Special Issue

Signaling Pathways in Pregnancy

Message from the Guest Editors

Placental villous tree development and differentiation are regulated by a number of growth factors, their receptors and other types of molecules that regulate placental cell proliferation, differentiation, migration and invasion. Achieving the correct balance of these factors in the activation of different pathways by regulating the expression of certain genes is critical for a successful pregnancy. Genetic factors can contribute to impaired placental development, leading to a series of pregnancy pathologies, i.e., preeclampsia (PE), fetal growth restriction (FGR), gestational trophoblastic diseases (GTD) and gestational diabetes mellitus (GDM). Furthermore, external factors, such as microbial agents, chemicals and natural compounds, can also affect placental development and function by altering signaling pathways, which can lead to pregnancy complications. In this Special Issue, we provide an overview of the signaling pathways involved in placental development in normal and pathological conditions. We are inviting submissions of original research articles, reviews and mini-reviews on topics relevant to any aspect of placental physiology, biochemistry or molecular biology.

Guest Editors

Prof. Dr. Daniela Marzioni

Department of Experimental and Clinical Medicine, Università Politecnica delle Marche, 60126 Ancona, Italy

Dr. Giovanni Tossetta

Department of Experimental and Clinical Medicine, Università Politecnica delle Marche, 60126 Ancona, Italy

Deadline for manuscript submissions

closed (31 May 2024)



Cells

an Open Access Journal by MDPI

Impact Factor 5.2 CiteScore 10.5 Indexed in PubMed



mdpi.com/si/115872

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



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 15.5 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).

