University of Alabama at Birmingham

2018 Extracorporeal Life Support (ECLS) Symposium

February 16-17, 2018

Grand Bohemian Hotel
Mountain Brook Ballroom I & II
2655 Lane Park Road
Birmingham, AL 35223

SPONSORED BY:
UAB Department of Medicine; UAB Division of Pulmonary, Allergy, & Critical Care Medicine; UAB Division of Cardiothoracic Surgery; UAB Mechanical Circulatory Support Program; UAB Comprehensive Transplant Institute; UAB Office of Interprofessional Simulation; and Mallinckrodt Pharmaceuticals

Register online at uab.edu/ECLS
For more information: 205-934-5548 or rpholt@uabmc.edu
AGENDA – Friday, February 16, 2018

7:30–8:00 am  Registration & Breakfast  
(Lobby and Mountain Brook Ballroom I & II)

8:00–8:05 am  Welcome/Opening Remarks  
Keith Wille, MD

8:05–8:30 am  ECLS: Overview of the UAB Program and Models for Staffing  
Peggy Blood, RN, MSN, and Bobby Reed, MHS

8:30–8:55 am  ECLS: The Basic Components  
Jessica Bryant, RN

Session 1: Pediatric ECLS
8:55–9:25 am  Pediatric ECLS Support: Children’s of Alabama Experience  
Joey Timpa, CCP

9:25–9:50 am  ECLS in Patients with Congenital Heart Failure  
David Mauchley, MD

9:50–10:10 am  ECLS Case Presentation: Pediatric  
Carlisle O’Meara, CCP, Children’s of Alabama

10:10–10:20 am  Panel Discussion/Question & Answer Session

10:20–10:35 am  Break

Session 2: ECLS in Advanced Respiratory Failure
10:35–11:00 am  ECLS in Patients with Acute Respiratory Distress Syndrome (ARDS)  
Vincent Valentine, MD

11:00–11:25 am  ECLS Regenerative Recovery Model  
Keith Wille, MD

11:25–11:50 am  Pulmonary Embolic Disease and Pulmonary Hypertension  
Charles Hoopes, MD

11:50–Noon  Panel Discussion / Question & Answer Session

Noon–1:00 pm  Lunch

Session 3: ECLS in Acute Cardiac Failure
1:00–1:25 pm  ECLS vs. Other Mechanical Circulatory Support Systems in Acute Cardiogenic Shock  
Jose Tallaj, MD

1:25–1:50 pm  ECLS in Patients with Acute Myocardial Infarction  
Mohammad Sarraf, MD

1:50–2:15 pm  ECLS in Patients with Cardiogenic Shock: Fatality, Bridging, Recovery, Outcomes, and Cannulation Techniques and Strategies  
Charles Hoopes, MD

2:15–2:25 pm  Panel Discussion / Question & Answer Session

2:25–2:45 pm  Break

Session 4: Caring for the Patient on ECLS
2:45–3:30 pm  Physician Perspective: Management, Complications, and Prevention  
Nirmal Sharma, MD, Division of Pulmonary, University of South Florida

3:30–3:55 pm  Nursing Perspective: Caring for the Patient  
Daniel Blackwell, RN

3:55–4:20 pm  Perfusionist Perspective: System Management, Monitoring, and Replacement  
Robert Ledbetter, CCP

4:20–4:30 pm  Panel Discussion / Question & Answer Session

4:30–5:00 pm  Debate: Ambulatory vs. Non-Ambulatory ECLS

5:00 pm  Adjourn

5:30–7:00 pm  Symposium Dinner (Mountain Brook Ballroom I & II)

AGENDA – Saturday, February 17, 2018

7:30–8:00 am  Registration & Breakfast  
(Lobby and Mountain Brook Ballroom I & II)

8:00–8:05 am  Welcome/Opening Remarks  
Keith Wille, MD

8:05–8:30 am  Public Health Mission: Integrated Models of ECLS  
Charles Hoopes, MD

8:30–8:50 am  Ground and Air Transport for Patients on ECLS  
Britt Mcllwain, CCP

8:50–9:15 am  Performing Concomitant Procedures While on ECLS  
Mat Tyndal, CCP

9:15–10:15 am  Keynote Speaker: History of ECLS and Development of Current Cannulation Strategies  
The Absence of Evidence Base in Innovation  
Joseph Zwischenberger, MD, FACS

10:15–10:30 am  Break

10:30–10:45 am  ECLS Case Presentation: Respiratory  
Vincent Valentine, MD, and Keith Wille, MD

10:45–11:00 am  ECLS Case Presentation: Cardiac  
Samuel McElwee, MD

11:00–11:10 am  Panel Discussion/Question & Answer Session

11:10–11:20 am  Break

11:20–11:45 am  Troubleshooting Different ECLS Systems  
Practical Application

11:45 am–12:10 pm  ECLS System Setup and Troubleshooting  
Practical Application

12:10–2:00 pm  ECLS Simulation Lab (UAB Jefferson Tower)

2:00 pm  Adjourn
**SPEAKER SPOTLIGHT**

Joseph Zwischenberger, MD, received his Bachelor of Science and medical degree from the University of Kentucky in Lexington. Following a cardiothoracic and general surgery residency at the University of Michigan in Ann Arbor, he completed a clinical associate fellowship under Andrew Morrow, MD, in the Cardiac Division of the National Heart, Lung, and Blood Institute (NHLBI) at the National Institutes of Health (NIH) in Bethesda, Maryland. In addition, he completed an extracorporeal membrane oxygenation (ECMO)/critical care fellowship in the Section of General Surgery at the University of Michigan in Ann Arbor.

Prior to returning to the University of Kentucky, Dr. Zwischenberger was a faculty member and served as director of ECMO at the University of Texas Medical Branch (UTMB) in Galveston. He is certified by the American Board of Thoracic Surgery and the American Board of Surgery in Surgical Critical Care. His research interests are largely focused on the development of the artificial lung, and he holds two related patents.

**FACULTY**

**UAB FACULTY:**

- **Keith Wille, MD**
  Medical Director, Adult ECMO and Advanced Lung Disease
  Division of Pulmonary, Allergy, and Critical Care Medicine
  Professor

- **Vincent Valentine, MD**
  Medical Director, Lung Transplantation
  Division of Pulmonary, Allergy, and Critical Care Medicine
  Professor

- **Charles Hoopes, MD**
  Surgical Director, Mechanical Circulatory Support Program
  Division of Cardiothoracic Surgery
  Professor

- **David Mauchley, MD**
  Division of Cardiothoracic Surgery
  Assistant Professor

- **Jose Tallaj, MD**
  Division of Cardiovascular Disease
  Professor

- **Mohammad Sarraf, MD**
  Division of Cardiovascular Disease
  Associate Professor

- **Samuel McElwee, MD**
  Cardiology, Pulmonary, and Critical Care Fellow

- **Marjorie White, MD, MA, MPPM**
  Director, Office of Interprofessional Simulation
  Associate Professor

- **Robert Reed, MHS**
  Senior Director, Perioperative Services

- **Rachel Schwartz, CCP**
  Manager, Cardiovascular Perfusion
  Perioperative Services

- **Britt McIlwain, CCP**
  Perioperative Services

- **Robert Ledbetter, CCP**
  Perioperative Services

- **Mat Tyndal, CCP**
  Perioperative Services

- **Peggy Blood, MSN, RN**
  Nurse Manager, MCS
  Perioperative Services

- **Daniel Blackwell, RN**
  Perioperative Services

- **Jessica Bryant, RN**
  Perioperative Services

**GUEST FACULTY:**

- **Joey Timpa, CCP, FPP**
  Perfusion Manager
  Perioperative Services
  Children’s of Alabama

- **Nirmal Sharma, MD**
  Division of Pulmonary, Critical Care, and Sleep Medicine
  Assistant Professor
  University of South Florida, College of Medicine

- **Carlisle O’Meara, CCP, FPP**
  Perioperative Services
  Children’s of Alabama

**SYMPOSIUM REGISTRATION**

Register online at uab.edu/ECLS
Online registration ends Jan. 30, 2018, at 5:00 pm

Physicians & surgeons - $100

Fellows, nurses, RTs & perfusionists - $60

Dinner on Friday, Feb. 16, at 7:00 pm - $40 (Additional guests $40/person)

Immersive simulation on Saturday, Feb. 17 at 2:00 pm - $60 (Limited space)

**HOTEL RESERVATIONS**

Grand Bohemian Hotel
2655 Lane Park Road
Mountain Brook, AL 35223
USA

Group code for discounted hotel rate: W14

To reserve a room, call (205) 414-0505 or visit grandbohemianmountainbrook.com
LEARNING OBJECTIVES

After participating in this CME activity, participants will be able to:

1. Describe the indications, contraindications, and selection guidelines for ECLS
2. Explain the physiology and mechanics of ECLS
3. Discuss the process of establishing an ECLS program and the UAB ECLS staffing model
4. Explain ground and air transportation for patients on ECLS
5. Describe physician management, complications, and complication prevention in the ECLS patient
6. Describe nursing care for the ECLS patient
7. Describe perfusion management, monitoring, and replacement therapy in the ECLS patient
8. Recognize patients with acute respiratory failure and acute heart failure who are likely to benefit from ECLS
9. Explain ECLS compared to other mechanical support systems in treating cardiogenic shock and acute myocardial infarction
10. Describe the use of ECLS in patients awaiting lung and/or heart transplantation
11. Demonstrate the use of ECLS in patients with acute respiratory distress syndrome (ARDS)
12. Discuss ECLS as a bridge to a more permanent support system
13. Identify newer technologies for long-term respiratory and cardiac support

ACCREDITATION

The University of Alabama School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The University of Alabama School of Medicine designates this live activity for a maximum 13 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The American Board of Cardiovascular Perfusion has allotted a maximum 16.5 Category 1 CEUs for attending this event. Nursing Continuing Education credits have been applied for. The Extracorporeal Life Support Organization approves this event.

The University of Alabama School of Medicine is an Equal Opportunity/Affirmative Action Employer committed to fostering a diverse, equitable, and family-friendly environment in which all faculty and staff can excel and achieve work/life balance irrespective of ethnicity, gender, faith, gender identity and expression, and sexual orientation.

TARGET AUDIENCE

This activity is designed for pulmonologists, cardiologists, and critical care physicians as well as fellows, nurses, respiratory therapists, and perfusionists wanting to increase their knowledge and skills in the management and treatment of patients using extracorporeal life support (ECLS).

For more information on the UAB ECMO Program:

uabmedicine.org/referECMO