Special Issue

Oxidative Stress and Inflammation in Chronic Diseases

Message from the Guest Editor

In chronic diseases affecting the cardio-pulmonary system, kidneys, liver, or central nervous system, an altered redox state would turn the physiological state into a pathologic condition through the alteration of lipids, proteins, or DNA. In the liver, the increased peroxidation could reduce insulin sensitivity and change the expression/activity of key enzymes involved in lipid metabolism. In the central nervous system, the neurovascular unit would be the target of the altered redox state. As regards the kidneys, oxidative stress could also be involved in the onset of comorbidities arising during haemodialysis and transplantation. In any case, the interaction between the redox system and innate immune signaling could constitute a complex network of regulation of the inflammatory response. Note that, in all of the abovementioned conditions, "mitochondrial dysfunction" would act as triggering factor. For the above reasons, the use of novel noninvasive markers aimed at evaluating oxidative stress and inflammation could represent powerful tools for the management of patients.

Guest Editor

Dr. Elena Grossini

Laboratory of Physiology, Department of Translational Medicine, Università del Piemonte Orientale, 28100 Novara, Italy

Deadline for manuscript submissions

closed (30 November 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/45674

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*) 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, and molecular biophysics. *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. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology "Jose Mataix", Biomedical Research Center, University of Granada, Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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)