



cells



an Open Access Journal by MDPI

Metabolic Alterations and Cellular Stress Responses in Chronic Obstructive Pulmonary Disease

Guest Editors:

Prof. Dr. Irene Heijink

Dept of Pathology and Medical Biology, Dept. of Pulmonology, Experimental Pulmonology and Inflammation Research, University of Groningen, University Medical Center Groningen, 9713 GZ Groningen, The Netherlands

Dr. Simon D. Pouwels

University Medical Center Groningen, Department of Pathology and Medical Biology, Experimental Pulmonology and Inflammation Research, University of Groningen, 9713 GZ Groningen, The Netherlands

Deadline for manuscript submissions:

closed (15 March 2023)

Message from the Guest Editors

Dear Colleagues,

The Special Issue is to explore the metabolic alterations and cellular stress responses upon exposure to noxious particles in healthy and diseased lungs and how these contribute to the development of Accumulating evidence points towards the crucial role of cellular stress and alterations in the metabolic processes of structural and innate immune cells. At the cellular level, COPD lungs display mitochondrial dysfunction, DNA damage, impaired proteasomal activity, and ER stress. This is associated with metabolic reprogramming, cell damage and death, and subsequent release of damage-associated molecular patterns (DAMPs), triggering immune and remodelling processes and systemic manifestations. We aim for the submission of review and research articles that cover the latest findings in the field of metabolic alterations and cellular stress responses in COPD, including the effects of cigarette smoke and environmental pollutants; oxidative stress responses; mitochondrial dysfunction; mitophagy; the role of novel cell death modalities such as ferroptosis, necroptosis, NETosis, DAMP release; and systemic metabolic alterations.

Prof. Dr. Irene Heijink

Dr. Simon D. Pouwels



mdpi.com/si/101408

Special Issue



cells



an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Alexander E. Kalyuzhny

Neuroscience, UMN Twin Cities,
6-145 Jackson Hall, 321 Church St
SE, Minneapolis, MN 55455, USA

Prof. Dr. Cord Brakebusch

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

Message from the Editorial Board

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.

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](#), [MEDLINE](#), [PMC](#), [CAPus / SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Cell Biology*) / CiteScore - Q1 (*General Biochemistry, Genetics and Molecular Biology*)

Contact Us

Cells Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/cells
cells@mdpi.com
[X@Cells_MDPI](https://twitter.com/Cells_MDPI)