

## Special Issue

# Advance in Molecular Pathology of Pulmonary Hypertension

### Message from the Guest Editor

Pulmonary hypertension (PH) is a serious sequelae of several systemic and genetic diseases, lung developmental and heart defects, and drug toxicity. PH is associated with inflammation, altered vascular relaxation responses, cellular phenotype changes, and cell proliferation and migration. The sustained cell proliferation and apoptosis resistance, abnormal angiogenesis, and dysregulated cellular metabolism observed in PH are reminiscent of cancer. The molecular mechanisms involved in the development and progression of PH is not yet fully understood. However, recent advances in the field have described several important aspects such as the deregulation of multiple genes and protein expressions, mitochondrial dysfunction, autophagic dysregulation in pulmonary endothelial and smooth muscle cells, and the endothelial–mesenchymal transition in PH. Mitochondrial dysfunction is thought to contribute to the metabolic alterations observed in PH. These responses promote the survival of proliferating cells. A number of these molecules function as a double-edged sword. They maintain homeostasis under normal conditions but facilitate cell proliferation and migration in the disease state.

---

### Guest Editor

Dr. Rajamma Mathew

Section of Pediatric Cardiology, Departments of Pediatrics and Physiology, New York Medical College, Valhalla, NY 10595, USA

---

### Deadline for manuscript submissions

closed (20 June 2023)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/127757](https://mdpi.com/si/127757)

*International Journal of  
Molecular Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



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



## About the Journal

### 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.

---

### 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

---

### 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, CAPus / SciFinder, and other databases.

#### Journal Rank:

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