

## Special Issue

# Exploring New Frontiers in Oxidative Stress and Antioxidant Research: From Model Organisms to Human Disease

### Message from the Guest Editors

Oxidative stress (OS) plays a critical role in the pathogenesis of numerous human diseases, including cancer, neurological disorders, cardiometabolic conditions, and aging. Understanding the intricate mechanisms regulating oxidative stress and the homeostatic antioxidant response is essential for developing innovative therapeutic interventions.

Insights gained from model organisms offer valuable perspectives on the molecular and cellular processes underlying OS, paving the way for novel translational approaches in human disease research. This Special Issue aims to highlight recent advancements in oxidative stress and antioxidant research using model organisms with direct relevance to human health.

We welcome contributions focusing on cellular processes such as cell cycle regulation, intercellular communication, and cell death—key pathways implicated in disease progression. Special emphasis will be placed on studies employing cutting-edge, high-throughput omics technologies, including transcriptomics, single-cell genomics, metabolomics, and proteomics. Additionally, novel strategies for the targeted delivery of antioxidant-based therapies will be of particular interest.

---

### Guest Editors

Dr. Marcello Ziosi

New York Genome Center, New York, NY 10013, USA

Dr. Gaetano Santulli

1. Departments of Medicine and Molecular Pharmacology, Wilf Family Cardiovascular Research Institute, Fleischer Institute for Diabetes and Metabolism (FIDAM), Einstein Institute for Aging Research, Einstein-Mount Sinai Diabetes Research Center (ES-DRC), Institute for Neuroimmunology and Inflammation (INI), Albert Einstein College of Medicine and Montefiore Hospital, New York, NY, USA  
2. International Translational Research and Medical Education (ITME) Consortium, Academic Research Unit, Department of Advanced Biomedical Sciences, Federico II University, Naples, Italy



## Antioxidants

---

an Open Access Journal  
by MDPI

---

Impact Factor 6.6  
CiteScore 12.4  
Indexed in PubMed



[mdpi.com/si/234804](https://mdpi.com/si/234804)

*Antioxidants*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[antioxidants@mdpi.com](mailto: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)