# **Special Issue**

# Oxidative Stress and Inflammation: From Mechanisms to Therapeutic Approaches

# Message from the Guest Editor

Oxidative stress and inflammation are two phenomena that are directly involved in practically all pathologies and especially in aging. However, they are not only involved in processes associated with damage. For instance, oxidative stress, which is associated with the redox state, constitutes an important mechanism in many physiological processes, such as adaptations to physical exercise, cell signaling, and hypothalamic regulation of appetite. Regarding inflammatory mediators, it is also known that they are essential in mechanisms such as the generation of gastric mucus for the protection of the stomach and the repair of tissues via the mobilization of stem cells. However, when these two phenomena are deregulated, their action is harmful. In this Special Issue, we ask ourselves several questions: How and when should we allow or block oxidative stress and inflammation? What is the advisable dose of antioxidant or anti-inflammatory therapy associated with aging? Are diet, physical exercise, and decreased psychological stress the best therapies for oxidative stress and inflammation control?

#### **Guest Editor**

Dr. Juan Gambini

Department of Physiology, Faculty of Medicine, University of Valencia and CIBERFES, Fundación Investigación Hospital Clínico Universitario/INCLIVA, 46010 Valencia, Spain

## Deadline for manuscript submissions

closed (30 November 2020)



an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/30865

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).