

SCCM Midwest Chapter Presents

4TH ANNUAL CRITICAL CARE CONFERENCE

September 9th, 2023

Advances in Critical Illness - Organ Rescue

Venue: Advocate Christ Medical Center, Oak Lawn, IL

Scan the QR code below to register



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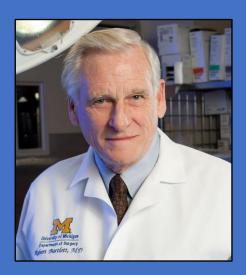


Advances in Critical Illness - Organ Rescue!

Venue: Advocate Christ Medical Center, Oak Lawn, IL

FEATURED SPEAKERS

Dr. Robert Bartlett



Dr. James McCully



To register: Visit: https://www.sccmmwc.org

Or Scan QR code **Registration Fee:**



SCCM MWC members: Physicians: \$60, Non-physicians/Trainees: \$20

Non-Members: Physicians: \$100, Non-physicians/Trainees: \$60

Speakers, Jeopardy Presenter: Free

To Join SCCM Midwest Chapter Click: https://www.sccmmwc.org/membership/

Cost is \$45. Main SCCM Membership is encouraged but not required.

Abstract Submission Deadline: July 31st, 2023, Noon

Contact Us: sccmmwc@gmail.com

University of Illinois College of Medicine at Peoria will provide CME/CEU (Anticipated 6 hours)

We appreciate support from University of Illinois College of Medicine at Peoria for providing CME credit.

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4th Annual Critical Care Conference

Advances in Critical Illness - Organ Rescue!

Foreword





Dear Colleagues,

We are very excited to be able to hold our first in-person symposium on September 9, 2023, in Oak Lawn, Illinois with an intriguing line-up of speakers providing cutting-edge lectures on methods of organ rescue in critical illness.

It is known that a variety of stressors may induce cellular damage and lead to organ failure in critical illness. Patients with organ failure benefit from highly-skilled teams and often advanced therapies. The concept of organ rescue for the symposium encompasses both medical and mechanical methods of enhancing organ function. From innovative methods of mitochondrial transplant to extracorporeal therapies to use of medical manipulations to augment recovery of organ function, this year's speakers will provide innovative strategies aimed at improving patient outcomes and pushing the field of critical care forward in this exciting realm.

As part of the journey to organ recovery, speakers will also provide key therapies for identifying and managing often-associated complications in patients with organ failure, such as delirium, as well as mechanical complications of invasive ventilation and renal replacement therapies.

Participants will not only be able to experience in-person lectures but will also be able to engage in hands-on and small group discussions with experts in the field of extracorporeal therapies, mechanical ventilation and neurocritical care as part of break-out sessions.

We really look forward to seeing you and your team at the SCCM Midwest Chapter symposium to share knowledge, interact, and network with professionals who share the common passion of caring for the critically ill. This year's symposium highlights the importance of the team, with each member playing a crucial role in recovery of all organs, so we are hoping to see providers from all aspects of critical care at this year's symposium.

Varsha

Varsha Gharpure, MD, FAAP, FCCM President, SCCM Midwest Chapter Chair, Symposium Committee Kristen

Kristen Nelson McMillan, MD Secretary, SCCM Midwest chapter Co-Chair, Symposium Committee

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4th Annual Critical Care Conference

Advances in Critical Illness - Organ Rescue!

VENUE: ADVOCATE CHRIST MEDICAL CENTER, OAK LAWN, IL SCHEDULE (CENTRAL TIME ZONE)

08:00 - 08:15 REGISTRATION AND EXHIBIT HALL

08:15 - 08:30 President's Address

Welcome, Introduction, Housekeeping Remarks Varsha Gharpure, MD, FAAP, FCCM

08:35 - 09:20 PLENARY SESSION

From ECMO to Ex-Vivo Organ Perfusion Robert Bartlett, MD

09:25 - 10:10 KEYNOTE ADDRESS

Mitochondrial Transplantation: A New Model for Organ Rescue! James McCully, PhD

10:10 - 10:25 COFFEE BREAK/EXHIBIT HALL

10:25 - 11:25 Breakout Sessions - 1 (Select 1 out of 4)

1) Extracorporeal Membrane Oxygenation: Simulation Kristen Nelson McMillan, MD Leon Eydelman, MD

2) Continuous Renal Replacement Therapies: Simulation

Priya Chandra, MD Erin Kim, MD

3) Mechanical Ventilation: Patient-Ventilator Asynchrony

Robert Chatburn, MHHS, RRT-NPS, FAARC Varsha Gharpure, MD, FAAP, FCCM

4) Aneurysmal Subarachnoid Hemorrhage: Evaluation and Management Andrea Sterenstein. MD

11:35 - 12:20 RESEARCH PRESENTATIONS

12:20 - 13:20 LUNCH & EXHIBIT HALL

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Advances in Critical Illness - Organ Rescue!

VENUE: ADVOCATE CHRIST MEDICAL CENTER, OAK LAWN, IL SCHEDULE (CENTRAL TIME ZONE) (CONTINUED...)

13:25 - 14:25 PHARMACY LECTURE

ICU Delirium: The Deceptively Simple – *Majdi Hamarsh, MD*Let it Snow or Let it Go? Sedation and Analgesia in the ICU – *Veronica Bonderski, PharmD, BCCCP*

14:30 - 15:00 STAR RESEARCH PRESENTATIONS

15:00 - 15:15 COFFEE BREAK/EXHIBIT HALL

15:20 - 16:20 Breakout Sessions - 1 (Select 1 out of 4)

1) Extracorporeal Membrane Oxygenation: Simulation

Kristen Nelson McMillan, MD Leon Eydelman, MD

2) Continuous Renal Replacement Therapies: Simulation

Priya Chandra, MD Erin Kim, MD

3) Mechanical Ventilation: Patient-Ventilator Asynchrony

Robert Chatburn, MHHS, RRT-NPS, FAARC Varsha Gharpure, MD, FAAP, FCCM

4) Aneurysmal Subarachnoid Hemorrhage: Evaluation and Management Andrea Sterenstein, MD

16:20 - 17:05 CRITICAL CARE JEOPARDY

Moderator: Padmaraj Duvvuri, MD

17:05 – 17:15 SCCM MIDWEST CHAPTER ELECTION RESULTS, INTRODUCTION OF NEW OFFICERS AND CLOSING REMARKS

Candice White, MSN, APRN, AGCNS-BC

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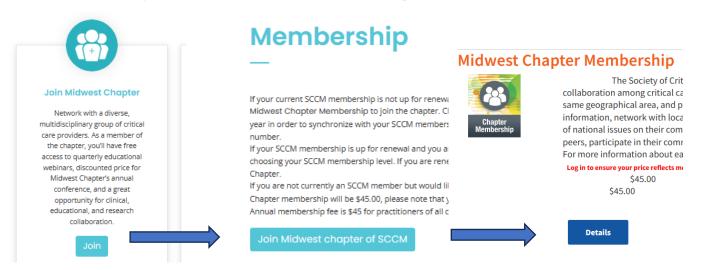


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Accommodation

- ➤ Limited rooms are reserved at Hilton Hotel, 9333 South Cicero Avenue, Oak Lawn, IL.
- Please contact <u>sccmmwc@gmail.com</u> for additional information.

To join the SCCM Midwest Chapter - Visit us at https://www.sccmmwc.org



OR Visit <u>Store (sccm.org)</u> directly.

- You will have to create a new account log in and password if you are not current SCCM Member
- Membership of the main organization is encouraged but not required to join the Midwest Chapter

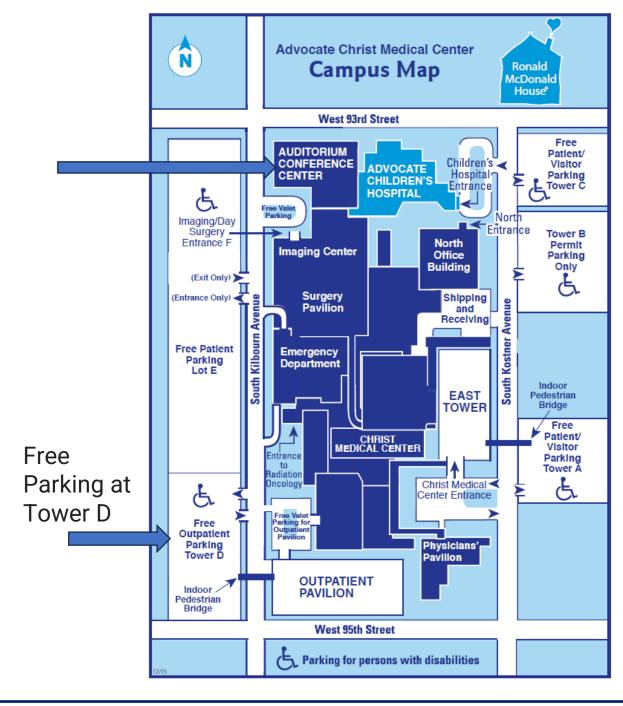
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Venue:

Stein Auditorium, Advocate Christ Medical Center, 4440 W 95th St, Oak Lawn, IL 60453.



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Session & Objectives

Welcome, Introduction, Housekeeping Remarks



Varsha Gharpure, MD, FAAP, FCCM Pediatric Intensivist, Advocate Children's Hospital, Park Ridge, IL Research Medical Director, Center for Child and Family Research, Advocate Aurora Research Institute Clinical Associate Professor of Pediatrics, Rosalind Franklin University of Medicine and Science, IL

Plenary Session - From ECMO to Ex Vivo Organ Perfusion



Robert Bartlett, MD Emeritus Professor of Surgery Sections of General and Thoracic Surgery University of Michigan, MI

- 1. What is ECLS
- 2. What are the indications and contraindications
- 3. What are the complications
- 4. What are the results

Keynote Address - Mitochondrial Transplantation: A new model for Organ Rescue

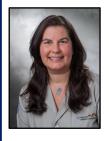


James McCully, PhD
Associate Professor
Department of Cardiac Surgery
Boston Children's Hospital and Harvard
Medical School, Boston, MA

- 1. Mitochondria and ischemia-reperfusion injury
- 2. Mitochondrial transplantation as a therapeutic modality: safety and efficacy
- 3. Mechanisms of action and future directions

Breakout Sessions (Select 1 out of 4)

1. ECMO simulation



Kristen Nelson McMillan, MD
Assistant Professor, Department of Pediatrics,
University of Chicago Medicine
Medical Director Pediatric Ventricular Assist
Device Therapies and Pulmonary
Hypertension, Division of Pediatric Critical
Care, University of Chicago Medicine, IL



Leon Eydelman, MD
Director of ECMO Operations
Advocate Lutheran General Hospital, IL

- 1. Discuss recognition of cardiogenic shock using both clinical and lab/imaging input
- 2. Discuss hemodynamic management goals on ECMO for cardiogenic shock
- 3. Discuss use of afterload reduction tools on ECMO for cardiogenic shock

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Session & Objectives



2. Continuous Renal Replacement Therapies: Simulation



Priya Chandra, MD
Clinical Associate Professor of Pediatrics,
University of Washington,
Pediatric Nephrologist,
Seattle Children's Hospital, WA



Erin D. Kim, MD
Assistant Professor, Department of
Pediatrics, Division of Nephrology,
Children's Hospital of Los Angeles
Director of Peritoneal Dialysis, Department
of Pediatrics, Division of Nephrology,
Children's Hospital of Los Angeles, LA

- 1. Provide a brief overview of the use of renal replacement therapies in the PICU
- 2. Discuss basic physiology of continuous renal replacement therapies
- 3. Determine approach to troubleshooting common problems that can arise for a patient on CRRT

3. Mechanical ventilation: Patient-Ventilator Asynchrony



Robert L Chatburn, MHHS, RRT-NPS, FAARC Enterprise Program Manager, Respiratory Care Research, Section of Respiratory Therapy, Respiratory Institute Director of Research Fellowship, Simulation and Advanced Skills Center, Education Institute, OH



Varsha Gharpure, MD
Clinical Associate Professor, Department of
Pediatrics, Rosalind Franklin University of
Medicine and Science
Pediatric Intensivist, Advocate Children's
Hospital, IL

- 1. Identify different types of patient-ventilator asynchrony
- 2. Recognize the impact of patient-ventilator asynchrony on outcomes
- 3. Understand mitigation strategies to reduce asynchrony

4. Neuro Critical Care: Aneurysmal Subarachnoid Hemorrhage: Evaluation and Management



Andrea Sterenstein, MD
Assistant Professor of Neurology,
Rush University Medical Center
Attending Physician,
Neurocritical Care,
Rush University Medical Center, IL

- Review the epidemiology of aneurysmal subarachnoid hemorrhage
- Discuss clinical presentation of, and how to evaluate for a suspected subarachnoid hemorrhage
- Understand treatment modalities and common complications associated with subarachnoid hemorrhage and the respective management
- 4. Review a differential diagnosis in the absence of subarachnoid blood

Sept 9th, 2023

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Session & Objectives

Pharmacy Lecture

ICU Delirium: The Deceptively Simple



Majdi Hamarshi, MD
Director of Critical Care Fellowship,
Department of Pediatrics, University of
Missouri, Kansas City, MO
Associate Clinical Professor, Department of
Pediatrics, University of Missouri, MO

- 1. How to screen and diagnose ICU delirium
- 2. How to manage ICU delirium
- 3. How to sustain progress in ICU delirium management

Let it Snow or Let it Go? Sedation and Analgesia in the ICU



Veronica A. Bonderski, Pharm.D., BCCCP Critical Pharmacy Specialist, Neurocritical Care The University of Chicago Medicine, IL

- 1. Summarize current recommendation and recent literature surrounding sedation management in adult intensive care units
- 2. Identify areas of opportunity for sedation stewardship in adult intensive care units

Critical Care Jeopardy

Moderator



Padmaraj Duvvuri, MD, MS
Advanced Heart Failure and Transplant Cardiologist,
Critical Care Medicine,
OSF Saint Francis Medical Center, IL

Closing Remarks, Welcome New Office Bearers



Candice White, MSN APRN AGCNS-BC President-Elect, SCCM Midwest Chapter Springfield Clinic, Springfield, IL

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STAR RESEARCH PRESENTERS

Moderators: Sandeep Tripathi, MD, MS; Varsha Gharpure, MD, FCCM

MMP-12 Expression Increases in the Brain after Traumatic Brain Injury. Billy Chen Wang, Navid Shoaee, Siva Reddy Challa, Krishna Kumar Veeravalli. *University of Illinois College of Medicine Peoria*.

Association between weight status, age, and patient outcomes in the pediatric intensive care unit.

So Hyeon Park, Cindy Ndiaye, Vinod Havalad.

Advocate Children's Hospital and Chicago Medical School at Rosalind Franklin University.

Bacteremia and Endocarditis in a Complex Pediatric Congenital Heart Disease Cohort.

Kristen Kelly, Vincent Dorsey, Faeeq Yousaf-faeeq, Nina Censoplano, Alex Constas, Sreya Patel, Micheal TeKippe, Emily Keller, Kristen Nelson McMillan-Kristen.

Advocate Children's Hospital/Heart Institute University of Chicago

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RESEARCH PRESENTATIONS

ROOM - 1

Moderators: Sandeep Tripathi, MD, MS; Judith Jacobi, PharmD, FCCP, MCCM, BCCCP

Intracranial Hypertension as a Presenting Sign of Adrenal Insufficiency Secondary to Inhaled Corticosteroids in a Child

Aimee Daccache, Joshua E. Albright, John Braum, and Kyle Lemley. *University of Kansas School of Medicine, Wichita, KS.*

Severe Human Parechovirus Meningoencephalitis in Neonates and Infants: A Case Series and brief review of literature

Aimee Daccache, Kate Waldeck, Jacob Kilgore, Robert Wittler, and Nisha Agasthya. *University of Kansas School of Medicine, Wichita, KS*.

Three cases of severe iGAS infections

Aimee Daccache, Anthony Saad, Edwin Feghali, and Nisha Agasthya. *University of Kansas School of Medicine, Wichita, KS.*

Human Metapneumovirus and Severe Group A Streptococcal Co-infections in Children: A Case Series

Maureen Chavez, Mustafa Bakir, Girish Deshpande Sandeep Tripathi, and Meghana Nadiger. *University of Illinois College of Medicine Peoria/OSF Children's Hospital of Illinois, IL.*

A local rebound in adult invasive group a streptococcus (iGAS) after a recent pediatric iGAS outbreak

Nikolina Madjer, Daniel Rowan, Leon Eydelman, and Valerie Griffeth. *Advocate Lutheran General Hospital, Park Ridge, IL.*

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RESEARCH PRESENTERS

ROOM - 2

Moderators: Nisha Agasthya, MD, FAAP

Risk Assessment Profile Score and Time to Diagnosis of Venous Thromboembolism

Tarika Sivakumar and Amy Stewart.

Advocate Lutheran General Hospital, Park Ridge, IL.

An Anomalous Course of Central Venous Catheter

Nancy Guirguis, Evan Eilers, John Robins, and Padmaraj Duvvuri University of Illinois College of Medicine Peoria/OSF St. Francis Medical Center, Peoria, IL

Atherosclerotic Plaque affiliated with Carotid Web: A Rare Cause of Recurrent Stroke Leeda Bashardost and Brendan Eby.

Department of Neurology, Section of Neurocritical Care, Washington University, St. Louis, MO.

Stage 3 Acute Kidney Injury in the Setting of Obstructive Uropathy in a 5-Year-Old Male

Basel Ahmad, Zachary Palmisano, Alisa Corrado, Valerie Kalinowski, and Marylouise Wilkerson.

Rush University Medical Center, Chicago, IL.

Neurogenic pulmonary edema after Ventriculoperitoneal shunt malfunction requiring Extracorporeal Membrane Oxygenation

Amr Nabaah, Varsha Gharpure, Nadia Khan, Lauren Rissman.

Advocate Children's Hospital, Park Ridge, IL.

Multi-Focal Infarction in an Adolescent with Ulcerative Colitis: A Rare Stroke Complication

Jacob Hutton, So Hyeon Park, and Vinod Havalad.

Advocate Children's Hospital, Park Ridge, IL.

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RESEARCH PRESENTATIONS

ROOM - 3

Moderators: Padmaraj Duvvuri, MD; Varsha Gharpure, MD, FCCM

Desmoplakin Cardiomyopathy Mimicking Acute Fulminant Myocarditis in a Child Jacob Hutton, Kristen Nelson-McMillan, Diva Ramachandra, Waseem Cossor, David Gamboa, Saad Siddiqui, Stephen Neuberger, Stephen Pophal, Diana Mitchell, Varsha Gharpure, Deanna Behrens, Fasiha Saeed, Karen Caylor, Heather Kessler, Nadia Khan, Amanda Ellis-Pelletier, and Chawki El-Zein.

Advocate Children's Hospital, Park Ridge, IL

Life-threatening Thrombosis in Pediatric Patients - Role of Factor VIII and von Willebrand Factor

Kristen Nelson McMillan, Diane Ward, Cynthia Urbas, Sandra McIntyre, Nina Censoplano, Jason Canner, and Faeeq Yousaf.

Advocate Children's Hospital and Heart Institute University of Chicago, IL

Superior Mesenteric Artery Syndrome in a Child with Critical Illness Polyneuropathy Kristen Nelson McMillan, Darlene Huisenga, Lisa Doody, Molly Phillips, Erin Kim, Priya Chandra, Luca Vricella, Chawki El Zein, Naru Hibino, and Manish Raji. *Advocate Children's Hospital and Heart Institute University of Chicago, IL.*

Novel Endothelin Receptor Blockers in Pediatric Pulmonary Hypertension in Congenital Heart Disease

Kristen Nelson McMillan, MD, Hannah Jenkins, Hanna Persha, Diane Ward, Sandy McIntyre, Vanessa Harvey, Vincent Dorsey, and Faeeq Yousaf.

Advocate Children's Hospital and Heart Institute University of Chicago, IL.

Heart Failure in Young Infants due to Delayed Identification of Critical Coarctation

Kristen Nelson McMillan, Sarah Kane, Chelsea Kriesberg, Andrea Waas, Angela Hermann, Vincent Dorsey, Faeeq Yousaf, Megan Davis, Emily Pena, Luca Vricella, Chawki El Zein, Narutoshi Hibino, Stephen Pophal, and Joan Hoffman.

Advocate Children's Hospital and Heart Institute University of Chicago, IL.

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