



**CRRT UNIVERSITY** 

# Creating New Directions in CRRT Simulation

Supported by an educational grant from Baxter Gambro Renal Division

## Creating New Directions in CRRT Simulation

#### COURSE DESCRIPTION

CRRT University is designed for health care providers caring for infants, children and/or adults receiving Continuous Renal Replacement Therapy (CRRT). The conference will provide a forum for the exchange of CRRT program strategies and innovations to enhance education, patient safety and quality improvement through podium presentations, expert panels, and simulation.

#### COURSE OBJECTIVES

The goals of this conference are to:

- Improve aptitude in care for patients receiving CRRT
- Increase working knowledge of the CRRT machine and ability to troubleshoot alarms
- Enhance abilities to navigate and adapt to complex situations involving CRRT
- Develop strategies for addressing challenging communication issues and program structure

#### **ACCREDITATION**

#### Physicians

Cincinnati Children's Hospital Medical Center is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

This activity has been approved for AMA PRA Category | Credit<sup>TM</sup>.

#### Nursing

Contact hours will be awarded to nurses who attend the entire program and complete an evaluation tool.

Cincinnati Children's Hospital Medical Center (OH-046, 9/1/2018) is an approved provider of continuing nursing education by the Ohio Nurses Association (OBN-001-91), an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

#### CONFERENCE LOCATION

Cincinnati Children's Hospital Medical Center 3333 Burnet Avenue | Cincinnati, OH 45229

#### HOTEL INFORMATION:

Kingsgate Marriott Conference Center at the University of Cincinnati 151 Goodman Drive | Cincinnati Ohio 45219 513-487-3800

## Agenda

#### DAY 1

11:30-noon	Registration and Lunch
noon-12:15 pm	Welcome and Introductions
12:15–1:15 pm	Session 1 Program Evaluation and AKI Epidemiology
1:15–2:15 pm	Session 2 CRRT Prescription
2:15–3 pm	Break
3–4 pm	Session 3 Current Research and CRRT Outcomes
4–5 pm	Session 4 Case Studies

#### DAY 2

7:30–8 am	Continental Breakfast
8–10:15 am	Scenarios 1-2
10:15–10:30 am	Break
10:30-noon	Scenarios 3-4
noon-1:15 pm	Lunch
1:15-2:45 pm	Scenarios 5-6
2:45–3:15 pm	Break
3:15–4 pm	Scenario 7
4–4:15 pm	Wrap Up

Register online at cchmc.cloud-cme.com/aph.aspx

### **QUESTIONS**

For questions, contact Jolyn Morgan at jolyn.morgan@cchmc.org at 513-803-3297 or Liz Rising at elizabeth.rising@cchmc.org.

## CRRT University Co-Chairs



#### STUART GOLDSTEIN, MD

Professor of Pediatrics; University of Cincinnati College of Medicine: Division of Nephrology and Hypertension & The Heart Institute; Director, Center for Acute Care Nephrology; Cincinnati Children's Hospital Medical Center | Cincinnati, OH USA

Dr. Goldstein serves as Director for the Center for Acute Care Nephrology (CACN) at Cincinnati Children's Hospital Medical Center.

The CACN's mission to coordinate all AKI related clinical, research and outcomes efforts at CCHMC and to function as a nexus for coordinating multi-center pediatric AKI research. Dr. Goldstein serves as the Founder and Principal Investigator of the Prospective Pediatric CRRT (ppCRRT) Registry Group, a 12 US center collaborative effort that has collected the most extensive data to date regarding pediatric CRRT including patient demographics, evaluation of outcome in specialized pediatric populations and assessment of different anticoagulation protocols. The ppCRRT has transformed into the Prospective Pediatric AKI Research Group, an international consortium of greater than 50 pediatric institutions that will focus on pediatric AKI epidemiology, interventional trials, device evaluation and genetic studies. Dr. Goldstein is also the program director for the only Pediatric Acute Care Nephrology fellowship in the United States.



#### THERESA MOTTES, RN, CPNP-AC, CDN

Nurse Practitioner, Pediatric Critical Care Nephrology; Pediatric Renal Program; Texas Children's Hospital | Houston, TX

Theresa Mottes has over 25 years of pediatric renal replacement therapy experience in both the critical care setting and the outpatient dialysis setting. Throughout her career, she has been actively involved in the care of CRRT patient. Theresa has served many roles in the

ANNA Pediatric Specialty Practice Network. She has presented at both national and international conferences. Theresa spent 5years as a Research Nurse in the field of acute kidney injury, overseeing more than 20 AKI related research projects. She received the Carolyn Stoll Nursing Grant for her work on simulation-based CRRT education. She completed her Pediatric Nurse Practitioner-Acute Care in 2017. Her long-term goal is to integrate quality improvement and process improvement strategies to advance the care of patients receiving CRRT.



#### JOLYN MORGAN, RN, CPNP-AC, CDN

Nurse Practitioner, Center for Acute Care Nephrology; Cincinnati Children's Hospital Medical Center | Cincinnati, OH USA

Jolyn Morgan is an Acute Care Pediatric Nurse Practitioner in the Center for Acute Care Nephrology (CACN) at Cincinnati Children's Hospital Medical Center (CCHMC). She first joined the center as a registered nurse in 2010. Jolyn has over 12 years of experience caring

for patients requiring renal replacement therapy in both the critical care and outpatient dialysis setting. She also cares for patients requiring various acute therapies including apheresis, Mars, peritoneal dialysis and ultrafiltration. Jolyn is the lead pediatric internal CRRT simulation education coordinator for all ICU nurses and ECMO specialists/clinicians. Additionally, she is the lead lecturer for all CRRT didactic courses at CCHMC.

## **CRRT University Faculty**



#### DAVID ASKENAZI MD, MSPH

Professor of Pediatrics; Division of Pediatric Nephrology; University of Alabama at Birmingham; Children's of Alabama | Birmingham, AL USA

Dr. Askenazi is a pediatric Nephrologist and Medical Director of the Pediatric and Infant Center for Acute Nephrology (PICAN) at the University of Alabama at Birmingham/Children's of Alabama. His

clinical, educational and research interest focus is on the epidemiology, diagnosis and renal support therapy of neonates and children at risk for acute kidney injury.



#### SEAN BAGSHAW, MD, MSC, FRCPC

Department of Critical Care Medicine; Faculty of Medicine and Dentistry; University of Alberta | Edmonton, Alberta, Canada

Dr. Bagshaw's main research interests have focused on the clinical, epidemiological and translational issues related to acute kidney injury and the application of extracorporeal blood purification in critically ill patients. Dr. Bagshaw's current projects include diuretic therapy in

early acute kidney injury and factors related with the initiation of renal support in critically ill patients. He has published over 100 peer-reviewed papers, numerous book chapters, and peer-reviewed for over 20 medical journals.



#### RAJIT BASU, MD

Associate Professor of Pediatrics; Director of Clinical Research; Division of Critical Care Medicine; Children's Healthcare of Atlanta; Emory School of Medicine | Atlanta, GA USA

Dr. Basu is an Associate Professor of Pediatrics and Pediatric Intensive Care and is an active investigator of acute kidney injury (AKI). His long term goal is to integrate risk stratification and advanced diagnostic

methodology, using novel biomarkers, into electronic medical record based clinical decision support, streamlining and standardizing recognition and initial management of critically ill children. His current central focus is improving the precision of AKI and fluid overload diagnosis using renal angina and novel biomarkers. Prior to taking his current position at Emory University, he served as the Co-Director of the Center for Acute Care Nephrology at Cincinnati Children's Medical Center (CCHMC), helping to coordinate and study the use of renal support devices in the ICU, including renal replacement therapy (RRT), hemodialysis, peritoneal dialysis, pheresis, and the molecular adsorbent recirculating system (MARS).



PATRICK BROPHY, MD, MHCDS

William H. Eilinger Professor and Chair

Department of Pediatrics at the University of Rochester Shool of Medicine and Dentistry

Physician-in-Chief of the Golisano Children's Hospital at the University of Rochester Medical Center

One of Dr. Brophy's primary clinical interests is critical care nephrology. He has been an active member of the ppCRRT consortium and the ppAKI group as well. His interests also include the changing value proposal in healthcare delivery and basic research in renal development.



#### FRANCISCO FLORES, MD

Associate Professor; University of Cincinnati College of Medicine Division of Nephrology and Hypertension; Cincinnati Children's Hospital Medical Center | Cincinnati, OH USA

Dr. Flores received his degree from Universidad Catolica Santiago de Guayaquil in Ecuador. He completed a residency in Pediatrics at the University of Miami Jackson Memorial Hospital in Miami, Florida. Dr.

Flores then completed a fellowship in Pediatric Nephrology at Harvard University, Boston Children's Hospital in Boston, Massachusetts. He is board-certified in Pediatric Nephrology and, he is the clinical director of the division of nephrology and hypertension and the he medical director of the MARS at Cincinnati Children's Hospital Medical Center. His areas of clinical interest include acute kidney Injury (AKI) in children, the use of continuous renal replacement therapy (CRRT) in the management of pediatric acute kidney injury, and the use of Molecular Adsorbent Recirculating System (MARS) in pediatrics.



#### MICHAEL HEUNG, MD, MS

Associate Professor, Internal Medicine; Associate Chief, Division of Nephrology; University of Michigan | Ann Arbor, MI USA

Michael Heung is an Associate Professor of Internal Medicine at the University of Michigan, where he serves as the Associate Chief for Clinical Affairs in the Division of Nephrology. He previously served as the Medical Director of the Acute Dialysis Program from 2006 thru 2016. His

clinical and research interests focus on critical care nephrology and acute kidney injury outcomes. He has a particular interest in optimizing delivery of CRRT and patient safety.



#### JOHN A. KELLUM, MD, FACP, MCCM

Professor, Critical Care Medicine; University of Pittsburgh School of Medicine | Pittsburgh, PA USA

Dr. Kellum is a Professor of Critical Care Medicine, Medicine, Bioengineering and Clinical & Translational Sciences. His research interests span various aspects of Critical Care Medicine, but center in critical care nephrology (including acid-base, and renal replacement

therapy), sepsis and multi-organ failure, and clinical epidemiology). He has authored more than 300 publications and has won several awards for teaching. He has given more than 300 seminars and invited lectures related to his research. Dr. Kellum is a founding member and past president of the Acute Dialysis Quality Initiative (www.ADQI.net). Dr. Kellum is Vice Chair for Research in the Department of Critical Care Medicine at the University of Pittsburgh and Director of the Center for Critical Care Nephrology at the University of Pittsburgh.



#### JAVIER A. NEYRA, MD, MSCS, FASN

Assistant Professor of Medicine; Director, Acute Care Nephrology & CRRT program; Division of Nephrology, Bone and Mineral Metabolism; University of Kentucky Medical Center | Lexington, KY USA

Dr. Neyra is an Assistant Professor of Medicine at the University of Kentucky, where he serves as Director of the Acute Care Nephrology & CRRT program. Dr. Neyra is a founding member of the Acute Kidney

Injury in Critical Illness study group. His clinical, educational and research interest focus is on critical care nephrology with emphasis on Klotho biology in acute kidney injury (AKI) and post-AKI multiorgan complications. Dr. Neyra has established an AKI Survivor Clinic at the University of Kentucky Medical Center and is an active investigator in different AKI studies.



#### SCOTT SUTHERLAND, MD

Clinical Associate Professor; Pediatric Nephrology; Stanford University School of Medicine; Lucile Packard Children's Hospital Stanford | Stanford, CA, USA

Dr. Sutherland is a Clinical Associate Professor of Pediatric Nephrology. He is currently the Medical Directors both of Critical Care Nephrology and of Apheresis Services. His clinical interests include

intensive care nephrology, acute kidney injury, continuous renal replacement therapy, and the cardiorenal syndrome. He is an active clinical investigator with a focus on acute kidney injury and renal replacement therapy in critically ill children, as well as the short and long term renal outcomes in the setting of cardiac failure and transplantation. He is particularly interested in in the use of electronic health records (EHRs) to improve identification and management of children with acute kidney injury. He works part time with the IT department where he is the Medical Director of Clinical Informatics, enabling him to leverage this data and these techniques to answer novel research questions.

## CRRT University Simulation Faculty



#### GARY GEIS, MD

Medical Director; Center for Simulation and Research; Cincinnati Children's Hospital Medical Center | Cincinnati, OH USA

Dr. Geis completed his medical school training at the University of Cincinnati, College of Medicine, his residency in pediatrics at Eastern Virginia Medical School in Norfolk, Virginia, and his fellowship in pediatric emergency medicine at Cincinnati Children's Hospital

Medical Center. He is currently an Associate Professor of Pediatrics in the Division of Emergency Medicine at Cincinnati Children's and the Medical Director at the Center for Simulation and Research. His academic and research interests include medical and trauma resuscitative care, simulation-based training to improve teamwork and patient safety, pediatric airway management, and use of bedside sonography for procedural care. He is currently the primary investigator on an AHRQ-funded investigation aimed at improving early recognition and goal-directed management of pediatric sepsis.



#### JAMIE SHOEMAKER, MSN, RN

Simulation Specialist; Center for Simulation and Research; Cincinnati Children's Hospital Medical Center  $\mid$  Cincinnati, OH USA

Jamie Shoemaker, RN, MSN is an Education Specialist at the Center for Simulation and Research at Cincinnati Children's Hospital. She has a background in Pediatric Emergency Nursing, since 2007 at Cincinnati Children's in the Emergency Department. In the role of Simulation

Education Specialist, she facilitates and debriefs a variety of courses which bring together multidisciplinary teams in the simulation environment. Jamie is also involved in course development for new learners to the simulation center.





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