



## Molecular Mechanisms of Pregnancy-Related Vascular Remodeling and Pregnancy Complications

Guest Editors:

**Prof. Dr. Nihar Ranjan Nayak**

Department of Obstetrics and Gynecology, UMKC School of Medicine, Kansas City, MO 64108, USA

**Prof. David K. Stevenson**

Department of Pediatrics, Division of Neonatal and Developmental Medicine, Stanford University School of Medicine, Stanford, CA, USA

Deadline for manuscript submissions:

**closed (30 April 2022)**

### Message from the Guest Editors

Normal pregnancy involves dramatic maternal and placental vascular remodeling and adaptations throughout pregnancy, and failure of these vascular changes contributes to the development of most pregnancy complications. Although defects in trophoblast function and placentation and the resulting vascular dysfunction have been implicated in the pathophysiology of pregnancy complications, the molecular underpinnings of such defects are poorly understood. The goal of this Special Issue is to publish high-quality manuscripts with particular emphasis on molecular understanding of the pathophysiology of pregnancy-related vascular adaptations and complications. We welcome reviews, new methods, short communications, and original articles covering all aspects of uterine and placental vascular development and remodeling, maternal vascular adaptations and dysfunctions (both during pregnancy and in the postpartum period), fetal and neonatal diseases associated with vascular complications of pregnancy, and clinical studies and experimental models addressing pregnancy-related vascular complications.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maurizio Battino

Department of  
Odontostomatologic and  
Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of  
Medicine, Università Politecnica  
delle Marche, Via Ranieri 65,  
60100 Ancona, Italy

## Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) 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, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *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 (Inorganic 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