Special Issue

Trace Elements and Male Fertility

Message from the Guest Editors

Male fertility depends on many factors, such as genetics, personal habits, nutrition, and environmental conditions. Among these factors, an adequate intake of certain trace elements is necessary for normal spermatogenesis and essential for male reproductive efficiency. A deficiency of these elements causes sperm morphological and functional alterations, and hence, an impairment of sperm motility and maturation with worsening of semen quality.

Even if the involvement of trace elements in male fertility is widely recognized, further research is necessary to understand the precise molecular mechanisms underlying their role at all stages of sperm maturation, also in the view of novel pharmacological therapies. This Special Issue of IJMS intends to contribute to this field, collecting recent findings and review articles on:

- biochemistry and molecular biology of enzyme containing trace elements as cofactor and their relationships with male fertility;
- studies on the pathways related to trace elements and male fertility;
- physiological aspects of trace elements involvement in male fertility,
- novel clinical studies on trace elements and male fertility.

Guest Editors

Prof. Dr. Antonella Roveri

Department of Molecular Medicine, University of Padova, Padova, Italy

Dr. Maria Luisa di Paolo

Department of Molecular Medicine, University of Padova, Italy

Deadline for manuscript submissions

closed (31 January 2021)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/45280

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





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.

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

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 and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

