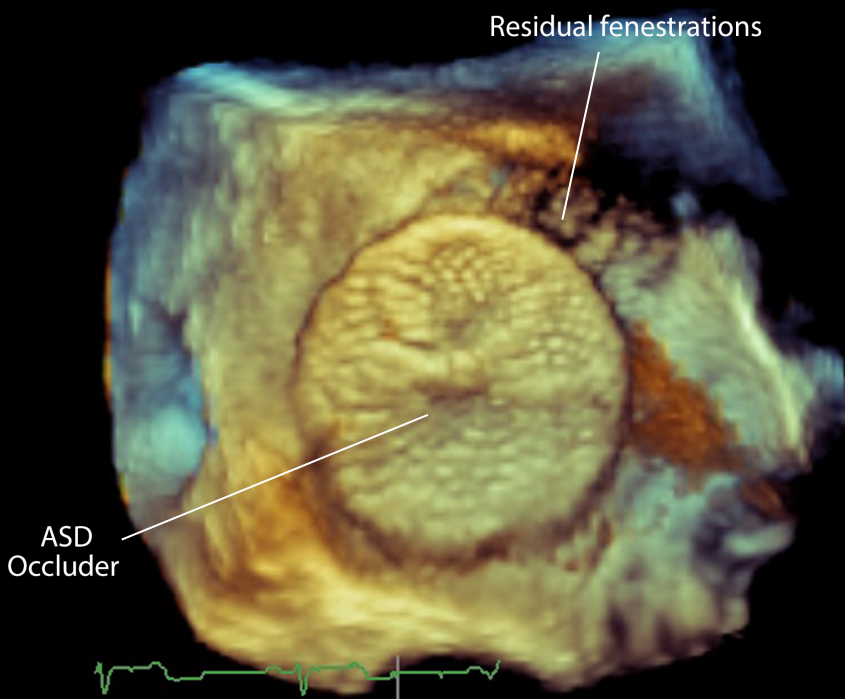


# Echocardiography of Congenital Heart Disease

Sunday, April 15 –  
Tuesday, April 17, 2018

Ruth and Tristram Colket, Jr.  
Translational Research Building

Learn more: [chop.cloud-cme.com](http://chop.cloud-cme.com)



## Overview

This course will discuss the morphology and echocardiographic imaging of the majority of congenital heart defects and the major postoperative findings for these lesions. It will also include assessment of ventricular performance in the pediatric patient population and provide case studies for review.

## General Information

The conference will be held in the Ruth and Tristram Colket, Jr. Translational Research Building at Children's Hospital of Philadelphia. The registration fee is \$450 for physicians and \$350 for fellows, sonographers and other healthcare professionals. The fee includes continental breakfast, breaks, lunch, parking and syllabus material.

## Course Objectives

1. Enhance knowledge of the spectrum of congenital heart defects based on morphology and pathology
2. Apply particular echocardiographic views and sweeps to diagnose congenital heart disease before and after surgical intervention
3. Enhance ability to assess ventricular performance in patients with congenital heart disease

## ACCME Accreditation Statement

Children's Hospital of Philadelphia is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing education for physicians.

## AMA Credit Designation Statement

Children's Hospital of Philadelphia designates this live activity for a maximum of 20.0 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

## Hotel Accommodations

A block of rooms has been reserved at reduced rates at The Sheraton University City, located just a few blocks from Children's Hospital. The group overnight rate is \$172 single and double occupancy plus a 15.2 percent room tax. Participants are required to make their own hotel reservations by calling the Inn directly at 215-387-8300. Please mention the name of the conference when making your reservation. The special room rate will be available until Wednesday, March 14, 2018. After that date, reservations will be accepted on a space and rate availability basis.

## Cancellation and Refund Policy

Children's Hospital of Philadelphia reserves the right to cancel or postpone any course due to any unforeseen circumstances. In the event of cancellation or postponement, Children's Hospital of Philadelphia will refund any registration fees, less a \$40 service charge, but is not responsible for any related costs, charges or expenses to participants, including cancellation charges assessed by airlines or travel agencies. In order to process refunds for course withdrawals, cancellation must be received in writing by Sunday, April 1, 2018. No refunds will be issued thereafter.

## Services for People with Disabilities

If special arrangements are required for an individual with a disability to attend this meeting, please contact the Continuing Medical Education Department at 215-590-5263.

## PROGRAM • Sunday, April 15, 2018

8 a.m. Introduction to the Course  
*Meryl S. Cohen, MD*

### Session 1: The Normal Pediatric Echocardiogram

8:10 a.m. Segmental Approach and Anatomy of the Normal Heart  
*Paul Weinberg, MD*

8:35 a.m. Preparing a Child for a Pediatric Echocardiogram and Sedation Strategies  
*Christine Pascua, RDMS, FASE*

8:55 a.m. Echo Assessment of Segmental Anatomy  
*Michael Quartermain, MD*

9:15 a.m. The Do's and Don't's of Pediatric Echocardiography  
*Melissa Wasserman, RDMS, FASE*

9:30 a.m. Break

### Session 2: Intracardiac Shunts

10 a.m. The Anatomy and Morphology of the Atria and Atrial Septum  
*Andrew Cook, PhD*

10:20 a.m. Imaging Assessment of Atrial Septal Defects and Other Atrial Communications  
*Jan Marek, MD, PhD, FESC*

10:40 a.m. Imaging Assessment During and After Device Closure of Atrial Communications  
*Laura Mercer-Rosa, MD, MSCE*

11 a.m. The Anatomy and Morphology of the Ventricular Septum and Ventricular Septal Defects  
*Paul Weinberg, MD*

11:20 a.m. Imaging Assessment of Ventricular Septal Defects  
*Leo Lopez, MD*

11:40 a.m. The Anatomy and Morphology of Atrioventricular Canal/Septal Defects  
*Andrew Cook, PhD*

Noon Imaging Assessment of Atrioventricular Canal/Septal Defects  
*Meryl Cohen, MD*

12:30 p.m. Lunch

*continued >*

### Session 3: Systemic Veins, Pulmonary Veins, Aortic Valve and Aortic Arch

- 1:30 p.m. Anatomy and Morphology of Systemic and Pulmonary Venous Anomalies  
*Andrew Cook, PhD*
- 1:55 p.m. Imaging Assessment of Systemic and Pulmonary Venous Anomalies  
*Leo Lopez, MD*
- 2:20 p.m. Anatomy and Morphology of the Aortic Valve  
*Paul Weinberg, MD*
- 2:35 p.m. Imaging Assessment of the Aortic Valve  
*Dave Goldberg, MD*
- 2:50 p.m. Anatomy and Morphology of the Aortic Arch and Vascular Rings  
*Paul Weinberg, MD*
- 3:10 p.m. Imaging Assessment of the Aortic Arch and Vascular Rings  
*Shobha Natarajan, MD*
- 3:30 p.m. Break

### Session 4: Tetralogy of Fallot

- 3:50 p.m. Anatomy and Morphology of Tetralogy of Fallot and Its Variants  
*Paul Weinberg, MD*
- 4:10 p.m. Preoperative Imaging Assessment of Tetralogy of Fallot  
*Michael Quartermain, MD*
- 4:30 p.m. Postoperative Imaging Assessment of Tetralogy of Fallot  
*Laura Mercer-Rosa, MD, MSCE*
- 4:50 p.m. Interesting Cases of the Day  
*Faculty*
- 5:15 p.m. **Special Lecture** — Fetal Echocardiography: Where Is the Field Going?  
*Jack Rychik, MD*
- 5:40 p.m. Adjourn

## PROGRAM • Monday, April 16, 2018

### Session 5: Transposition of the Great Arteries

- 8 a.m. Anatomy and Morphology of Transposition of the Great Arteries and the Atrial and Arterial Switch  
*Paul Weinberg, MD*
- 8:30 a.m. Preoperative Imaging Assessment of Transposition of the Great Arteries  
*Meryl S. Cohen, MD*
- 8:50 a.m. Imaging Assessment after the Arterial Switch Operation  
*Luc Mertens, MD, PhD*
- 9:10 a.m. Imaging Assessment after the Atrial Switch Operation  
*Folkert Meijboom, MD, FESC*
- 9:30 a.m. Break

### Session 6: Double Outlet Right Ventricle and Truncus Arteriosus

- 10 a.m. Anatomy and Morphology of Double Outlet Ventricle  
*Andrew Cook, PhD*
- 10:20 a.m. Imaging Assessment of Double Outlet Ventricle  
*Leo Lopez, MD*
- 10:45 a.m. Anatomy and Morphology of Truncus Arteriosus and AP Window  
*Paul Weinberg, MD*
- 11:05 a.m. Preoperative and Postoperative Imaging Assessment of Truncus Arteriosus and AP Window  
*Jan Marek, MD, PhD, FESC*

### Session 7: Congenitally Corrected Transposition

- 11:30 a.m. Anatomy and Morphology of Congenitally Corrected Transposition  
*Andrew Cook, PhD*
- 11:50 a.m. Imaging Assessment of Congenitally Corrected Transposition  
*David Goldberg, MD*
- 12:15 p.m. Lunch

*continued >*

## Session 8: Functionally Univentricular Hearts

- 1:15 p.m.     **Anatomy and Variation of the Functionally Single Ventricle Heart**  
*Andrew Cook, PhD*
- 1:40 p.m.     **Preoperative Imaging Assessment of the Single Ventricle Heart**  
*Michael Quartermain, MD*
- 2 p.m.         **Imaging Assessment after First Stage Palliation for Single Ventricle**  
*Shobha Natarajan, MD*
- 2:20 p.m.     **Imaging Assessment after Glenn and Fontan Procedures**  
*Luc Mertens, MD, PhD*
- 2:45 p.m.     **Break**
- 3:10 p.m.     **Interesting Cases of the Day**  
*Faculty*
- 4 p.m.         **Special Lecture: Imaging of the Lymphatic System in  
Congenital Heart Disease**  
*Yoav Dori, MD, PhD*
- 4:30 p.m.     **Adjourn**

## PROGRAM • Tuesday, April 17, 2017

### Session 9: Coronary Artery Anomalies and Heterotaxy Syndrome

- 8 a.m.            **Anatomy and Morphology of Coronary Artery Anomalies**  
*Paul Weinberg, MD*
- 8:20 a.m.        **Imaging Assessment of Anomalous Coronary Arteries**  
*Leo Lopez, MD*
- 8:45 a.m.        **Anatomy and Morphology of Heterotaxy Syndrome/Isomerism**  
*Paul Weinberg, MD*
- 9:10 a.m.        **Imaging Assessment of Heterotaxy/Isomerism**  
*Meryl S. Cohen, MD*
- 9:30 a.m.        **Break**

### Session 10: Atrioventricular Valves and the Pulmonary Valve

- 10 a.m.           **Anatomy and Morphology of the Tricuspid Valve and Ebstein's Anomaly**  
*Andrew Cook, PhD*
- 10:20 a.m.       **Imaging Assessment of Tricuspid Valve Anomalies and Ebstein's Anomaly**  
*Folkert Meijboom, MD, FESC*
- 10:40 a.m.       **Anatomy and Morphology of the Mitral Valve and its Anomalies**  
*Andrew Cook, PhD*
- 11 a.m.           **Imaging Assessment of the Mitral Valve and its Anomalies**  
*Shobha Natarajan, MD*
- 11:20 a.m.       **Anatomy and Morphology of the Pulmonary Valve**  
*Paul Weinberg, MD*
- 11:40 a.m.       **Imaging Assessment of the Pulmonary Valve**  
*Meryl S. Cohen, MD*
- Noon              **Lunch**

*continued >*

**Session 11: Assessment of Systolic and Diastolic Function in Pediatric Patients**

- 1 p.m.**            **Assessment of Systolic Left Ventricular Function**  
*Luc Mertens, MD, PhD*
- 1:30 p.m.**        **Assessment of Diastolic Left Ventricular Function**  
*Jan Marek, MD, PhD, FESC*
- 2 p.m.**            **Assessment of RV Function in Two-ventricle Circuit**  
*Laura Mercer-Rosa, MD, MSCE*
- 2:30 p.m.**        **Break**
- 2:50 p.m.**        **Assessment of Single Ventricular Function**  
*David Goldberg, MD*
- 3:10 p.m.**        **Utilization of 3D for Perioperative Imaging in Children**  
*Matthew Jolley, MD*
- 3:30 p.m.**        **Interesting Cases of the Day**  
*Faculty*
- 4:30 p.m.**        **Adjourn**



*Unless otherwise noted, faculty is from Children's Hospital of Philadelphia and the Perelman School of Medicine at the University of Pennsylvania.*

### Course Directors

**Meryl S. Cohen, MD**

*Associate Chair, Division of Cardiology  
Professor of Pediatrics*

**Luc Mertens, MD, PhD**

*Head of Echocardiography  
Hospital for Sick Children  
Professor of Pediatrics  
University of Toronto  
Toronto, Ontario*

### Faculty

**Andrew Cook, PhD**

*Director of Cardiac Registry  
Great Ormond Street Hospital for Children  
NHS Foundation Trust  
London, UK*

**Yoav Dori, MD, PhD**

*Attending Cardiologist  
Director, Center for Lymphatic Imaging and Interventions  
Associate Professor of Pediatrics*

**David Goldberg, MD**

*Attending Cardiologist  
Assistant Professor of Pediatrics*

**Matthew Jolley, MD**

*Attending Anesthesiologist  
Assistant Professor of Anesthesia, Cardiac Anesthesiology*

**Leo Lopez, MD**

*Medical Director, Echocardiography Laboratory  
Nicklaus Children's Hospital  
Clinical Professor of Pediatrics  
Florida International University  
Miami, Fla.*

**Jan Marek, MD, PhD, FESC**

*Consultant Paediatric Cardiologist and Clinical Lead for  
Echocardiography and Prenatal Cardiology  
Professor of Pediatric Cardiology  
Great Ormond Street Hospital for Children  
NHS Foundation Trust  
London, UK*

*continued >*

**Folkert Meijboom, MD, FESC**  
*Pediatric Cardiologist*  
*Centre for Congenital Heart Disease*  
*Division of Adult Congenital Heart Disease*  
*Utrecht, The Netherlands*

**Laura Mercer-Rosa, MD, MSCE**  
*Attending Cardiologist*  
*Assistant Professor of Pediatrics*

**Shobha Natarajan, MD**  
*Medical Director, Quality Improvement Core*  
*The Cardiac Center*  
*Associate Professor of Clinical Pediatrics*

**Christine Pascua, RDMS, FASE**  
*Technical Director, Echocardiography Laboratory*

**Jack Rychik, MD**  
*Associate Chair, Division of Cardiology*  
*Director, Fetal Heart Program*  
*Director, Single Ventricle Survivorship Program*  
*Professor of Pediatrics*

**Michael Quartermain, MD**  
*Medical Director, Echocardiography Laboratory*  
*Clinical Associate Professor of Pediatrics*

**Melissa Wasserman, RDMS, FASE**  
*Pediatric Sonographer, Echocardiography Laboratory*

**Paul Weinberg, MD**  
*Director, Cardiac Registry*  
*Professor of Pediatrics and Radiology*