



cells



an Open Access Journal by MDPI

Mitochondrial Dysfunction in Aging and Metabolic Diseases

Guest Editors:

Dr. Yuguang Shi

Department of Pharmacology,
Sam and Ann Barshop Institute
for Longevity and Aging Studies,
UT Health San Antonio, San
Antonio, TX 78229, USA

Dr. Jun Zhang

Department of Pharmacology,
Sam and Ann Barshop Institute
for Longevity and Aging Studies,
UT Health San Antonio, San
Antonio, TX 78229, USA

Deadline for manuscript
submissions:

closed (31 December 2022)

Message from the Guest Editors

Dear Colleagues,

Mitochondria are crucial for cellular bioenergetics and play a major role in multiple cellular processes that dictate the fate of a cell. Mitochondrial dysfunction is characterized by a reduced efficiency of oxidative phosphorylation, generation of free radicals, and reductions in the synthesis of adenosine-5'-triphosphate. Accumulating evidences have suggested that mitochondrial dysfunction plays a critical role in the pathogenesis of aging and age-related metabolic diseases, including type 2 diabetes, obesity, and cardiovascular diseases. Although the underlying molecular pathways in regulating mitochondrial function is complex, it is crucial to understand the nexus of mitochondrial dysfunction in aging and age-related metabolic diseases. This Special Issue will accept original studies, reviews, and technical reports in the field of mitochondrial biology and dysfunction, including mitochondrial quality control, oxidative stress, mtDNA integrity, synthesis and remodelling of mitochondrial phospholipids in aging and age-related metabolic diseases.

For further information, please visit the [Special Issue website](#).



mdpi.com/si/83271

Special Issue



cells



an Open Access Journal by MDPI

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

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, Grosspeteranlage 5
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)