



SCCM Midwest Chapter Presents

**4<sup>TH</sup> ANNUAL  
CRITICAL CARE CONFERENCE**

**September 9<sup>th</sup>, 2023**

**Advances in Critical Illness – Organ Rescue**

*Venue: Advocate Christ Medical Center, Oak Lawn, IL*

**Scan the QR code below to register**



**<https://www.sccmmwc.org>**

**Sept 9<sup>th</sup>, 2023**

SCCM Midwest Chapter Presents

## **4<sup>th</sup> Annual Critical Care Conference**

*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 31<sup>st</sup>, 2023, Noon**

**Contact Us: [sccmmwc@gmail.com](mailto: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.*

**Sept 9<sup>th</sup>, 2023**

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# **4<sup>th</sup> 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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# **4<sup>th</sup> 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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**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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## Accommodation

- Limited rooms are reserved at Hilton Hotel, 9333 South Cicero Avenue, Oak Lawn, IL.
- Please contact [sccmmwc@gmail.com](mailto:sccmmwc@gmail.com) for additional information.

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

**Join Midwest Chapter**

Network with a diverse, multidisciplinary group of critical care providers. As a member of the chapter, you'll have free access to quarterly educational webinars, discounted price for Midwest Chapter's annual conference, and a great opportunity for clinical, educational, and research collaboration.

**Membership**

If your current SCCM membership is not up for renewal: Midwest Chapter Membership to join the chapter. One year in order to synchronize with your SCCM membership number.

If your SCCM membership is up for renewal and you are choosing your SCCM membership level. If you are renewing Chapter.

If you are not currently an SCCM member but would like to join Chapter membership will be \$45.00, please note that your Annual membership fee is \$45 for practitioners of all countries.

**Midwest Chapter Membership**

The Society of Critical Care Medicine encourages collaboration among critical care practitioners in the same geographical area, and provides information, network with local peers, participate in their community, and address national issues on their common concerns. For more information about each chapter, please visit [www.sccm.org](https://www.sccm.org).

**Log in to ensure your price reflects membership level**

\$45.00  
\$45.00

**Join** → **Join Midwest chapter of SCCM** → **Details**

OR Visit [Store \(sccm.org\)](https://www.sccm.org) 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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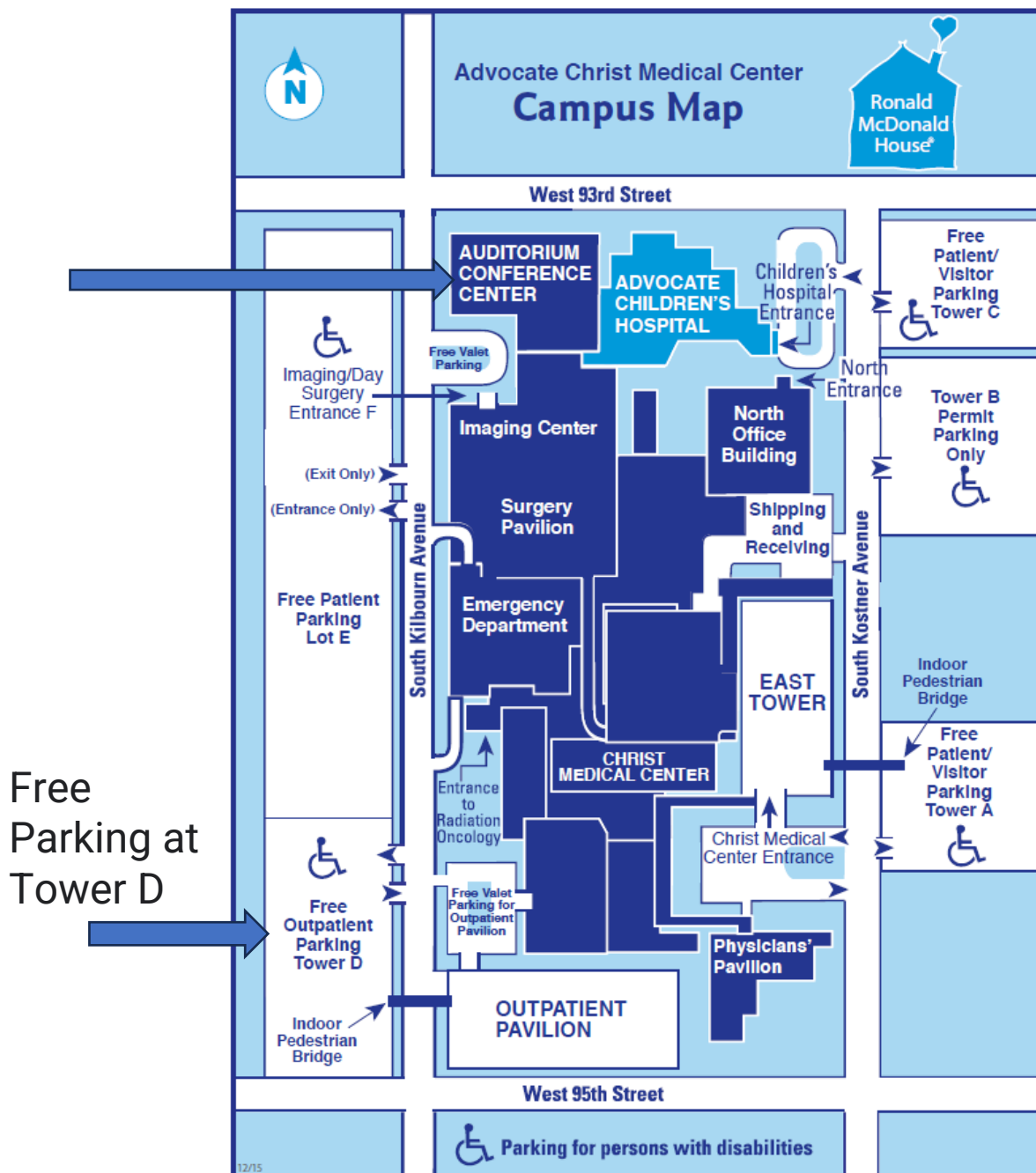
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## Venue:

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



Free  
Parking at  
Tower D

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## Session & Objectives



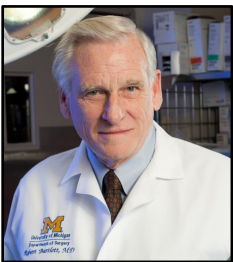
### Welcome, Introduction, Housekeeping Remarks



**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

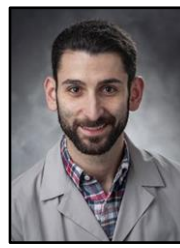
### Breakout Sessions (Select 1 out of 4)

#### 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

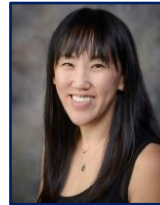


### Breakout Sessions (Select 1 out of 4)

#### 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

1. Review the epidemiology of aneurysmal subarachnoid hemorrhage
2. Discuss clinical presentation of, and how to evaluate for a suspected subarachnoid hemorrhage
3. 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

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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 Shoae, 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, Faeq Yousaf-faeq, 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 Faeq 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 Faeq 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, Faeq 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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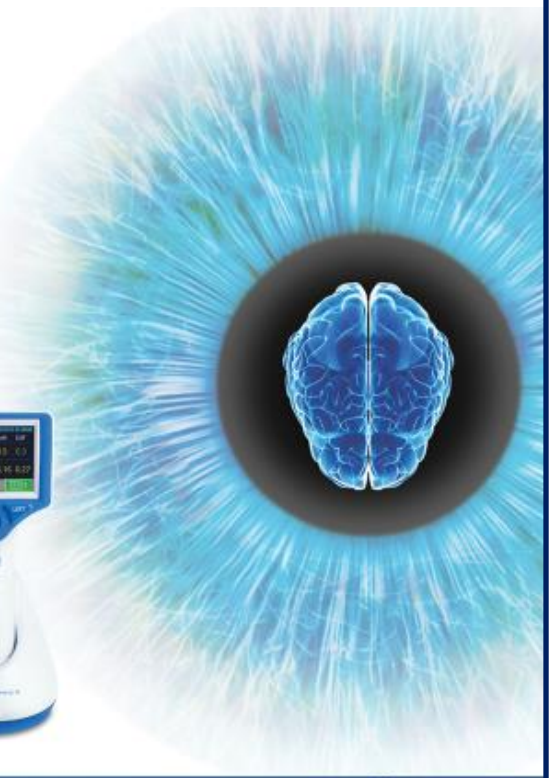
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