

# 4th Annual UPMC Children's Hospital of Pittsburgh's Da Silva Center for Ebstein's Anomaly Symposium

Saturday, February 10, 2024, from 9 a.m. to 1 p.m. Patient conference from 1 p.m. to 2 p.m.

Interactive Didactic Sessions and Cone Repair in Special Situations Case Forum

Presented Live from Rangos Auditorium and attended virtually via Zoom

Presented by UPMC Children's Hospital of Pittsburgh, the Heart Institute at UPMC Children's, the UPMC Center for Continuing Education in the Health Sciences, and the Congenital Heart Academy









# Welcome:

We are excited to host the 4<sup>th</sup> Annual Da Silva Center for Ebstein's Anomaly Symposium at UPMC Children's Hospital of Pittsburgh.

This year, we celebrate the 31<sup>st</sup> anniversary of the world's first successful cone procedure, performed by our own Dr. José Da Silva. To commemorate this milestone, we are hosting Dr. Christopher Knott-Craig to share his expertise on neonatal surgical management of Ebstein's Anomaly and Dr. Norman Silverman who will be sharing his expertise on Ebstein's anomaly imaging.

Many individuals were instrumental in bringing this course to fruition. First, we would like to thank all the faculty who are giving presentations during the course. We are particularly appreciative of our visiting professors, Professor Norman Silverman, MD, DSc (Med.), FACC, FAHA, FASE, and Dr. Christopher Knott-Craig, MD, for their contributions as guest faculty. Katie Scollon and Drew Berkhoudt have been a tremendous help organizing this event and we are thankful for their support. We are also appreciative of James Ferris from Massive Media for his skill and dedication to this virtual symposium.

This educational event is generously sponsored by the Heart Institute at UPMC Children's Hospital, and we are honored to have the Congenital Heart Academy's support.

Thank you for your participation in this meeting and we look forward to seeing you at our next annual Da Silva Center for Ebstein's Anomaly Symposium!





# Introduction:

Ebstein's malformation is a rare congenital heart disease, and few institutions have significant experience regarding the number of patients. The clinical presentation of Ebstein anomaly is variable, as well as the timing for surgical intervention. Many patients have the surgical repair of Ebstein's anomaly postponed due to fear of having a tricuspid valve replaced by a prosthesis instead of repaired, which would imply many reinterventions in life. Introduced in 1993 by Dr. Da Silva, the Cone procedure became the standard surgical repair for this disease, being applicable for almost all situations with rare need for tricuspid valve replacement. However, only a few surgeons are familiar with this operation, considering the variability of anatomical presentations of this congenital heart disease. The improved approach done by the UPMC team to treat newborns with Ebstein's anomaly with new surgical concepts, and the capability to do valve repair in complex situations need to be divulged. All professionals involved in the treatment of this heart condition need to understand the key points in the complementary tests and in the perioperative care that are crucial for treatment success and better long-term outcomes.

Ebstein's anomaly is a rare congenital heart defect affecting the tricuspid valve, right ventricle, and right atrium. The Cone procedure that was developed is very specific to this patient population and is offered in only a few centers around the world. There have been advances in technique for management of this heart defect, and it is important for all pediatric cardiologists to understand the options that exist to best care for their patients and increase their chance of survival with the best possible outcomes. The UPMC Children's Hospital of Pittsburgh specializes in this specific area and would like to share this knowledge with as many physicians as possible.

José Pedro Da Silva, Luciana Da Fonseca Da Silva, Jacqueline Kreutzer and Victor Morell

# **Learning Objectives:**

- Education about Ebstein's Anomaly regarding anatomy, complementary diagnostic tests, and contemporary indications for surgical treatment.
- Demonstration of surgical steps of the Cone procedure, especially the repair in special situations.
- Education about neonatal management in very sick newborns with contemporary resources and procedures available.

This event can improve the knowledge about this congenital heart disease, including its clinical and surgical management. The main points in clinical evaluation and surgical repair will be addressed.

# **Target Audience:**

This symposium is designed for Pediatric and Adult Cardiologists, Pediatric and Adult Cardiac Surgeons, Physician Assistants, Nurse Practitioners, Nurses, and other professionals interested in Ebstein's Anomaly.





# **Continuing Medical Education:**

In support of improving patient care, the University of Pittsburgh is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

# Physician (CME)

The University of Pittsburgh designates this live activity for a maximum of 4.0 AMA PRA Category 1 Credits $^{\text{TM}}$ . Physicians should claim only the credit commensurate with the extent of their participation in the activity.

# Nursing (CNE)

The maximum number of hours awarded for this Continuing Nursing Education activity is 4.0 contact hours.

# Physician Assistant (AAPA)

The University of Pittsburgh has been authorized by the American Academy of PAs (AAPA) to award AAPA Category 1 CME credit for activities planned in accordance with AAPA CME Criteria. This activity is designated for 4.0 AAPA Category 1 CME credits. PAs should only claim credit commensurate with the extent of their participation.

Other health care professionals will receive a certificate of attendance confirming the number of contact hours commensurate with the extent of participation in this activity.





# **Program Agenda**

9 a.m. **Welcome and Introduction** 

Jacqueline Kreutzer, MD

Session I: Morphology of Ebstein's Anomaly: Imaging Review

Moderator: Jacqueline Kreutzer, MD

9:05 a.m. **Fetal Echocardiogram** 

Jacqueline Weinberg, MD

9:20 a.m. **Echocardiogram Insights on Ebstein's Anomaly** 

Norman Silverman, MD

9:45 a.m. **Cross-Sectional Imaging in Ebstein's Anomaly** 

Tarek Alsaied, MD

10 a.m. **Heart Catheterization** 

Sara Trucco, MD

10:15 a.m. **Panel Discussion** 

> Jacqueline Weinberg, MD José Pedro Da Silva, MD Norman Silverman, MD Sara Trucco, MD Tarek Alsaied, MD

**Session II: Staged Treatment of Ebstein's Anomaly** 

Moderator: Laura Olivieri, MD

10:40 a.m. **Critical Care Management of Neonatal Ebstein's Anomaly** 

Joan Sanchez De Toledo, MD

10:55 a.m. **Neonatal Surgical Management of Ebstein's Anomaly** 

Christopher Knott-Craig, MD

11:10 a.m. Imaging in Interstage Treatment of Ebstein's Anomaly

Adam Christopher, MD

11:25 a.m. **Cone after Starnes** 

Luciana Da Fonseca Da Silva, MD

11:40 a.m. **Panel Discussion** 

> Adam Christopher, MD Christopher Knott-Craig, MD Joan Sanchez De Toledo, MD

José Pedro Da Silva, MD

Luciana Da Fonseca Da Silva, MD



Session III: Cone Repair in Special Situations

Moderator: Tarek Alsaied, MD

12:05 p.m. Cone Repair in Special Situations

José Da Silva, MD

12:20 p.m. Panel Discussion

Bryan Goldstein, MD

Christopher Knott-Craig, MD José Pedro da Silva, MD Mario Castro Medina, MD Norman Silverman, MD

12:40 p.m. Patient Video

Session IV: Outcomes Review

12:45 p.m. Results from Our Center of the Cone Procedure for Ebstein's Anomaly

Jacqueline Kreutzer, MD

12:55 p.m. Final Remarks

Jacqueline Kreutzer, MD

1 p.m. Adjournment

1 to 2 p.m. Patient/Parent Conference (No CME credit awarded)

Log into Breakout Session Link





# **Course Directors:**

#### José Pedro Da Silva, MD

Professor of Cardiothoracic Surgery Surgical Director, Center for Valve Therapy Founding Director, Da Silva Center for Ebstein's Anomaly

Heart Institute at UPMC Children's Hospital of Pittsburgh

# Luciana Da Fonseca Da Silva, MD

Assistant Professor of Cardiothoracic Surgery Heart Institute at UPMC Children's Hospital of Pittsburgh

# Jacqueline Kreutzer, MD, FACC, FSCAI

Professor of Pediatrics
Peter and Ada Rossin Endowed Chair in
Pediatric Cardiology
Division Chief, Pediatric Cardiology
Co-Director, Heart Institute at UPMC Children's
Hospital of Pittsburgh

# Victor O. Morell, MD

Eugene S. Wiener Endowed Professor and Chair of Pediatric Cardiothoracic Surgery VP and Chief Strategy Officer, UPMC Heart and Vascular Institute Co-Director, Heart Institute at UPMC Children's Hospital of Pittsburgh

# **Invited Faculty:**

## **Christopher Knott-Craig, MD**

Professor of Surgery
Chief, Pediatric Cardiovascular Surgery
Susan and Alan Graf Endowed Chair of Excellence in
Pediatric Cardiac Surgery
Executive Co-Director of the Heart Institute
University of Tennessee Health Sciences Center and
Le Bonheur Children's Hospital

# Norman H. Silverman, MD, DSc (Med.), FACC, FAHA, FASE

Professor of Pediatrics Honorary Faculty Emeritus, Pediatrics Stanford University Medical Center

# **University of Pittsburgh Faculty:**

# Tarek Alsaied, MD, FACC, MSc

Assistant Professor of Pediatrics Heart Institute at UPMC Children's Hospital of Pittsburgh

# Mario Castro Medina, MD

Assistant Professor of Cardiothoracic Surgery Heart Institute at UPMC Children's Hospital of Pittsburgh

#### Adam Christopher, MD

Assistant Professor of Pediatrics Director, Cardiac MRI and CT Programs Heart Institute at UPMC Children's Hospital of Pittsburgh

## **Erin Colvin, CRNP**

Supervisor, APP HVI Heart Institute at UPMC Children's Hospital of Pittsburgh





# Bryan H. Goldstein, MD

Professor of Pediatrics Director, Cardiac Catheterization Laboratory Heart Institute at UPMC Children's Hospital of Pittsburgh

## Laura Olivieri, MD, FAHA, FSCMR

Associate Professor of Pediatrics Director, Noninvasive Cardiac Imaging Heart Institute at UPMC Children's Hospital of Pittsburgh

# Joan Sanchez de Toledo, MD, PhD

Assistant Professor of Pediatrics and Critical Care Medicine
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# Sara M. Trucco, MD, FSCAI, FACC, FPICS

Associate Professor of Pediatrics
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Heart Institute at UPMC Children's Hospital of
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#### Jacqueline Weinberg, MD

Assistant Professor of Pediatrics Interim Director, Perinatal Cardiology Heart Institute at UPMC Children's Hospital of Pittsburgh

# **Course Coordinators:**

# Katie Scollon, MPAS, PA-C

Director, Pediatric Heart and Vascular Services Heart Institute at UPMC Children's Hospital of Pittsburgh UPMC Heart and Vascular Institute

# Drew Berkhoudt, MBA

Project Specialist Heart Institute at UPMC Children's Hospital of Pittsburgh





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**Bryan H. Goldstein, MD:** Grant/Research Support: Medtronic Consultant: Medtronic, W.L. Gore & Associates, PECA Labs, Mezzion Pharma

Jacqueline Kreutzer, MD, FACC, FSCAI: Grant/Research Support: Medtronic; Edwards Lifesciences Consultant: Medtronic

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