

## Special Issue

# Cellular and Molecular Mechanism of Spermatogenesis

### Message from the Guest Editor

We are pleased to invite you to submit your paper to the Special Issue of “Cellular and Molecular Mechanism of Spermatogenesis”. Research areas include (but are not limited to) the following: 1. Mechanisms of hormonal, genetic, and temperature regulation of germ cell proliferation, differentiation, and death during spermatogenesis. 2. Discover and elucidate the molecular pathways via single-cell multi-omics in testes. 3. Validation and confirmation of the molecular pathways discovered via genomics, transcriptomics, proteomics, metabolomics, and lipidomics approaches in experimental model systems in vitro or in vivo. 4. Deciphering the cellular and molecular mechanisms of testicular pathological conditions in animal and human testes. 5. Protection, rescue, or suppression of spermatogenesis using biomolecules in experimental animal models. 6. Mitochondrial dynamics and bioenergetic regulation of spermatogenesis. 7. Sertoli cell, blood–testis barrier, and immunologic regulation of spermatogenesis. 8. Application of biomolecules, biomaterials, and bioengineering for establishing in vitro spermatogenesis.

### Guest Editor

Dr. Yanhe Lue

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### Deadline for manuscript submissions

31 December 2025



## Biomolecules

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### 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.

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