Special Issue

Advances in Spermatogenesis and Male Infertility

Message from the Guest Editor

Sperm provides the zygote with genetic material from the father and is essential for reproduction. Throughout biological evolution, spermatogenesis has been a precise and conserved process which occurs in the male testis but is regulated by the hypothalamicpituitary-gonadal axis. The blood-testis barrier, as the histological barrier of the testis, prevents the stimulation of spermatogenesis and ensures the process runs smoothly. A variety of signaling molecules are involved in various stages of and at different points in spermatogenesis, and studying its related functions may provide us with a new therapeutic direction for male reproductive diseases. However, at present, more and more environmental factors impair this process. impeding spermatogenesis and as a result decreasing male fertility rates. The purpose of this Special Issue is to summarize and expand on the molecular mechanisms that ensure successful spermatogenesis and to explore the key processes in male reproduction, providing an effective platform on which new insights into male reproductive diseases to be described.

Guest Editor

Prof. Dr. Wanxi Yang

The Sperm Laboratory, College of Life Sciences, Zhejiang University, Hangzhou 310058, China

Deadline for manuscript submissions

closed (20 September 2025)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/203405

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)

