Special Issue

Placenta in Tissue Engineering and Regeneration

Message from the Guest Editor

This Special Issue aims to publish original research and reviews that highlight the placenta as a unique source of biomaterials and bioactive factors for tissue regeneration. It will explore how placental biology can be harnessed to drive innovation across bioengineering and translational medicine, ultimately advancing our knowledge on the therapeutic potential of the placenta in regenerative applications. Key areas of focus include the following:

- Placental stem cells and their applications in regenerative therapies.
- Current advances in bioengineering using placental tissues.
- Clinical applications of placenta-derived biomaterials in wound healing.
- Ethical, regulatory, and translational considerations in placenta-based organ repair.
- Innovative laboratory techniques utilising placental tissue in regenerative medicine.

By fostering dialogue across biology and engineering, this Special Issue will inspire a global community of researchers to reimagine the placenta as a cornerstone for future regenerative strategies. We welcome your valuable contributions.

Guest Editor

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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.

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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).

