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Proceedings from the 5th Annual UAB-UCSD O'Brien Center symposium Held on Tuesday, March 4, 2014 in San Diego, California:

Changing Paradigms in Acute Kidney Injury: From Mechanisms to Management

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Introduction

Acute kidney injury (AKI) is a rapidly evolving area where several advances have been made in understanding the mechanisms and pathways of AKI and its effects on other organs. Recent identification of biomarkers has provided new tools and techniques to characterize this disorder. The complex nature of AKI including genetics and epigenetic changes, influence of the environment, and more importantly, intrinsic kidney-related mechanisms that contribute to the pathophysiology of AKI offer challenging perspectives in clinical and translational research approaches (Figure 1). This issue summarizes proceedings from the 5th pre-conference symposium during the 19th annual Continuous Renal Replacement Therapy meeting held in San Diego, California on Tuesday, March 4th, 2014 sponsored by the University of Alabama at Birmingham (UAB)-University of California San Diego (UCSD) O'Brien Center for Acute Kidney Injury Research.

The UAB-UCSD O'Brien Center has taken a major role in the development of scientific resources for investigators pursuing AKI-related research by identifying emerging trends and technologies and pursuing these opportunities through enhancement of core resources and educational outreach to the research base through workshops and seminars. The overall goal of this symposium was to provide a comprehensive review of the most recent developments in the field and describe emerging knowledge from basic and translational research. The meeting included 30 invited experts from across the world and over 100 participants were in attendance. Symposia sessions focused on molecules, mechanisms and targets, translational research, improving outcomes and biomarkers. Results from clinical trials were discussed to define the best strategies for effective management of patients and define the criteria for future studies.

The Complex Nature of Acute Kidney Injury

Figure 1.
The complex nature of acute kidney injury.