



Molecular Mechanisms of Male Infertility

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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.





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