Special Issue

Advances in Spermatogenesis

Message from the Guest Editors

Spermatogenesis is a complex process that occurs in the testes and enables sperm production. This process begins from puberty and involves stem-cell proliferation; meiotic division, which results in haploid gametes; and spermiogenesis, through which highly polarized sperm is formed. The whole process is precisely regulated; genetic and epigenetic regulation are two fundamental mechanisms, and these work alongside many other factors such as steroid hormones, which play an essential role in spermatogenesis. Extensive studies have been carried out in order to understand spermatogenesis at the cellular and molecular level and promote advances in techniques such as single-cell multi-omics and organoid culture, which have opened new avenues for further deciphering the mechanisms of spermatogenesis. Fully understanding the regulatory mechanisms of spermatogenesis will not only aid in the identification of the genetic factors of male infertility, but also provide novel approaches for the treatment of the disease. The main aim of this Special Issue is to introduce novel findings regarding the regulation of spermatogenesis, particularly studies using state-of-the-art techniques.

Guest Editors

Dr. Zhibing Zhang
School of Medicine, Wayne State University, Detroit, MI, USA

Dr. Changmin Niu
School of Nursing—School of Public Health, Yangzhou University, Yangzhou, China

Deadline for manuscript submissions

closed (20 June 2025)

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/si/207284

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

mdpi.com/journal/cells

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/journal/cells

MDPI

About the Journal

Message from the Editorial Board

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

Dr. Alexander E. Kalyuzhny
Dental Basic Sciences, University of Minnesota, 308 Harvard St. SE, Minneapolis, MN 55455, USA

Prof. Dr. Cord Brakebusch
Biotech Research & Innovation Centre, The University of Copenhagen, Copenhagen, Denmark

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Cell Biology) / CiteScore - Q1 (General Biochemistry, Genetics and Molecular Biology)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).