Special Issue

Oxidative Stress and Antioxidant Strategies: Relationships and Cellular Pathways for Human Health

Message from the Guest Editors

Among the key factors influencing human health are the chronic diseases and aging, which have been increasing in the last decades. These pathological states are produced by several causes, and a common factor involved in most of them is oxidative stress. Oxidative stress is defined as an imbalance between oxidative status, mainly by the formation of reactive species (RS), and antioxidant defence mechanisms. Nevertheless, when oxidants are produced in excess, or when the antioxidant defenses that regulate them are ineffective, this balance can be perturbed, thus resulting in oxidative condition. Oxidative products are highly reactive, and can directly or indirectly modulate the functions of many enzymes and transcription factors through a complex signaling cascades. This phenomenon increases with age and affects the normal functioning of several cells and tissues. Due to the broad and profound biological effects of RS, numerous experimental and clinical studies have focused their attention on the participation of oxidative stress as a key regulator in chronic pathological status and aging.

Guest Editors

Dr. Alessia Remigante

Department of Biomedical, Dental and Morphological and Functional Imaging, University of Messina, Messina, Italy

Dr. Rossana Morabito

Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, 98166 Messina, Italy

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

mdpi.com/journal/ cells





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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. Cells encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

Editors-in-Chief

Dr. Alexander E. Kalyuzhny

Dental Basic Sciences, University of Minnesota, 308 Harvard St. SE, Minneapolis, MN 55455, USA

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Biotech Research & Innovation Centre, The University of Copenhagen, Copenhagen, Denmark

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