Special Issue

Cellular and Molecular Basis in Chronic Kidney Disease

Message from the Guest Editor

Chronic kidney disease (CKD) corresponds to a condition involving an alteration in kidney capacity persisting for three months or more with eventual loss of function over time. CKD can be divided into five specific stages, with factors such as glomerular filtration rate (GFR) and albuminuria serving as criteria for categorization. One of the central pathways involved in the pathogenesis of CKD is the renin–angiotensin–aldosterone system (RAAS). When this pathway is activated, it induces contraction of the glomerular afferent arterioles, resulting in worsening renal ischemia which ultimately diminishes glomerular filtration capacity. Collectively, RAAS, TGF-B1, and other factors such as vascular calcification and uremic toxins are known to be involved in CKD, causing worsening renal inflammation and fibrosis, both of which diminish renal capacity and function. This Special Issue on CKD aims to recruit original papers, reviews, and communication that enhance the understanding of cellular and molecular mechanisms involved in the pathophysiology of CKD.

Guest Editor

Dr. Prabhatchandra Dube

Department of Medicine, College of Medicine and Life Sciences, The University of Toledo, Toledo, OH 43614, USA

Deadline for manuscript submissions

25 November 2025

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/si/179692

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

mdpi.com/journal/cells

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 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).