# Special Issue

## Unraveling Mysteries of Heme Metabolism

### Message from the Guest Editors

Heme, an iron-containing cofactor, is essential for most life forms. Heme-containing proteins are responsible for a myriad of different tasks in living organisms, being responsible for electron transfer, gas transport and sensing, diverse one-electron enzymatic reactions, and as gene regulators to list a few. The ability of the iron to change valance rapidly upon coordination with a ligand provides a diverse functionality to the array of biomolecules. While most currently characterized organisms that possess heme are capable of synthesizing their own heme, some do not, and have evolved elaborate mechanisms to obtain heme from their environment. Among mammals, defects in the heme synthesis pathway result in phenotypic disorders named porphyrias. Additionally, heme may be further metabolized to yield linear tetrapyrroles which serve diverse functions.

### Guest Editors

Prof. Dr. Harry A. Dailey

Prof. Dr. Peter N. Meissner

Dr. Amy E. Medlock

Prof. Dr. John D. Phillips

Prof. Dr. Iqbal Hamza

### Deadline for manuscript submissions

30 November 2024

**Biomolecules**

**an Open Access Journal by MDPI**

**Impact Factor 4.8**
**CiteScore 9.4**
**Indexed in PubMed**

mdpi.com/si/147212

*Biomolecules*
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomolecules@mdpi.com

mdpi.com/journal/biomolecules

# Biomolecules

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 9.4
Indexed in PubMed

mdpi.com/journal/biomolecules

# About the Journal

## Message from the Editorial Board

*Biomolecules* is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

## Editors-in-Chief

Prof. Dr. Peter E. Nielsen
Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan
Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

## 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, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:**

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)

MDPI