DA SILVA CENTER for Ebstein's Anomaly UPDATE

Fall 2025

Welcome to the inaugural issue of the *Da Silva Center for Ebstein's Anomaly Update*. This biannual update provides program news and education from the Da Silva Center team at UPMC Children's Hospital of Pittsburgh. In this first edition, we will share:

- · A program overview
- An introduction to our team of experts
- A recap of the 2025 Da Silva Center for Ebstein's Anomaly Symposium
- New research from Dr. Luciana da Fonseca da Silva
- · Our clinical outcomes
- One patient's journey with the Da Silva Center

About the Da Silva Center for Ebstein's Anomaly



The Da Silva Center for Ebstein's Anomaly, part of the Heart Institute at UPMC Children's Hospital of Pittsburgh, is a global leader in the treatment and study of Ebstein's anomaly — a rare and complex congenital heart defect.

José Pedro da Silva, MD, creator of the groundbreaking Cone procedure, founded the Da Silva Center for Ebstein's Anomaly at UPMC Children's in 2016. Since then, it has served as a hub for patients seeking expert care for this rare congenital heart defect. In Jan. 2025, Luciana da Fonseca da Silva, MD, was named as the program director and will continue to build upon Dr. da Silva's outstanding legacy. Together, Drs. da Silva and da Fonseca da Silva pioneer new frontiers in Ebstein's anomaly



care, improving outcomes and advancing treatment options for patients across their lifespan.

Over the last three decades, Dr. da Silva's Cone procedure has become the gold standard for surgical repair of Ebstein's anomaly. By reconstructing the tricuspid valve using the patient's own tissue, the procedure creates a durable, functional valve that can grow with the patient. This innovation has paved the way for continued breakthroughs at the Center.

- Since 2019, the Cone repair provides a new option of rehabilitation of the right ventricle in patients submitted to the Starnes procedure in the neonatal period
- Application of the **Cone technique after Fontan palliation**
- Performing Cone repair after tricuspid valve replacement

These efforts reflect the Center's mission: to innovate, educate, and restore heart function in even the most complex cases, particularly those involving right ventricular dysfunction, which often accompanies Ebstein's anomaly.

Our team also integrates molecular biology research to better understand and eventually target the mechanisms driving right ventricular failure, setting the stage for the next generation of treatments.

All patients who have undergone the Starnes procedure are encouraged to undergo right ventricular function evaluation at the Da Silva Center. In many cases, we are able to rehabilitate the right ventricle and restore two-ventricle physiology, even after single-ventricle palliation with the Glenn or Fontan, opening entirely new pathways for patient care.

What We Offer

We provide personalized, multidisciplinary care for patients of all ages with Ebstein's anomaly. At UPMC Children's Hospital of Pittsburgh, we have performed the Cone repair on patients from infancy to 62 years of age. Our team of experts provides:

- Comprehensive diagnostic imaging: echocardiogram, EKG, cardiac MRI, electrophysiology studies, and catheterization
- Electrophysiology and interventional cardiology: ablation for arrhythmias and catheter-based therapies
- Surgical care: including Cone repair and complex re-operations



Meet Our Team

The Da Silva Center unites specialists from cardiothoracic surgery, cardiology, imaging, electrophysiology, and adult congenital heart disease to deliver exceptional care.



José Pedro da Silva, MD

Professor of Cardiothoracic Surgery
Founding Director, Da Silva Center for
Ebstein's Anomaly
Heart Institute at UPMC Children's
Hospital of Pittsburgh



Luciana da Fonseca da Silva, MDAssociate Professor of Cardiothoracic Surgery
Director, Da Silva Center for Ebstein's Anomaly



Victor Morell, MD

Eugene S. Wiener Endowed Professor of
Pediatric Cardiothoracic Surgery

Chair, Department of Cardiothoracic Surgery

Co-Director, Heart Institute at UPMC Children's
Hospital of Pittsburgh

VP and Chief Strategy Officer, UPMC Heart and
Vascular Institute



Jacqueline Kreutzer, MD, FACC, FSCAI, FPICS
Peter and Ada Rossin Endowed Professor and
Chair of Pediatric Cardiology
Division Chief, Pediatric Cardiology
Co-Director, Heart Institute at UPMC Children's
Hospital of Pittsburgh

Laura Olivieri, MD

Director, Noninvasive Cardiac Imaging Professor of Pediatrics

Adam Christopher, MD

Director, Cardiac MRI and CT Programs Assistant Professor of Pediatrics

Arvind Hoskoppal, MD

Director, UPMC Adult Congenital Heart Disease Program Co-Director, UPMC Center for Aortic Disease Associate Professor of Pediatrics and Internal Medicine

Jacqueline Weinberg, MD

Director, Fetal and Perinatal Cardiology Program Assistant Professor of Pediatrics

Gaurav Arora, MD

Associate Director of Electrophysiology Associate Vice-Chair for Clinical Affairs, Pediatrics Associate Professor, Division of Pediatric Cardiology

Erin Colvin, CRNP

Supervisor, APP HVI UPMC Children's Hospital of Pittsburgh

Wendy Koulouris, RN, BSN

OP Nurse Coordinator, Cardiac Surgery Second Opinion/Referral Team UPMC Children's Hospital of Pittsburgh

Administrative Support Erin Dupree Denise Cochenour

Research Spotlight

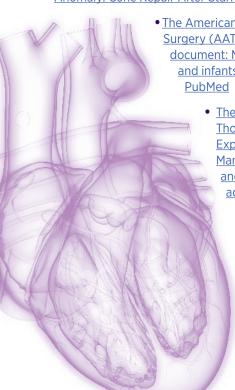
Dr. da Fonseca da Silva continues to lead groundbreaking research about innovative surgical techniques, including:

- Cone repair after Starnes procedure
 - The Da Silva cone operation after the Starnes procedure for Ebstein's anomlay: new surgical strategy and initial results
 PubMed
 - The cone repair allows right ventricle rehabilitation with excellent tricuspid valve function following the Starnes procedure - PubMed
- Cone repair following tricuspid valve replacement
 - > Cone repair after tricuspid valve replacement in Ebstein anomaly PubMed
- Surgical repair of Ebstein's anomaly with anterior leaflet displacement
 - Ebstein anomaly variant with anterior leaflet displacement
 PubMed

Recent publications include original research in *The Journal of Thoracic and Cardiovascular Surgery and JTCVS Techniques*.

For families or medical professionals looking for guidance on Ebstein's anomaly management, view these newly published articles:

 Staged Treatment for Critically III Neonates With Ebstein Anomaly: Cone Repair After Starnes Procedure - PubMed



 The American Association for Thoracic Surgery (AATS) 2024 expert consensus document: Management of neonates and infants with Ebstein anomaly -

> The American Association for Thoracic Surgery (AATS) 2025 Expert Consensus Document: Management of Ebstein anomaly in children and adults - PubMed

Our Outcomes

The Da Silva Center for Ebstein's Anomaly delivers world-class surgical outcomes built on decades of innovation and experience. Our team continues to redefine what's possible in the treatment of this complex congenital heart condition.

Dr. da Silva and Dr. da Fonseca da Silva have performed more than 400 Cone procedures, with 155 Cone cases at UPMC Children's.

The following post-op data is based on the UPMC Children's Hospital of Pittsburgh Cone Experience:

- Patients' ages range from infancy to 62 years old
- Post-op LOS: median 6 days
- 80.6% of patients had mild to no Tricuspid valve insufficiency on the pre-discharge TTE
- Percentage requiring follow-up valvular reoperation:
 3.2% (5 patients)
- Percentage requiring TV replacement: 1.2% (2 patients)
- Heart block requiring pacemaker: 2.6% (4 patients)
- Cone repairs following Starnes procedure: 20

Innovations and Updates

Pioneering Cone Repair After Starnes Procedure

Our team's publication in *The Journal of Thoracic and Cardiovascular Surgery* highlights the feasibility of converting single-ventricle circulation to biventricular function through Cone repair.

Read More

Case Study: Anterior Leaflet Displacement Variant

A rare surgical case published in *JTCVS Techniques* details management of extreme anterior leaflet displacement in Ebstein's anomaly.

Read More

Cone Repair After Mechanical Valve Replacement

Published research outlines technical considerations and outcomes for patients undergoing Cone repair after previous mechanical valve replacement.

Read More



Symposium Highlights: April 2025

The fifth annual Da Silva Center for Ebstein's Anomaly Symposium, held in April 2025, welcomed more than 360 participants from 62 countries and six continents. The event featured in-depth discussions on:

- · Advances in imaging and diagnostics
- Cone repair following the Starnes procedure

View presentations from this year's symposium

- Management of arrhythmias
- Complex surgical cases and outcomes

One Patient's Journey with the Da Silva Center



After learning that their baby was diagnosed with Ebstein's anomaly, expecting parents Tressa and Chase were filled with uncertainty and questions about their son Matthias' future. After a few months of seeking out the best treatment for Matthias, they finally felt relief when they spoke with Dr. José da Silva and learned about the care offered at the Da Silva Center for Ebstein's Anomaly. Tressa and Chase quickly traveled from Florida to Pittsburgh and were immediately met with support from the team at UPMC Children's and the Da Silva Center. Nearly four months after he was born, Matthias went into surgery for his cone repair.

Learn more about Matthias' treatment journey

Contact Us

At the Da Silva Center for Ebstein's Anomaly, collaboration with referring providers is key to our mission of providing comprehensive care to children and adults with Ebstein's anomaly. When you refer a patient to UPMC, we will work with you to create a plan specific to your patient's needs and maintain open communication throughout each stage of your patient's journey.



To refer a patient, or discuss a case with our team, call 412-692-5218 or email dasilvacenter@upmc.edu.