

Topical Collection

Mitochondrial Dysfunction in Kidney Diseases

Message from the Collection Editor

Mitochondria satisfy the high metabolic needs of the kidney and efficiently combat kidney injury-induced stresses. Mitochondrial structural and functional aberrations are widely reported during both acute kidney injury (AKI) and chronic kidney disease (CKD). Mitochondrial dysfunction is an early event during kidney injury and exerts a critical role in exaggerating inflammation during AKI. Defects in mitochondrial quality control and bioenergetics are also known to promote progression of CKD. The production of new mitochondrial networks and recycling of dysfunctional mitochondria via mitophagy are crucial and help in maintaining the metabolic status and sense and respond to different triggers and oxidative stress. Balance between mitochondrial fusion and fission processes also influences mitochondrial structure and functions. Therapeutic approaches that help in regulating mitochondrial health have the potential to attenuate kidney diseases. We invite submissions on mitochondrial-associated molecular pathways, mitochondrial dynamics (fusion/fission) and mitophagy during AKI and CKD, and mitochondria-targeted potential therapeutic strategies.

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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.

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