



cells



an Open Access Journal by MDPI

Hypoxia-Inducible Factors in Human Physiology and Diseases

Collection Editors:

Dr. Weibo Luo

Departments of Pathology and Pharmacology, The UT Southwestern Medical Center
5323 Harry Hines Blvd., Dallas, TX 75390, USA

Dr. Yingfei Wang

Departments of Pathology and Neurology, The UT Southwestern Medical Center 5323 Harry Hines Blvd., Dallas, TX 75390, USA

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 α subunit and a constitutively expressed β 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.



mdpi.com/si/90452

Topical Collection



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)