Changing Paradigms in Acute Kidney Injury: From Mechanisms to Management: Proceedings of the 8th Annual UAB-UCSD O'Brien Center Symposium

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Acute kidney injury (AKI) is an occurrence of kidney failure/damage that can happen within hours to a few days. The research surrounding this disease state has rapidly evolved to elucidate further the mechanisms and pathways of AKI and how these affect other organ systems and processes. Biomarkers and other small molecules have provided new tools and techniques to further characterize AKI, including genetic and epigenetic modifications, environmental influences, and the mechanisms within the kidney. Further understanding the pathophysiology of AKI offers challenging perspectives in clinical and translational research. This issue summarizes the proceedings of the 8th annual symposium that was sponsored by the University of Alabama at Birmingham (UAB) – University of California San Diego (UCSD) O'Brien Center for AKI Research and held during the 23rd annual Continuous Renal Replacement Therapy conference in San Diego, California on March 6, 2018.

The overall goal of this symposium was to provide a comprehensive review of the most recent developments

in the study of AKI and describe emerging knowledge from basic and translational research. The meeting included 20 experts invited from around the world and over 100 participants who were in attendance. Symposium sessions focused on defining key molecules, mechanisms and targets involved in the pathogenesis, differentiation, and repair in AKI. The symposium included discussion of (1) coordination of the results of AKI studies in animal models with the human condition; (2) modalities to translate research and discoveries into the best practices for clinical care; and (3) different issues in research, diagnosis and clinical trials for researchers involved in AKI discovery.

The UAB-UCSD O'Brien Center has taken a major role in the development of scientific and clinical resources for investigators undertaking AKI-related research. The Center has been involved in identifying research trends and emerging technologies and assisting in the pursuit of opportunities through enhanced core resources, technique training and opportunities as well

as educational enrichment through workshops and seminars. This symposium highlighted the exciting developments in the field and provided a forum for exchange of ideas among basic scientists and clinicians. The proceedings from this symposium [1–17] provide a unique collection, which we anticipate will stimulate further investigation into understanding the effects and outcomes of AKI.

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Disclosure Statement

The authors have no conflicts of interest to declare.

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