



cells



an Open Access Journal by MDPI

Controversies and Recent Advances in Senescence and Aging

Guest Editors:

Dr. Nicole Wagner

Institute of Biology Valrose,
University of Nice Sophia
Antipolis, 06107 Nice, France

Dr. Kay-Dietrich Wagner

CNRS, INSERM, iBV, Université
Côte d'Azur, 06107 Nice, France

Deadline for manuscript
submissions:

closed (1 May 2022)

Message from the Guest Editors

Aging is the leading factor for chronic diseases that account for most of the morbidity and mortality worldwide (e.g., neurodegeneration; cardiovascular, pulmonary, renal, and bone diseases; and cancers). Oxidative stress and reactive oxygen species generation, overproduction of inflammatory cytokines, activation of oncogenes, DNA damage, telomere shortening, and the accumulation of senescent cells are all widely accepted mechanisms contributing to aging. Senescence is mainly thought to be provoked by negative cellular stress, but might also be induced by physiological developmental stimuli. Currently, no single marker is available to identify a cell as specifically senescent *in vivo*. Senescent cells contribute to embryonic tissue development and participate in tissue repair and tumor suppression, but they are also involved in detrimental tissue decline during aging. Given the pleiotropic actions of senescent cells, a deeper understanding is needed to develop further approaches and recommendations for healthy aging. All contributions shedding additional light and providing significant or provocative findings in these fascinating topics are welcome in this Special issue of *Cells*.



mdpi.com/si/95565

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)