Topical Collection

Chronic Inflammation, Oxidative Stress, and Adult Stem Cells

Message from the Collection Editor

Chronic inflammation plays crucial roles in various diseases, including autoimmune diseases, cancer, arteriosclerosis, obesity, and Alzheimer's disease. Oxidative stress injures cellular compounds (including DNA, proteins, and lipids), resulting in apoptotic and necrotic cell death. This process induces the secretion of proinflammatory cytokines in cells and consequently worsens the inflammation. As a result, cells and tissues eventually become functionally depleted. Adult stem cells (also known as somatic stem cells or tissue stem cells) are undifferentiated cells (that replace damaged functional cells) in the tissue. During chronic inflammation, adult stem cells repair oxidative-stress-induced injuries to the tissue to maintain tissue homeostasis. However, oxidative stress and inflammatory stimuli can also cause stem cell senescence or mutation that leads to the abovementioned diseases. This Topical Collection welcomes manuscripts providing insight into aspects of the relationship between chronic inflammation, oxidative stress, and adult stem cells. We are interested in a wide range of work, including experimental, preclinical, and clinical studies.

Collection Editor

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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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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).