



Changing Paradigms in Acute Kidney Injury: From Mechanisms to Management

UAB/UCSD O'Brien Center Symposium on AKI

Tuesday, February 14, 2012 Hilton San Diego Bayfront San Diego, California

Visit www.crrtonline.com for Registration & More Information

This symposium immediately precedes the 17th International Conference on CRRT (www.crrtonline.com) at the same venue and offers an excellent opportunity to learn from and network with international experts in nephrology and critical care.

Acute Kidney Injury 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. This special symposium on AKI sponsored by the UAB/UCSD O'Brien Center for AKI research (www.OBrienaki.org) will provide a comprehensive review of the most recent developments in the field and describe emerging knowledge from basic and translational research applicable to clinical care.

Full Day Symposium 8:00am-5:30pm \$250.00

\$220.00 with CRRT Registration, includes lunch, AM & PM breaks

AGENDA

7:55 am **Opening Remarks** Ravindra Mehta, MD

PLENARY 1 Molecules, Mechanisms and Targets *Co-Chairs: Bruce Molitoris, MD and Anupam Agarwal, MD*

8:00-8:20 **The Pathogenesis of Acute Kidney Injury (AKI) & the Toxic Triangle of O₂, NO & ROS** - Can Ince, PhD

8:20-8:40 **Mitochondria Dynamics in AKI** - Zheng Dong PhD

8:40-9:00 **Sepsis and AKI: What Have We Learned?** - Martin Matejovic, MD

9:00-9:20 **Cell Cycle Regulation in AKI** - Robert Safirstein MD

9:20-9:40 **Is Renal Dysfunction of Cirrhosis Truly Reversible?** - Rajiv Jalan MD

9:40-10:00 **Mechanisms of Repair After AKI** - Ben Humphreys MD

10:00-10:15 *Coffee Break*

PLENARY 2 Translational Research: Bedside to Bench and Back *Co-Chairs: Robert Schrier & John Kellum*

10:15-10:35 **Immune Hyporesponsiveness: Target for Monitoring and Intervention?** - Didier Payen MD

10:35-10:55 **Human Endotoxemia: Does it Lead to Tubular Injury?** - Peter Pickkers MD

10:55-11:15 **Acute Kidney Injury in Sepsis: A Role of the Microcirculation?** - Daniel De Backer MD

11:15-11:35 **Targeting Nrf2 Regulation of Oxidative Stress to Improve AKI** - Hamid Rabb MD

11:35- 11:55 **Targeting Recovery: What's Needed?** - Ravindra Mehta MD

11:55-12:15 **Utilizing Mechanistic Modeling to Facilitate Clinical Drug Development** - William Macias MD

12:15-1:15 pm *Lunch Hosted by Conference*

PLENARY 3 Concurrent Sessions

A. Pre-Clinical Models for Translational Research in AKI

Co-Chairs: Paul Sanders and Roland Blantz

1:15-1:35 **Rodent Models and Imaging**

Kurt Zinn PhD

1:35-1:55 **Dissecting Immune Responses in AKI**

Mark Okusa, MD

1:55-2:15 **Unraveling the Interactions of AKI and CKD**

Prabhleen Singh MD

2:15-2:35 **Visualizing the Microcirculation**

Bruce Molitoris, MD

2:35-2:55 **Using Gene-targeted Mice to Study Renal Physiology In Vivo** - Volker Vallon MD

2:55-3:15 **Genetic Labeling Techniques**

Ben Humphreys MD

B. Enhancing Clinical and Translational Research in AKI

Co-Chairs: Robert Safirstein and Claudio Ronco

When Did AKI Start: Baseline vs

Reference Creatinine - Etienne Macedo MD

Clinical Endpoints for AKI: Do We

Have a Consensus? - John Kellum, MD

Outcomes Research: The Role of an

AKI Registry - Josee Bouchard, MD

Design Issues & Strategies for Biomarker Guided

Clinical Trials - Zoltan Endre MD

AKI in Hospitalized Patients: Implications for

Clinical Research - Henry Wang MD

Trial Designs for Preventing AKI Progression

to CKD - Lakhmir Chawla MD

3:15-3:30 *Coffee Break*

PLENARY 4 Tools to Characterize Human AKI *Co-Chairs: Mark Okusa and Hamid Rabb*

3:30-3:50 **Biomarkers in AKI: An Update from the ADQI Conference** - Patrick Murray MD

3:50-4:10 **Diagnostic Value of Urine Electrolytes in AKI** - Robert Schrier MD

4:10-4:30 **Candidate Biomarkers for Sepsis Associated AKI in Children: A Microarray Analysis** - Hector Wong MD

4:30-4:50 **Epigenetics and the Interface Between Host and Environment.** - Andrew Shaw MD

4:50-5:10 **Assessing Kidney Function in the Patient with Cardiorenal Syndrome** - Claudio Ronco MD

5:10-5:30 **Urinary Exosomes: Emerging Tools for Characterizing AKI** - Pam Taub MD

5:30 *Adjourn*