



New Advances in Iron Metabolism, Ferritin and Hepcidin Research

Guest Editor:

Prof. Dr. Paolo Arosio

Department of Molecular and
Translational Medicine,
University of Brescia, Viale
Europa 11, 25123 Brescia, Italy

Deadline for manuscript
submissions:

closed (30 March 2022)

Message from the Guest Editor

Iron is an essential trace element required as a cofactor for many enzymes involved in respiration, cellular metabolism, and DNA replication. However, iron is also potentially toxic when in excess or deregulated. Thus, iron homeostasis must be tightly controlled at the systemic and cellular level. Ferritin is an iron storage protein with a major role in the regulation of cellular iron metabolism and its concentration in serum is an important index of iron status. Hepcidin is a peptidic hormone that controls systemic iron availability and homeostasis and its deregulation leads either to iron overload (hemochromatosis) or iron deficiency (IRIDA). The expression of both proteins is regulated by iron, although in a very different manner, and they are both strongly affected by inflammation. Recent studies show that local or systemic alteration of iron metabolism occurs in various pathological conditions, including neurodegeneration, cancer, cardiovascular diseases and viral infections. In addition, the peculiar structure of ferritin is exploited for drug encapsulation and delivery.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of
Odontostomatologic and
Specialized Clinical Sciences,
Sez-Biochimica, Faculty of
Medicine, Università Politecnica
delle Marche, Via Ranieri 65,
60100 Ancona, Italy

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI