



Molecular Mechanisms of Male Infertility

Guest Editors:

Dr. Mohamed Hammad

Biochemistry and Molecular
Biology of Reproductive Medicine
Laboratory, Saarland University,
66421 Homburg, Germany

Dr. Houda Amor

Biochemistry and Molecular
Biology of Reproductive Medicine
Laboratory, Saarland University,
66421 Homburg, Germany

Deadline for manuscript
submissions:

30 November 2024

Message from the Guest Editors

Male infertility is a complex, multi-factorial disorder, and the underlying causes often remain unknown.

This research areas of this special issue may include (but are not limited to) the following:

Endogenous and exogenous physical, chemical, and biological sources modify the genome of spermatozoa;

Sperm chromatin and implications for male infertility;

Molecular and structural basis of the histone-to-protamine exchange;

Post-translational modifications on P1 and P2 protamines;

DNA damage and DNA repair mechanisms in male infertility;

Extrinsic factors such as smoking, cannabis,

Redox signaling pathways in spermatozoa, which, in turn, may affect its physiological functions;

Methylation and hyper- and hypo-methylation of specific DNA regions.

miRNAs as biomarkers to understand the molecular mechanisms underlying male infertility;

Molecular mechanisms of obesity and male infertility;

Proteome studies of spermatozoa from fertile and infertile men.





an Open Access Journal by MDPI

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

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.

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)

Contact Us

Biomolecules Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/biomolecules
biomolecules@mdpi.com
X@Biomol_MDPI