

Special Issue

Hormones and Oxidative Stress

Message from the Guest Editor

An imbalance between the production of ROS and the capability of the antioxidant defense system results in the induction of oxidative stress, which is involved in different pathological events. The regulation of cellular antioxidant defenses may be influenced by different factors, such as age, organ specificity, and hormonal state. Some hormones, such as melatonin, insulin, and estrogen, act as antioxidants and/or exert an impact on the various enzymatic and non-enzymatic components of the defense system, while others, including thyroid hormones, corticosteroids, and catecholamines, promote the generation of ROS and oxidative stress. Moreover, any alterations in the hormonal milieu can exhibit significant effects on ROS production and oxidative stress, possibly leading to pathological conditions. For this Special Issue, we aim to better understanding the complex relationship between hormonal conditions, redox states, and oxidative stress in living systems in both physiological and pathological conditions.

Guest Editor

Dr. Silvia Nistri

Department of Experimental and Clinical Medicine, Research Unit of Histology and Embryology, University of Florence, Viale G. Pieraccini 6, 50139 Florence, Italy

Deadline for manuscript submissions

closed (31 May 2025)



Antioxidants

an Open Access Journal
by MDPI

Impact Factor 6.6
CiteScore 12.4
Indexed in PubMed



mdpi.com/si/199667

Antioxidants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
antioxidants@mdpi.com

[mdpi.com/journal/
antioxidants](https://mdpi.com/journal/antioxidants)





Antioxidants

an Open Access Journal
by MDPI

Impact Factor 6.6
CiteScore 12.4
Indexed in PubMed



[mdpi.com/journal/
antioxidants](https://mdpi.com/journal/antioxidants)



About the Journal

Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of “oxidative stress” a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

Editor-in-Chief

Prof. Dr. Alessandra Napolitano
Department of Chemical Sciences, University of Naples “Federico II”,
Via Cintia 4, I-80126 Naples, 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, FSTA, PubAg, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Chemistry, Medicinal) / CiteScore - Q1 (Food Science)