

## Special Issue

# Oxygen Homeostasis, Oxidative Stress, and Inflammation in Kidney Health and Disease

### Message from the Guest Editors

The kidneys are organs with high energy demands due to their heavy workload, which involves the filtration and reabsorption of nutrients, minerals, and electrolytes. The kidneys are also involved in the regulation of blood pressure and pH and vitamin D maturation and erythropoiesis. As such, the kidneys are constantly exposed to numerous insults, which can trigger acute kidney injury (AKI) and chronic kidney disease (CKD), including diabetic nephropathy. While it has been generally established that hypoxia, redox imbalance, oxidative stress, mitochondrial dysfunction, and inflammation are all implicated in the pathogenesis of AKI and CKD, the detailed mechanisms behind them still need to be unraveled in order to explore novel therapeutic targets to combat kidney disease. For this purpose, we are launching this Special Issue, and we welcome research focusing on any aspect of the above-mentioned pathological processes. Both original research articles and review articles will be considered.

### Guest Editors

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### Deadline for manuscript submissions

closed (20 February 2025)



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