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Cellular and Molecular Mechanism of Spermatogenesis

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

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 opermategel esis.











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