

## Special Issue

# Oxidative Stress in Vascular Diseases

### Message from the Guest Editor

Oxidative stress, broadly defined as tissue damage resulting from an imbalance between the production and degradation of reactive oxygen species (ROS), is prominent in many vascular diseases and has been implicated in the pathogenesis of diverse conditions including atherosclerosis, neointimal hyperplasia, and abdominal aortic aneurysms (AAA). Pathologically, oxidative stress disrupts physiologic nitric oxide signaling while promoting vascular inflammation, lipid accumulation, apoptosis, protease-mediated degradation of the extracellular matrix, etc. The overall goal of this thematic issue is to (i) summarize evidence that mechanistically links oxidative stress to vascular diseases such as AAA, with a particular emphasis on human studies; (ii) provide data supporting the role of specific oxidant-generating enzymatic pathways, such as NADPH oxidase, in vascular diseases; (iii) demonstrate the role of key antioxidant defense pathways in mitigating vascular disease; and (iv) exhibit the potential benefit of targeting oxidative stress as a biomarker and treatment strategy for vascular diseases.

### Guest Editor

Prof. Dr. Neal Weintraub

Medical College of Georgia, Augusta University, Augusta, GA, USA

### Deadline for manuscript submissions

closed (31 August 2017)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 8.1  
Indexed in PubMed



[mdpi.com/si/8191](http://mdpi.com/si/8191)

*International Journal of  
Molecular Sciences*  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

[mdpi.com/journal/](http://mdpi.com/journal/)

[ijms](http://ijms)





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 8.1  
Indexed in PubMed



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

[ijms](https://ijms)



## About the Journal

### 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.

---

### 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

---

### 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 (Inorganic Chemistry)