

## Topical Collection

# Stem Cell Application in Infertility

### Message from the Collection Editors

Assisted reproductive technologies (ART) such as in-vitro fertilization (IVF) have overcome several types of infertility. Nevertheless, about 10% of couples suffer from infertility due to problems with the female reproductive system, insufficient production of gametes, or the poor ability of sperm or oocytes.

Recently, attempts have been made to treat the problems with the female reproductive system in clinics using adult stem cells such as mesenchymal stem cells (MSCs) or hematopoietic stem cells (HSCs). The results were promising, but no clear mechanism has been investigated.

Further, embryonic stem cells (ESCs) or induced pluripotent stem cells (iPSCs) could be converted into germ cells such as sperm or oocytes. However, a few laboratories can perform this technology.

This Special Issue focuses on therapeutic mechanisms for stem cell application in the field of infertility, including basic, preclinical and clinical studies, and the replication of current technologies.

---

### Collection Editors

Prof. Dr. Eunju Kang

1. Associate Professor, Department of Biochemistry, School of Medicine & Biomedical Science, CHA University, Seongnam-si 13488, Gyeonggi-do, Republic of Korea

2. Director, Cell Therapy 3 Center, CHA Advanced Research Institute, CHA Bundang Medical Center, Sungnam-si 13488, Gyeonggi-do, Republic of Korea

Prof. Dr. Jongki Cho

College of Veterinary Medicine, Chungnam National University, 99, Daehak-ro, Yuseong-gu, Daejeon 34134, Korea

---



## Cells

---

an Open Access Journal  
by MDPI

---

Impact Factor 5.2  
CiteScore 10.5  
Indexed in PubMed



[mdpi.com/si/55558](https://mdpi.com/si/55558)

*Cells*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[cells@mdpi.com](mailto:cells@mdpi.com)

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

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



## 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, CAPus / 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).