

Special Issue

Genetics and Reproduction in Pigs

Message from the Guest Editor

Spermatogenesis and semen preservation technology are key factors affecting reproductive efficiency in pigs. Spermatogenesis is the complex and dynamic evolution from spermatogonia into spermatozoa, which is precisely controlled by genetic and epigenetic factors. With the development of new technologies, an increasing number of genes and molecular mechanisms related to spermatogenesis have been identified. In addition, significant progress in semen preservation has been achieved over the last decade, including liquid preservation and freezing preservation. This Special Issue will focus on sharing advances in spermatogenesis and semen preservation in pigs, providing a basis for innovation in boar reproductive technologies. We welcome submissions exploring diverse topics, including genomic selection, reproductive genetics, assisted reproductive technologies, genetic diversity conservation, and the integration of biotechnology into breeding programs. Studies investigating the molecular mechanisms underlying fertility and reproductive health, as well as applications of biotechnologies to address emerging challenges in porcine production, are strongly encouraged.

Guest Editor

Dr. Rui Cai
College of Animal Science and Technology, Northwest A&F University,
Yangling 712100, China

Deadline for manuscript submissions

closed (20 March 2026)

G C A T
T A C G
G C A T

Genes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5
Indexed in PubMed



mdpi.com/si/239253

Genes
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
genes@mdpi.com

[mdpi.com/journal/
genes](https://mdpi.com/journal/genes)



G C A T
T A C G
G C A T

Genes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5
Indexed in PubMed



[mdpi.com/journal/
genes](https://mdpi.com/journal/genes)



About the Journal

Message from the Editor-in-Chief

Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

Editor-in-Chief

Prof. Dr. Selvarangan Ponnazhagan
Experimental Cancer Therapeutics, The University of Alabama at
Birmingham, 1825 University Blvd., SHEL 814, Birmingham, AL 35294-
2182, USA

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, and other databases.

Journal Rank:

JCR - Q2 (Genetics and Heredity) / CiteScore - Q2 (Genetics (clinical))