Special Issue

The Role of NAD+ Metabolism in Cellular Processes during Aging and Age-Associated Diseases

Message from the Guest Editors

Nicotinamide adenine dinucleotide (NAD+) is an important coenzyme for hundreds of different oxidoreductases as well as an essential cofactor for NAD+-dependent enzymes, such as sirtuins, poly(ADP-ribose) polymerases (PARPs) and NAD+ glycohydrolases (CD38, CD157 and SARM1). These enzymes play a fundamental role in many pivotal cellular processes including DNA repair, regulation of gene expression, redox balance and cell metabolism and signaling. The decline in NAD+ levels has been associated with several hallmarks of aging and age-related diseases. In this regard, boosting NAD+ levels by enhancing its biosynthesis or inhibiting its degradation has emerged as a promising therapeutic approach to counteract the aging process and to treat age-associated diseases. This Special Issue aims at providing novel insights into the role of NAD+ metabolism in the context of aging and age-associated diseases. We welcome original research and review articles. For further reading, please, visit the Special Issue website.

Guest Editors

Dr. Alessia Grozio
The Buck Institute for Research on Aging, Novato, CA, USA
Dr. Rosalba Perrone
The Buck Institute for Research on Aging, Novato, CA, USA
Dr. Andrea Benzi
Department of Experimental Medicine, University of Genoa, Genoa, Italy

Deadline for manuscript submissions

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

mdpi.com/journal/cells

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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

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.5 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).