Special Issue

Role for the Enzyme Myeloperoxidase to Elicit Pathologies

Message from the Guest Editors

The neutrophil-derived heme enzyme myeloperoxidase is an efficient peroxidase that is considered to form part of responses to injury and infection in the acute to early phases. This leukocyte enzyme produces a range of potent oxidants in the presence of both hydrogen peroxide and biological halides or thiocyanate. Myeloperoxidase is gaining increased attention as an important oxidative mediator of range of pathologies, including inflammatory damage to the brain, reperfusion injury to a range of organs, vascular dysfunction, adverse ventricular remodeling, and atrial fibrillation. Thus, interest in this enzyme, its role in host damage, and the resolution of the inflammatory response has increased. Accordingly, the development of potential therapies to limit both neutrophil and myeloperoxidase activity in tissue pathology has gained significant traction in the recent literature. This Special Issue will highlight the role for myeloperoxidase in disease progression, identify important biomarkers to monitor host tissue damage elicited by this peroxidase, and expand on novel strategies to limit enzyme activity and its relationship to disease.

Guest Editors

Prof. Dr. Paul K. Witting

Discipline of Pathology, The University of Sydney, Sydney, NSW 2006, Australia

Dr. Benjamin Rayner

Senior Research Fellow, Heart Research Institute, Sydney Medical School, University of Sydney, Sydney, Australia

Deadline for manuscript submissions

closed (30 September 2020)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/30029

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





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





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)

