Special Issue

Targeting Inflammaging and Degeneration by Amino Acids

Message from the Guest Editor

The process of ageing and stress or aberrant signalinginduced senescence can induce inflammation and degeneration. Oxidative stress affects signaling pathways for metabolic protein turnover that can recruit malfunctioning aberrant proteins and compounds that trigger inflammatory processes. Although various cell types are involved in secreting proinflammatory signals. the lack of trophic prosurvival signaling by amino acids and the resulting insufficient antioxidative protection by amino acid metabolites derived from the symbiotic organisms in the gastrointestinal tract and the endothelial cells of the cardiovascular system or the myocytes from the muscles seem to contribute most to age-dependent inflammatory processes that impair health. Recent studies emphasized the role of metabolic mitochondrial dysregulation in degenerative inflammatory diseases.

This Issue focuses on these detrimental metabolic und immune responses during ageing and invites contributions to this rapidly developing field of research with special emphasis on approaches that successfully target inflammation and degeneration by providing amino acids as the decisive molecules enabling endogenous regeneration.

Guest Editor

Prof. Dr. Burkhard Poeggeler

Department of Physiology, Johann-Friedrich-Blumenbach-Institute for Zoology and Anthropology, Faculty of Biology, Georg August University Göttingen, Göttingen and Goettingen Research Campus, Göttingen, Am Türmchen 3, Gütersloh D-33332, Germany

Deadline for manuscript submissions

closed (31 July 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/82449

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)

