



Paul M. Weinberg Congenital Cardiac Morphology Course

Virtual Symposium

Tuesday, Oct. 12 to Friday, Oct. 15, 2021

Saturday, Oct. 16, 9 a.m. – 4 p.m.

Optional In-person Interactive Session



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Course Overview

This is a four-day virtual course with the option for a fifth day, in person hands-on experience and is designed to be a comprehensive examination of the morphology of congenital heart disease. The course was created and led by Paul M. Weinberg, MD, renowned cardiac morphologist, for eight years. In the course's ninth year, Dr. Weinberg's colleagues (many of whom he trained in cardiology and morphology) will carry on his legacy by continuing to provide expert content in cardiac morphology, utilizing many of Dr. Weinberg's own teaching materials. In addition, this year will feature expert cardiac morphologist, Andrew Cook, PhD. To supplement anatomic teaching, there are sessions on echocardiography, cardiac magnetic resonance imaging and surgical correlation by distinguished faculty. The purpose of the course is to fill the need for detailed knowledge of cardiac anatomy in all forms of congenital disease. The course is designed for senior, junior and trainee cardiologists, cardiothoracic surgeons, pathologists, pathology assistants, echocardiography sonographers and other medical professionals interested in congenital heart disease.

New this year, we are offering a one-day, *in-person* experience at Children's Hospital of Philadelphia, beginning at 9 a.m., that will allow attendees to review cardiac specimens with CHOP faculty. Specimen examples exhibiting many of the major forms of congenital heart defects, both unoperated and post-operative, will be available for guided review. In addition, there will be an opportunity to view our virtual specimen collection using digital and virtual reality formats. This interactive educational experience is not to be missed!



Paul M. Weinberg, MD

Paul Morris Weinberg, professor emeritus of pediatrics at the Perelman School of Medicine and Children's Hospital of Philadelphia passed away on Oct. 15, 2020, after a long battle with cancer.

As a world expert in cardiac morphology, one of his many educational contributions was creating and leading the Advanced Cardiac Morphology Course beginning in the fall of 2012. This course has grown in popularity each year and has become an essential forum for education surrounding the anatomy of the malformed heart for trainees and seasoned professionals alike.

In its first year without Dr. Weinberg, we are changing the course name to honor his remarkable contributions to the field and pay tribute to his hard work in creating, directing and improving this course over eight years. A course bearing his name in the title was a tribute that was suggested, but not allowed during his tenure as course director. However, we believe this posthumous honor is long overdue and we endeavor to pay tribute to Dr. Weinberg by continuing this course and sharing knowledge that he so generously and patiently imparted on us for many years. While we had hoped for many more years to share in his expertise, we honor Dr. Weinberg's legacy by teaching the next generation of experts. Afterall, as Sir Isaac Newton once said in a letter to a fellow scientist in 1675, "If I have seen further, it is by standing upon the shoulders of giants."

Dr. Weinberg was a true giant in the field of pediatric cardiology, cardiac morphology and education and his contributions will continue to impact our field for years to come.

Sincerely yours,
Lindsay S. Rogers
Organizing Committee

Meryl S. Cohen
Organizing Committee

Jill J. Savla
Organizing Committee

Guest Faculty



Professor Andrew Cook
University College London
Institute of Cardiovascular Science

Professor Cook leads the Centre for Cardiac Morphology and Development at UCL's Institute of Cardiovascular Science/Great Ormond Street Hospital. He is internationally known for his expertise in the structure and architecture of the heart, especially concerning congenital heart disease.

He is the founder of www.cardiacmorphology.com.

Objectives

Upon completion of this CME activity, participants will be able to:

1. Identify the key anatomical aspects of all forms of congenital heart disease
2. Apply their anatomical knowledge to performance or interpretation of imaging studies of congenital heart disease
3. Know the key anatomical features that influence surgical decision-making for repair of congenital heart defects
4. Properly classify congenital heart defects
5. List commonly associated congenital heart defects, as well as those that rarely — or never — occur together

Registration

Attendees are welcome to register online at chop.cloud-cme.com. Preregistration is required. The registration deadline is Friday, Oct. 1, 2021. Payment must accompany your registration form for it to be processed. Once registration has been processed, a confirmation letter will be mailed. Please note: If you do not receive a confirmation within 10 days of registration, please contact the Continuing Medical Education Department at 215-590-5263.

Fees—Before Friday, Sept. 3, 2021

\$500	Physicians
\$350	Residents, Fellows and Other Healthcare Professionals
\$100	Hands-on Session (additional)

Fees—After Friday, Sept. 3, 2021

\$650	Physicians
\$450	Residents, Fellows and Other Healthcare Professionals
\$150	Hands-on Session (additional)

ACCME Accreditation Statement

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

AMA Credit Designation Statement

Children's Hospital of Philadelphia designates this live activity for a maximum of 35 *AMA PRA Category 1 Credit(s)*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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. In order to process refunds for course withdrawals, cancellation must be received in writing by Friday, Oct. 8, 2021. No refunds will be issued thereafter.

Program • Tuesday, Oct. 12, 2021 *(All times are Eastern Standard Time.)*

- 9 a.m. **Welcome and Introductory Remarks**
Meryl S. Cohen, MD, Jill J. Savla, MD, MSCE and Lindsay S. Rogers, MD
- 9:15 a.m. **Segmental Approach to Diagnosis of Congenital Heart Disease**
Lindsay S. Rogers, MD
- 10:30 a.m. **Break**
- 10:45 a.m. **Ventricular Septal Defects**
Lindsay S. Rogers, MD
- Noon **Common Atrioventricular Canal**
Andrew Cook, PhD
- 1 p.m. **Lunch**
- 2 p.m. **Tricuspid Atresia**
Jill J. Savla, MD, MSCE
- 3 p.m. **Straddling Atrioventricular Valves**
Meryl S. Cohen, MD
- 3:45 p.m. **Break**
- 4 p.m. **Echocardiography**
Matthew J. O'Conner, MD
- 4:40 p.m. **Cardiac Magnetic Resonance**
Matthew A. Harris, MD
- 5:20 p.m. **Surgery**
Muhammad Nuri, MBBS
- 6 p.m. **Adjourn**

Program • Wednesday, Oct. 13, 2021 *(All times are Eastern Standard Time.)*

- 9 a.m.** **Single Ventricle Defects**
Andrew Cook, PhD
- 9:40 a.m.** **Hypoplastic Left Heart Syndrome**
Lindsay S. Rogers, MD
- 10:30 a.m.** **Break**
- 10:45 a.m.** **Atrial Septal Defects**
Jill J. Savla, MD MSCE
- 12:05 p.m.** **Pulmonary Vein Anomalies**
Jill J. Savla, MD MSCE
- 12:20 p.m.** **Lunch Break**
- 1:20 p.m.** **Ebstein's and Uhl Anomalies**
Meryl S. Cohen, MD
- 2 p.m.** **Coronary Artery Anomalies**
Lindsay S. Rogers, MD
- 2:50 p.m.** **Break**
- 3:10 p.m.** **Echocardiography**
Shivani M. Bhatt, MD
- 3:50 p.m.** **Cardiac Magnetic Resonance**
Matthew A. Harris, MD
- 4:30 p.m.** **Surgery**
Constantine Mavroudis, MD
- 5:10 p.m.** **Adjourn**

Program • Thursday, Oct. 14, 2021 *(All times are Eastern Standard Time.)*

- 9 a.m.** **The Conotruncus and Ventriculo-arterial Alignments**
Lindsay S. Rogers, MD
- 9:45 a.m.** **Tetralogy of Fallot**
Jill J. Savla, MD, MSCE
- 11 a.m.** **Break**
- 11:10 a.m.** **Truncus Arteriosus**
Jill J. Savla, MD, MSCE
- Noon** **Transposition of the Great Arteries and Anatomically Corrected Malposition**
Andrew Cook, PhD
- 1:15 p.m.** **Lunch with Professor Cook**
- 2 p.m.** **Double-outlet Ventricles**
Meryl S. Cohen, MD
- 3 p.m.** **Break**
- 3:15 p.m.** **Echocardiography**
Michael Quartermain, MD
- 3:55 p.m.** **Cardiac Magnetic Resonance**
Mark Fogel, MD
- 4:35 p.m.** **Surgery**
Jonathan M. Chen, MD
- 5:15 p.m.** **Adjourn**

Program • Friday, Oct. 15, 2021 *(All times are Eastern Standard Time.)*

- 9 a.m. **Pulmonary Stenosis and Atresia**
Jill J. Savla, MD, MSCE
- 9:50 a.m. **Aortic Stenosis**
Meryl S. Cohen, MD
- 10:40 a.m. **Break**
- 10:45 a.m. **Heterotaxy Syndrome**
Lindsay S. Rogers, MD
- Noon **Lunch Break**
- 1 p.m. **Supero-inferior Ventricles and Criss-cross Atrioventricular Relations**
Lindsay S. Rogers, MD
- 2 p.m. **Aortic Arch Anomalies**
Jill J. Savla, MD, MSCE
- 3 p.m. **Break**
- 3:15 p.m. **Echocardiography**
Amanda Shillingford, MD
- 3:55 p.m. **Cardiac Magnetic Resonance**
Mark Fogel, MD
- 4:35 p.m. **Surgery**
Stephanie Fuller, MD
- 5:15 p.m. **Virtual Conference Adjourns**

Saturday, Oct. 16, 2021

Optional In-person Interactive Session

Leonard and Madlyn Abramson Pediatric Research Center

9 a.m. – Noon Hands-on Session

Noon – 1 p.m. Lunch

1 – 4 p.m. Hands-on Session

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

Course Directors

Meryl S. Cohen, MD

*Director, Fellowship Training Program
in Pediatric Cardiology
Attending Cardiologist
Professor of Pediatrics*

Lindsay S. Rogers, MD

*Associate Director, Fellowship Training
Program in Pediatric Cardiology
Attending Cardiologist
Associate Professor of Clinical Pediatrics*

Jill J. Savla, MD, MSCE

*Attending Cardiologist
Assistant Professor of Pediatrics*

Course Faculty

Shivani M. Bhatt, MD

*Attending Cardiologist
Assistant Professor of Clinical Pediatrics*

Jonathan M. Chen, MD

*Chief, Division of Cardiothoracic Surgery
Professor of Surgery*

Mark Fogel, MD

*Director, Cardiac Magnetic Resonance
Attending Cardiologist
Professor of Pediatrics and Radiology*

Stephanie Fuller, MD

*Attending Surgeon
Associate Professor of Surgery*

Matthew A. Harris, MD

*Associate Director, Cardiac Magnetic Resonance
Associate Professor of Pediatrics and Radiology*

Constantine Mavroudis, MD

*Attending Surgeon
Assistant Professor of Surgery*

Muhammad Nuri, MBBS

*Attending Surgeon
Associate Professor of Clinical Surgery*

Matthew J. O'Connor, MD

*Medical Director, Heart Failure and
Transplantation Program
Associate Professor of Clinical Pediatrics*

Michael Quartermain, MD

*Director, Echocardiography Laboratory
Associate Professor of Clinical Pediatrics*

Amanda Shillingford, MD

*Medical Director, Fetal Outreach
Attending Cardiologist
Associate Professor of Clinical Pediatrics*