Topical Collection

Hypoxia-Inducible Factors in Human Physiology and Diseases

Message from the Collection Editors

Oxygen (O2) is the third abundant element in the universe and essential for life in all metazoans. It is required for ATP production in the mitochondria, which drives many physiological processes in the living cell. Reduced availability of O2 (also known as hypoxia) is associated with many human diseases. The hypoxia response is primarily controlled by hypoxia-inducible factor, a family of basic Helix-Loop-Helix (bHLH)-Per-Arnt-Sim (PAS) transcription factors consisting of an O2-regulated subunit and a constitutively expressed subunit. Over the past three decades, HIF has been shown to mediate many physiological and pathological processes. Despite the remarkable advancement in the HIF research filed, it remains poorly understood how HIF regulates physiological processes and drives disease progression. The purpose of the Special Issue on "Hypoxia-Inducible Factors in Human Physiology and Diseases" is to discuss new developments of HIF-dependent physiological and pathological processes. Both original research articles and reviews are welcomed, with the goal of advancing the fundamental knowledge of HIF biology in human physiology and diseases.

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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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