



## New Insights into Oxidative Stress and Inflammation in the Pathophysiology and Treatment of Respiratory Diseases

Guest Editor:

**Prof. Dr. Marcel Bonay**

1. Department of Physiology and  
Functional Explorations,  
Ambroise Paré and Bicêtre  
Hospitals, Assistance Publique  
Hôpitaux de Paris, 92104  
Boulogne, France  
2. Inserm U1179, University of  
Paris Saclay (UVSQ), 78000  
Versailles, France

Deadline for manuscript  
submissions:

**closed (31 May 2023)**

### Message from the Guest Editor

Dear Colleagues,

Recently, the importance of the respiratory system and the need for novel therapeutic strategies for respiratory diseases have been highlighted by SARS-CoV-2. The airways are constantly exposed to various inhaled pollutants and microbes, which induce oxidative stress and inflammation. Oxidative stress, known to increase the risk of developing many acute and chronic respiratory diseases, is defined by an imbalance between the production of reactive oxygen species and the capacity of antioxidants to counteract the deleterious effects of oxidants. Normal healthy lungs protect themselves against these oxidants with cellular and extracellular antioxidant defense mechanisms throughout the epithelial lining fluid and tissues. Recently, novel therapeutic targets have been implicated in the prevention, or treatment, of respiratory disease by modulating oxidative stress and inflammation.

This Special Issue focuses on different aspects of oxidative stress and inflammation in the pathophysiology and treatment of respiratory diseases in animal models.

Prof. Dr. Marcel Bonay  
*Guest Editor*





an Open Access Journal by MDPI

## 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

## 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.

## 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 & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

## Contact Us

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI