

Special Issue

The Pathophysiology of Heme

Message from the Guest Editors

Heme, an iron-containing porphyrin, is required in all our cells. As a co-factor in hemoproteins, heme participates in several essential biological processes, such as oxygen transport, mitochondrial respiration, and drug metabolism. Moreover, the heme molecule itself exhibits regulatory activities, covering a broad spectrum of cellular functions such as micro-RNA processing, transcription and translation of target genes, and the regulation of the circadian rhythm. The present Special Issue invites original research papers and reviews that aim to unravel the role of heme (1) in the regulation of physiological processes essential for cell and organ homeostasis, as well as (2) its role in the pathogenesis or in the pathologic outcomes of human diseases.

Guest Editors

Dr. Sara Petrillo

Molecular Biotechnology Center, Department of Molecular Biotechnology and Health Sciences, University of Torino, Via Nizza 52, Torino, Italy

Prof. Dr. Emanuela Tolosano

Molecular Biotechnology Center, Department of Molecular Biotechnology and Health Sciences, University of Torino, via Nizza 52, Torino, Italy

Deadline for manuscript submissions

closed (31 May 2021)



Biology

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed



mdpi.com/si/43182

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

[mdpi.com/journal/
biology](https://mdpi.com/journal/biology)





Biology

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed



[mdpi.com/journal/
biology](https://mdpi.com/journal/biology)



About the Journal

Message from the Editorial Board

A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

Editors-in-Chief

Prof. Dr. Jukka Finne

Research Programme in Molecular and Integrative Biosciences, Faculty of Biological and Environmental Sciences, University of Helsinki, P.O. Box 56, FI-00014 Helsinki, Finland

Prof. Dr. Andrés Moya

Integrative Systems Biology Institute, University of Valencia and CSIC, 46980 Valencia, Spain

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (General Agricultural and Biological Sciences)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.4 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2025).