Special Issue

Kidney Disease-Gut Dysbiosis: What Is the Role of Uremic Toxins?

Message from the Guest Editor

The gut microbial composition is altered in patients with chronic kidney disease (CKD). These alterations are further enhanced by several uremia-related factors. In addition, the gut microbiota are a potential cause of change in the gut biochemical milieu can contribute to the complex clinical picture of CKD. In CKD, the homeostasis between the end-products of carbohydrate fermentation, such as short-chain fatty acids, and end-products of protein fermentation, among which are the precursors of well-known uremic toxins, is disrupted. To what extent this contributes to the increase in the plasma levels of uremic toxins is yet unclear. Gut microbiota and their metabolism are potential targets for reducing the circulating levels of uremic toxins and improving the outcomes of patients with CKD. In addition, studying the metabolism of intestinally generated uremic toxins along the gut–liver–kidney axis is desirable, and omics approaches are an important tool in this context. This SI focuses on the relationship between gut dysbiosis and uremic toxins in all its aspects. Original research papers and review articles describing novelties or overviews, respectively, are welcome.

Guest Editor

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Toxinology is an incredibly diverse area of study, ranging from field surveys of environmental toxins to the study of toxin action at the molecular level. The editorial board and staff of *Toxins* are dedicated to providing a timely, peer-reviewed outlet for exciting, innovative primary research articles and concise, informative reviews from investigators in the myriad of disciplines contributing to our knowledge on toxins. We are committed to meeting the needs of the toxin research community by offering useful and timely reviews of all manuscripts submitted. Please consider *Toxins* when submitting your work for publication.

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