



an Open Access Journal by MDPI

Recent Advances in Placental Pathophysiology

Guest Editor:

Dr. Thierry Fournier

3PHM, Institut National de la Santé et de la Recherche Médicale, Université Paris Cité, Paris, France

Message from the Guest Editor

Every year, around 20 % of 140 million births worldwide are from pathological pregnancies. These obstetrical complications have lifelong consequences for the mother (death, metabolic disorders) and the foetus (death, intrauterine growth restriction (IUGR), prematurity, and metabolic disorders in adulthood).

The placenta is essential for implantation, enables an immune tolerance of the conceptus to avoid miscarriage, produces pregnancy hormones such as hCG at implantation to maintain pregnancy, participates in the remodelling of the uterine spiral arteries, is a biological barrier allowing the exchange of nutrients and gases between maternal and foetal blood, protects the foetus from toxics and pathogens, and might be involved in parturition.

Sub-topics:

- Interactions between trophoblasts and uterine immune cells
- Trophoblastic cell differentiation, proliferation, invasion, fusion, apoptosis, necrosis and senescence
- Remodelling of uterine spiral arteries
- Genetic, Epigenetic (DOHAD: developmental origin of health and disease)
- Pollutants: endocrine disruptors, xenobiotics, drugs
- Infectious diseases
- Maternal microbiome

Deadline for manuscript submissions:

closed (1 March 2023)



[mdpi.com/si/127502](https://www.mdpi.com/si/127502)

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. José L. Quiles

Department of Physiology,
Institute of Nutrition and Food
Technology “Jose Mataix”,
Biomedical Research Center,
University of Granada, Avda.
Conocimiento s/n, 18100 Armilla,
Granada, Spain

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, and molecular biophysics. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

Contact Us

International Journal of Molecular
Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
[X@IJMS_MDPI](https://twitter.com/IJMS_MDPI)