



15th Annual Master Class in Congenital Cardiac Morphology

Univentricular Heart

Diagnostic and Clinical Management Implications for the Infant with Univentricular Heart

Saturday, Oct. 21, 2023, from 9:00 a.m. to 2:00 p.m.

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



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HOSPITAL OF PITTSBURGH



Welcome:

We are excited to host the 15th Annual Master Class in Congenital Cardiac Morphology at UPMC Children's Hospital of Pittsburgh.

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, especially Professor Robert Anderson and Diane Spicer, BS, for their precious contributions as guest faculty. We would also like to express our gratitude to the UPMC Children's Department of Pathology for their collaboration making the unique heart specimens from the Frank E. Sherman and Cora C. Lenox Heart Museum available for the course. In addition, we are most grateful to Mr. Bill Devine, ex curator of the Heart Museum, for his expertise and dedication to the Heart Institute's educational mission. 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 Master Class.

This educational event is generously sponsored by the Heart Institute at UPMC Children's.

Thank you for your participation in this meeting and we look forward to seeing you at our next annual Mater Class!

Introduction:

This year's Master Class will focus on Univentricular Heart. A true understanding of the morphologic components of this anatomy is essential to correct interpretation of diagnostic testing, and ultimately high-quality treatment to assure optimal outcomes. In this single day comprehensive course, we will focus on the morphological aspects that dictate therapeutic approaches, non-invasive imaging and management of these patients. Thus, we will commence with a discussion of development, provided by Professor Anderson on the basis of his ongoing research into the developing human and murine heart, continue with a didactic pathology presentation by Diane Spicer, followed by a video demonstration of

autopsy specimens from the Frank E. Sherman and Cora C. Lenox Heart Museum by Bill Devine (retired curator for the museum). Approaches to interventional therapies, including transcatheter palliative versus surgical interventions will be discussed. Our expectations are that this be an interactive class, with discussion and audience participation in the Q&A section.

We are grateful to the many individuals that brought this course to fruition, to the Congenital Heart Academy for supporting its worldwide transmission, and to all the participating faculty and attendees.

Robert H. Anderson, Jackie Kreutzer, and Victor Morell.

Learning Objectives:

- Review of the morphology of Univentricular Heart
- Review of Diagnostic Modalities
- Explore interventional treatment options
- Increase awareness of observed clinical outcomes across global Centers of Excellence
- Understanding the value of subspecialty expertise for this patient population

Target Audience:

This master class is designed for Pediatric and Adult Cardiologists, Pediatric and Adult Cardiac Surgeons, Physician Assistants, Nurse Practitioners, Nurses, Sonographers, Pathologists, Pathology Assistants, Cardiac Morphologists, Perfusionists, and other professionals interested in congenital heart disease.

15th Annual Master Class in Congenital Cardiac Morphology

Univentricular Heart

Saturday, Oct. 21, 2023
Live from Rangos Auditorium
Participants via Zoom

9 a.m.

WELCOME

*Professor Robert H. Anderson, MD, FRCPath
Jacqueline Kreutzer, MD, FACC, FSCAI
Victor O. Morell, MD*

Section I

Univentricular Heart Morphology

9:10 a.m.

Embryology and Developmental Anatomy

Professor Robert H. Anderson, MD, FRCPath

9:40 a.m.

Didactic Pathology Presentation

Diane Spicer, BS, PA (ASCP)

10:00 a.m.

Video Demonstration

William Devine, BS

10:20 a.m.

Q&A Panel

Moderator: Dr. Jacqueline Kreutzer

Section II

Univentricular Heart Pre-Stage I Diagnosis and Imaging

10:30 a.m.

Fetal Diagnosis

Jacqueline Weinberg, MD

10:45 a.m.

Echocardiography

Lizabeth Lanford, MD

11:00 a.m.

MRI/CT- Strategic Advanced Imaging

Laura Olivieri, MD

11:15 a.m.

Q&A Panel

Moderator: Dr. Tarek Alsaied

Section III

Univentricular Heart Stage I and II Care and Treatment

11:25 a.m.

Pre and Postoperative Stage I Palliation ICU Management

Joan Sanchez De Toledo

11:40 a.m.

Role of Interventional Cardiology in Pre and Post Stage I Palliation

Jacqueline Kreutzer MD

- 11:55 a.m.** **Surgical Management in the Early Stages**
Mario Castro-Medina, MD
- 12:10 p.m.** **Q&A Panel**
Moderator: Dr. Tarek Alsaied
- 12:20p.m.** **Lunch**
- 12:35 p.m.** **Mechanical Support in Early Stages of Univentricular Heart Palliation**
Melita Viegas, MD
- 12:50 pm** **Anesthesia Considerations**
Jacob Bray, MD
- 1:05 p.m.** **Interstage Care and Pre-Glenn Management**
Evonne Morell, MD
- 1:15 pm** **Neurodevelopmental implications in the Early Stages of Univentricular Heart Palliation**
Lauren Lorenzi, PhD
- 1:30 p.m.** **Q&A Panel**
Moderator: Dr. Jacqueline Kreutzer
- 1:40 p.m.** **Univentricular Heart Early Management: Discussion Panel**
Moderator: Tarek Alsaied, MD,
Panelists: Evonne Morell, DO, Libby Lanford, MD, Erin Colvin, CRNP,
Mario Castro-Medina MD, Jackie Kreutzer, MD, Lauren Lorenzi, PhD
- 2:00 p.m.** **Adjournment**

Course Directors:

Professor Robert H. Anderson, MD, FRCPath
Visiting Professor, Institute of Genetic Medicine
Newcastle University
Newcastle-upon-Tyne, United Kingdom

Jacqueline Kreutzer, MD, FACC, FSCAI
Professor of Pediatrics
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Division Chief, Pediatric Cardiology
Co-Director, Heart Institute at UPMC Children's
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Victor O. Morell, MD
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Chairman, Dept of Cardiothoracic Surgery
VP & Strategy Officer, UPMC Heart and Vascular
Institute

Faculty:

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Retired Curator of the Frank E. Sherman and
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Associate Professor of Pediatrics
UPMC Children's Hospital of Pittsburgh

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University of Pittsburgh, School of Medicine
Pediatric Cardiac Critical Care Medicine
UPMC Children's Hospital of Pittsburgh

Diane Spicer, BS, PA (ASCP)

Curator of the Lodewyk Van Mierop Archive
University of Florida
Gainesville, Florida

Melita Viegas, MD

Assistant Professor of Cardiothoracic Surgery
Pediatric Cardiothoracic Surgeon
UPMC Children's Hospital of Pittsburgh

Jacqueline Weinberg, MD

Assistant Professor of Pediatrics, University
of Pittsburgh School of Medicine
Interim Director, Perinatal Cardiology

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Heart Institute at UPMC Children's Hospital of
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UPMC Heart and Vascular Institute

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Project Specialist
Heart Institute at UPMC Children's Hospital of
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CONTINUING MEDICAL EDUCATION CREDIT

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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.

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Jacqueline Kreutzer, MD, FACC, FSCAI

Grant/Research Support: Medtronic; Edwards Lifesciences

Laura Olivieri, MD, FAHA, FSCMR

Grant/Research Support: R01, R01HL143468-0, NHLBI

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