Special Issue

DNA Damage in Neurodegeneration

Message from the Guest Editors

Accumulating evidence implicates DNA damage and defective DNA repair mechanisms as critical drivers of neuronal dysfunction and degeneration in various neurodegenerative disorders. Hence, there is a requirement to characterize the specific sources of genomic stress and the distinct DNA damage response pathways operative in post-mitotic neurons to deliver better insight into neuronal vulnerability and survival.

This Special Issue will examine the identification of endogenous and exogenous sources of DNA damage in neurons; methods to detect and quantify DNA lesions and repair activity in neural cells ex vivo; the effects of aging, oxidative stress, and metabolic dysfunction on genomic stability; neuronal and glial cell culture models for studying DNA damage-induced degeneration; in vitro systems recapitulating the DNA damage landscape of aging brains; and in vivo models to investigate the consequences of impaired DNA repair on neuronal function and survival.

Guest Editors

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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.

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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).