# Special Issue

# Ubiquitin–Proteasome System and Small Protein Modifiers in Gametogenesis and Fertility

## Message from the Guest Editors

A small-protein posttranslational modification of proteins by small modifiers such as ubiquitin, SUMO, ISG, and NEDD is required for the correct development of both female and male gametes. The ubiquitin–proteasome system, participates in the biological processes of gametes, including mitochondrial inheritance/sperm mitophagy after fertilization; the ubiquitin-dependent mechanisms for meiotic and post-meiotic germ cell quality control; testicular spermatid differentiation; oocyte maturation; sperm capacitation; sperm–ZP penetration (sperm proteasome as the egg coat lysine); as well as pronuclear development after fertilization. Similarly, SUMOylation has been implicated in both oogenesis and spermatogenesis. We cordially invite you to submit your valuable research that will enhance our understanding of protein modification and degradation pathways and their components as they relate to gamete production, quality control, and function during fertilization and preimplantation embryo development.

## Guest Editors

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## Deadline for manuscript submissions

closed (31 January 2022)

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*Cells* has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

## Editors-in-Chief

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