diseases and infections, including cancer, autoimmunity, and periodontitis, is to be found in the dysregulation of macrophage plasticity. Furthermore, recent studies on naturally occurring compounds emphasize their regulatory effects on macrophage polarization, suggesting that some of them could be promising for the treatment of sensitive diseases.

This Special Issue aims to cover all areas of molecular research, but is not limited to this, as it may include clinical studies with biomolecular experiments.

Guest Editor

Dr. Nadia Lampiasi

Istituto per la Ricerca e l'Innovazione Biomedica (IRIB), Consiglio Nazionale delle Ricereche (CNR), 00185 Rome, Italy

Deadline for manuscript submissions

closed (30 April 2022)

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/si/61442

International Journal of Molecular Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

mdpi.com/journal/ijms

MDPI

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/journal/ijms

MDPI

About the Journal

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. Maurizio Battino
Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)