# Special Issue

# Molecular and Cellular Mechanisms in Kidney Pathophysiology

### Message from the Guest Editors

The intent of this Special Issue is to highlight research in the cellular and molecular pathophysiology of the kidney. Kidney diseases are a significant burden on healthcare systems globally, and their prevalence is rising. We invite submissions that explore novel insights into the molecular and cellular mechanisms underlying various kidney pathologies, including but not limited to diabetic nephropathy, hypertension-related kidney injury, and glomerular diseases. We are particularly interested in studies that address the following topics:

- Molecular pathways and mechanisms of signal transduction, gene regulation, and molecular interactions that contribute to kidney disease progression and severity.
- Cellular responses to injury, including inflammation, fibrosis, and cell death, and how these processes affect kidney function and structure.
- Advances in therapeutic strategies targeting specific molecular and cellular pathways in kidney disease.
- Development and application of new experimental models that enhance our understanding of kidney pathophysiology and facilitate the translation of basic research into clinical applications.

### **Guest Editors**

Dr. Marharyta Semenikhina

Division of Nephrology, Department of Medicine, Medical University of South Carolina, Charleston, SC 29425, USA

Dr. Oleg Palygin

Division of Nephrology, Department of Medicine, Medical University of South Carolina, Charleston, SC, USA

### Deadline for manuscript submissions

closed (20 May 2025)



## **Biomolecules**

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/212932

Biomolecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomolecules@mdpi.com

mdpi.com/journal/biomolecules





## **Biomolecules**

an Open Access Journal by MDPI

Impact Factor 4.8 CiteScore 9.2 Indexed in PubMed



### **About the Journal**

### Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in Biomolecules so far. We would be delighted to welcome you as one of our authors.

### **Editors-in-Chief**

Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

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

### Journal Rank:

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

