

Special Issue

Research Progress on Oocyte Development

Message from the Guest Editor

The *International Journal of Molecular Sciences* (IJMS) is pleased to announce the Special Issue, "Research Progress on Oocyte Development," focusing on the latest advances in understanding molecular mechanisms of oocyte development across various model organisms. Recent breakthroughs in genomics, proteomics, and imaging technologies have shed new light on oocyte growth, maturation, and meiotic progression. This issue will highlight novel findings on oogenesis, cytoskeletal dynamics, organelle reorganization, molecular signaling, and epigenetic modifications that influence oocyte competence and fertility. We invite original research, reviews, and methodologies addressing fundamental questions and emerging challenges in oocyte biology. Contributions on external fertilization models, such as *Xenopus*, are particularly welcome for their comparative insights. Keywords include oogenesis, meiosis, oocyte maturation, cytoskeleton, organelle dynamics, signaling, epigenetic regulation, and fertilization. This Special Issue aims to promote collaboration and advance understanding of oocyte development in health and disease.

Guest Editor

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Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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.

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