

Special Issue

Molecular and Cellular Biology of Germ Cells

Message from the Guest Editor

Germ cell development is a fundamental biological process ensuring the transmission of genetic and epigenetic information across generations. Recent progress in molecular biology, imaging, and omics technologies has shed new light on germ cell specification, proliferation, meiosis, DNA repair, mitochondrial dynamics, and autophagy. At the same time, increasing evidence highlights the vulnerability of germ cells to environmental stressors, including endocrine-disrupting chemicals that may impair fertility and reproductive health. This Special Issue aims to provide an interdisciplinary platform for presenting recent discoveries on germ cell biology and its clinical implications. Submissions may include studies addressing molecular regulation, cellular stress responses, epigenetic control, and the impact of environmental and pharmacological factors on germ cell function. We particularly welcome contributions linking basic science with translational applications in infertility treatment, regenerative medicine, and reproductive toxicology.

Guest Editor

Dr. Anna Tabęcka-Łonczyńska

Department of Biotechnology and Cell Biology, Medical College,
University of Information Technology and Management in Rzeszow,
Sucharskiego 2, 35-225 Rzeszow, Poland

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Prof. Dr. José L. Quiles
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