Special Issue

Metabolic Alterations and Cellular Stress Responses in Chronic Obstructive Pulmonary Disease

Message from the Guest Editors

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 atricles 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.

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)

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/si/101408

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

mdpi.com/journal/cells

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/journal/cells

About the Journal

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.

Editors-in-Chief

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

Prof. Dr. Cord Brakebusch
Biotech Research & Innovation Centre, The University of Copenhagen, Copenhagen, Denmark

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

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

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).