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Metabolic Alterations and Cellular Stress Responses in Chronic Obstructive Pulmonary Disease

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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
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mdpi.com/si/101408

Special Issue



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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.

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