

CARDIOLOGY

2024

27th Annual Update on
Pediatric and Congenital
Cardiovascular Disease



**Actual (Not Artificial)
Intelligence in Pediatric &
Congenital Cardiovascular Disease**

*What do we know and what
do we need to learn?*

Presidents' Weekend

FEB. 14 – 18, 2024

Learn more at
www.chop.edu/cardiology2024

 **Children's Hospital
of Philadelphia®**
Cardiac Center

Hyatt Regency Scottsdale Resort
and Spa at Gainey Ranch,
Scottsdale, Ariz.





Dear Colleagues & Friends,

We are currently living through eventful and trying times. Technological innovation is rapidly influencing our models of healthcare in many ways. The development of artificial intelligence (AI) highlights many of the deficiencies, errors and misjudgments we exercise on a regular basis while at the same time clarifies the essence and value of the art of healing — skills irreplaceable by any algorithm or machine. In our field of pediatric and congenital cardiovascular disease, the evidence base is often limited, so good practice is commonly predicated on thoughtfulness and clinical “wisdom.” It will be interesting to see how the wave of AI influences care in our space. Although unlikely we will see providers fully replaced by automated machines any time soon, it is safe to assume that practitioners who do embrace AI and explore its advantages, will replace those who do not!

It is with this in mind that we present our **27th Annual Update on Pediatric and Congenital Cardiovascular Disease**. Our theme this year is “Actual (Not Artificial) Intelligence in Pediatric & Congenital Cardiovascular Disease: What Do We Know and What Do We Need to Learn?” The course faculty will present multiple talks in plenary sessions, as well as presentations in subspecialty breakout sessions and a series of moderated panel conversations, covering all areas and topics related to the comprehensive care of the unborn, neonate, child, teen and young adult with cardiovascular disease. Many of the presentations will be given through the lens of artificial intelligence as a mechanism of care, with exploration of its impact specific to our field.

Through **learning, sharing, networking and professional socializing**, the goals of our educational conference are to give healthcare providers the tools necessary — within the new world we live in — to best deliver a normal quality and duration of life for our patients with pediatric and congenital cardiovascular disease.

We are extremely pleased to welcome you to this year’s collaborative, multidisciplinary conference.

A warm welcome for joining us!

Jack Rychik, Course Director for the Organizing Committee, Cardiology 2024

GENERAL INFORMATION

Topics will include:

- Applications of intelligence in pediatric and congenital cardiovascular disease: What do we know and what do we need to learn?
- What's old is new again: Timeless principles in the practice of pediatric and congenital cardiovascular care
- Wisdom, evidence and experience in managing complex clinical scenarios: A panel discussion of methodological approaches to challenging problems
- A patient and family roundtable perspective on compassion, innovation and life challenges in cardiovascular disease
- Valves in congenital heart disease
- An open and honest discussion amongst the nation's chiefs of pediatric cardiology on challenges and opportunities heading into the future
- Innovations in congenital heart care
- A conversation on clinical wisdom in a host of real-world scenarios: Perhaps there is evidence, perhaps there is not ... but this is what I do in these circumstances
- Case-based experiences that helped form who I am as a care provider
- The liver in congenital heart disease
- The role of data in current healthcare practices: Data tells the story!
- Quality improvement: Are we making a difference?
- What can we do at the start to make sure we reach our destination? Perspectives on optimizing the life trajectory of congenital heart disease — from fetus to adult
- Update on heart failure and transplantation: Case-based principles and practice
- Ambulatory cardiology in pediatric and congenital cardiovascular disease
- Lymphatics 101: Case-based principles and practice
- Healthcare administration in pediatric and congenital cardiovascular disease
- Genetics, syndromes and pediatric cardiovascular disease
- Nursing topic-specific breakout sessions
- Perfusion specialist-specific breakout sessions
- Featured lecture presentations by chosen luminaries in the field within the areas of cardiology, cardiac surgery, cardiac intensive care, basic cardiovascular science research and nursing

Other benefits of attending include:

- Special dedicated session tracks for nursing, perfusion specialists and healthcare administrators
- Preconference session CHD primer and review course for nurses and frontline providers
- Opportunities to network and enjoy Scottsdale attractions: Old Town Scottsdale, Musical Instrument Museum, Desert Botanical Gardens and much, much more!
- 5K Heart Run
- More than 25 credits for physicians, nurses and perfusion specialists
- Abundant opportunities for socializing and networking with colleagues from around the world!

Call for Abstracts

Abstract Submission Deadline: **Friday, Dec. 22, 2023**
(11:59 p.m. EST)

Notification of Acceptance: **Monday, Jan. 8, 2024**

Oral Abstract Presentations: **Thursday, Feb. 15, 2024**

Poster Abstract Presentations: **Thursday, Feb. 15,**
through **Saturday, Feb. 17, 2024**

Course Objectives 2024

At the completion of this program, the healthcare team will be better able to:

- Outline the knowns and unknowns within the knowledge base that informs on how best to understand and care for the patient with pediatric and congenital cardiovascular disease
- Explain the methods for acquisition and sources of data and knowledge that currently exist and that need to be further developed to provide the means to offer optimal care for patients with pediatric and congenital cardiovascular disease
- Describe the science and knowledge base of information that supports current state-of-the-art clinical practice for the patient with pediatric and congenital cardiovascular disease
- Recall the concepts and new strategies of care and practice for conditions unique to cardiovascular disease ranging from the fetus to adult with congenital heart disease

continued>

Course objectives (continued)

- Explain the concepts and new strategies of care and practice for systemic conditions outside of the heart that affect the child with cardiovascular disease
- Recognize the unique challenges of the single ventricle and Fontan circulation, their origins and management
- Review the latest approach to advanced cardiac therapies for the failing circulation in the young
- Describe the current tools and methods available for optimal characterization of the cardiovascular system in the young utilizing the latest advanced technologies
- Outline the most recent developments in diagnosis and treatment of lymphatic conditions in the young
- Describe the many conditions affecting myocardial pump function in the young
- Discuss the latest updates on challenges and opportunities in understanding organ dysfunction, such as liver disease and kidney disease, when there is congenital heart disease
- Recall the underlying principles and best practices for postoperative care by nurses and other front-line providers for the newborn/infant with congenital heart disease
- Review the strategies of management related to perfusion during open heart surgery in the operating room and during mechanical circulatory support outside of the operating room
- Describe the challenges and opportunities in team building among varied specialists and providers to optimally deliver care to the young with cardiovascular disease
- Explain the value of administrative team collaboration in offering optimal healthcare to the community of pediatric and congenital cardiovascular disease
- Discuss the ideal strategies for provider team integration of outpatient community-based ambulatory care into the spectrum of cardiac care

Registration

The conference will be held Wednesday, Feb. 14, through Sunday, Feb. 18, 2024, at the **Hyatt Regency Scottsdale Resort and Spa at Gainey Ranch**, Scottsdale, Ariz. On-site registration is from 6:30 a.m. to 6 p.m. Wednesday, Feb. 14, and Thursday, Feb. 15.

Register online: chop.cloud-cme.com

Course Fees

The registration fee for this 5-day conference is \$995 for physicians and \$595 for other healthcare professionals and physicians-in-training. The registration fee includes tuition, online presentations, daily continental breakfast, lunch and opening reception.

Full Conference: 4 p.m. Wed., Feb. 14, to noon, Sunday, Feb. 18

Physicians \$995
Nurses, Medical Students, Residents, Fellows and
Other Healthcare Professionals \$595

Optional Preconference Seminars

You must be registered for the full conference to register for a preconference.

A Primer & Review: Congenital Heart Disease and Postoperative Management: Comprehensive Review for Nurses & Frontline Providers \$150

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 28 *AMA PRA Category 1 credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

AMA PRA Category 1 credits™ are designated as follows:

- **Wednesday, Feb. 14, 2024**
Optional Preconference Seminars – 7:30 a.m. to 3:30 p.m.
A Primer & Review: Congenital Heart Disease and Postoperative Management: Comprehensive Review for Nurses & Front-Line Providers
Total *AMA PRA Category 1 credits™* = 7
- **Main Conference: 4 p.m. Wednesday, Feb. 14, to noon Sunday, Feb. 18, 2024**
Total *AMA PRA Category 1 credits™* = 28

Nursing Continuing Professional Development Approved Provider Statement

Children’s Hospital of Philadelphia is approved as a provider of nursing continuing professional development by the Pennsylvania State Nurses Association, an accredited approver by the American Nurses Credentialing Center’s Commission on Accreditation.

Perfusion Accreditation Statement

An application for CEU Category 1 hours will be submitted.

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**.

Cancellation and Refund Policy

Children’s Hospital of Philadelphia reserves the right to cancel or postpone any course due to unforeseen circumstances. In the event of cancellation or

postponement, Children’s Hospital of Philadelphia will refund registration fees, but is not responsible for any related costs or charges assessed by airlines and travel agencies. To process refunds for course withdrawals, cancellations must be received **in writing** by Thursday, Feb. 1, 2024. Refunds will be issued for the amount of registration, less a \$100 service charge.

Hotel Information

A block of rooms has been reserved at the **Hyatt Regency Scottsdale Resort and Spa at Gainey Ranch**, Scottsdale, AZ. The group rate is \$399 per room, per night for single or double occupancy. There is an additional 14.02% state and local tax. Participants must reserve their own hotel accommodations by calling 480-444-1234.

For the reduced conference rate, mention the “Cardiology 2024 Conference” when making your reservation. The conference rate begins on Monday, Feb. 12, 2024. This rate will only be available until **Jan. 15, 2024**. Reservations made after Jan. 15 will be accepted on space and rate availability.



CONFERENCE PROGRAM

♥ WEDNESDAY, FEB. 14

Optional Preconference: 7:30 a.m. — 3:30 p.m.

Congenital Heart Disease and Postoperative Management: A Master Class for Nurses, APPs and Frontline Providers

Moderators: *Kathryn M. Dodds, Lisa Laddish, Patty Ozuna and Carina Perez*

- 7:30 a.m. What is “Normal” Cardiac Anatomy?
Meryl S. Cohen
- 7:45 a.m. Screening, Diagnosis and Preoperative Assessment
Kathryn M. Dodds
- 8 a.m. Open Heart Surgery: What is CPB, X Clamp, Circulatory Arrest?
Christy K. Bosler
- 8:15 a.m. Early Postoperative Management Issues and Concerns
David A. Hehir
- 8:30 a.m. Temporary Pacing: Who and How
Christopher Janson
- 8:45 a.m. Break
- 9 a.m. ECHO: Effusions, Function, Evaluation of Surgical Operation
David J. Goldberg
- 9:15 a.m. What the Chest X-ray Can and Cannot Show You
David A. Hehir
- 9:30 a.m. How to Decipher Cardiac Catheterization Data
Andrew C. Glatz
- 9:45 a.m. Postoperative Arrhythmias: SVT, JET, Heart Block, VT
Maully J. Shah
- 10 a.m. ECMO and Mechanical Support in Children with CHD
Chitra Ravishankar
- 10:15 a.m. Sedation and Pain Management After Cardiac Surgery
Michael P. Goldsmith
- 10:30 a.m. Break
- 10:40 a.m. **Ventricular Septal Defect**
Anatomy/morphology — *Lindsay S. Rogers*
Surgery — *Daniel A. Velez*
Postoperative Care and Outcomes — *Patty Ozuna*

- 11 a.m. **Complete Common Atrioventricular Canal Defect**
Anatomy/morphology — *Lindsay S. Rogers*
Surgery — *James E. O'Brien*
Postoperative Care and Outcomes — *Lisa Laddish*
- 11:20 a.m. **Tetralogy of Fallot**
Anatomy/morphology — *Lindsay S. Rogers*
Surgery — *James E. O'Brien*
Postoperative Care and Outcomes — *Lisa Laddish*
- 11:40 a.m. **Truncus Arteriosus**
Anatomy/morphology — *Lindsay S. Rogers*
Surgery — *Daniel A. Velez*
Postoperative Care and Outcomes — *Kathryn M. Dodds*
- Noon Lunch
- 12:30 p.m. **Coarctation of the Aorta**
Anatomy/morphology — *Lindsay S. Rogers*
Surgery — *Daniel A. Velez*
Postoperative Care and Outcomes — *Lisa Laddish*
- 12:50 p.m. **Transition of the Great Arteries/Arterial Switch**
Anatomy/morphology — *Lindsay S. Rogers*
Surgery — *Jonathan Chen*
Postoperative Care and Outcomes — *Kathryn M. Dodds*
- 1:10 p.m. **Total Anomalous Pulmonary Venous Return**
Anatomy/morphology — *Lindsay S. Rogers*
Surgery — *James E. O'Brien*
Postoperative Care and Outcomes — *Carina Perez*
- 1:30 p.m. **Single Ventricle: Stage 1, Bidirectional Glenn, Fontan**
Anatomy/morphology — *Lindsay S. Rogers*
Surgery — *Jonathan Chen*
Postoperative Care and Outcomes — *Kathryn M. Dodds*
- 2:30 p.m. Growing Up with Congenital Heart Disease
Yuli Y. Kim
- 2:45 p.m. A Patient Perspective
Meg Didier
- 3 p.m. Q & A with Faculty
- 3:30 p.m. ADJOURN

Wednesday program continued on next page>

Opening Plenary Session: 4 – 6 p.m.

Intelligence in Pediatric & Congenital Cardiovascular Disease: What Do We Know, What Do We Need to Learn?

Moderators: Joseph Rossano and Jonathan Chen

- 4 p.m. Welcome to our 27th Anniversary and Introduction to our Conference
Jack Rychik, Course Director
- 4:10 p.m. Artificial Intelligence: Can It Change Our Models of Care?
Jennifer N. Silva
- 4:25 p.m. Artificial Intelligence: Is Imaging the Place Where It Can Have the Greatest Impact in CHD Care?
Anita J. Moon-Grady
- 4:40 p.m. Striking a Balance: Data, Wisdom and Wit – Pulling It All Together to Make Good Decisions in the Sick Child with Congenital Heart Disease
Kiona Y. Allen
- 4:55 p.m. Emotional Health and Patient-Family Well-being in Congenital Heart Disease: Current and Future Models of Care
Nadine Kasparian
- 5:10 p.m. Let's Not Ignore the Economic Costs! The Financial Impact of Congenital Heart Disease
Diane M. Pickles
- 5:25 p.m. The Best Care for the Most: How to Extend Congenital Heart Healthcare to Those with Limited Resources – Does AI Solve or Deepen this Problem?
Keila Lopez
- 5:40 p.m. The Organ of Inspiration: The Heart in Art Throughout History
Shira Brisman
- 5:55 p.m. Closing Remarks
- 6 p.m. ADJOURN



“As one of the world’s largest and most prestigious conferences focused on pediatric and congenital cardiovascular disease, we offer a warm welcome to our many returning participants and greetings to new friends for joining us.”

Opening Reception

6 – 8 p.m.

Sponsored by



The Heart Center

Sunrise Session I

7 – 8 a.m. **Case-based Presentations Highlighting Practical Principles and Clinical Pearls: How to Read the Electrocardiogram**
Mitchell Cohen, Christopher Janson and Mully J. Shah

Breakfast sponsored by



Plenary Session II: 8 – 10 a.m.

What's Old is New Again

Moderators: Paul F. Kantor and Paul J. Chai

- 8 a.m. The Pott's Operation Lives Again!
Pirooz Eghtesady
- 8:15 a.m. An Old Disease But Still a Nagging Global Problem – Rheumatic Fever: Prevention and Early Detection in 2024
Andrea Z. Beaton
- 8:30 a.m. Pulmonary Arterial Banding: When, How and in Whom?
Katsuhide Maeda
- 8:45 a.m. High-tech Imaging Can't Seem to Settle the Matter in a Complex Case – What to Do? Let's Get an ECG!
Mully J. Shah and Jack Rychik
- 9 a.m. New Horizons in the Therapy of Heart Failure: SGLT2 Inhibitors and Beyond
Daniel P. Kelly
- 9:15 a.m. A Concept Revisited: Diastole in the Single Ventricle
Mark Friedberg
- 9:30 a.m. Exercise – Is It the Key to Fontan Circulatory Success?
Jesse Hansen
- 9:45 a.m. Panel and Discussion
Faculty
- 10 a.m. ADJOURN

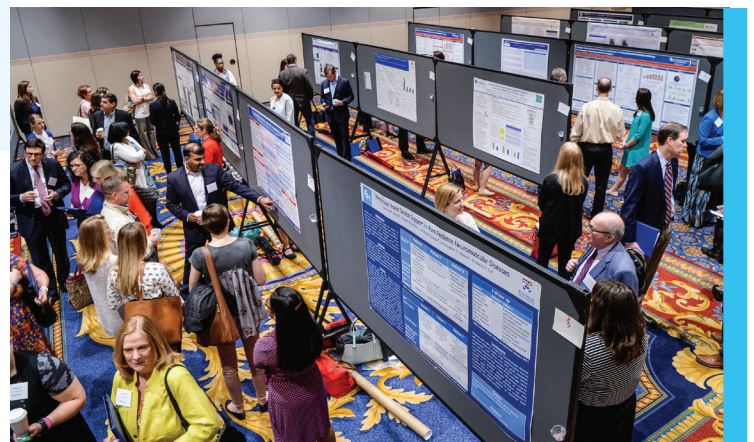
Simultaneous Breakout Sessions: 11 a.m. – 1 p.m.

They Have Come for Your Liver... but You're Not Done with It! The Liver in Congenital Heart Disease

Moderators: Elizabeth B. Rand and Salil Ginde

- 11 a.m. Oh My Gosh! My Patient has Biliary Atresia, Alagille Syndrome or a Fontan Circulation: When the Pediatric Cardiologist Needs a Hepatologist – We Can Help!
Elizabeth B. Rand
- 11:15 a.m. Modalities for Imaging the Liver When There are Cardiovascular Concerns in the Young
Jonathan Dillman
- 11:30 a.m. Fontan-associated Liver Disease: Making Progress Through a QI Project
Salil Ginde
- 11:45 a.m. Prospective Surveillance of the Liver and Association of Fibrosis with Other Systems in the Fontan Circulation
Taylor Hartzel Houlihan
- Noon Mechanistic Insights into Liver Fibrosis in the Fontan Circulation
Moira B. Hilscher
- 12:15 p.m. Novel Means for Characterizing the Cellular Impact of Fontan-associated Liver Disease
Liming Pei
- 12:30 p.m. Novel Functional Characterization of the Liver in the Fontan Circulation and the Risk of Hepatocellular Carcinoma
Yuli Y. Kim
- 12:45 p.m. Panel and Discussion
Faculty
- 1 p.m. ADJOURN

Thursday program continued on next page>



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 Medicine

**Break/Visit the Exhibits
 10 – 11 a.m.**

Poster Session No. 1

Data Tells the Story ...

Moderators: Michael Gaies and Michael P. Goldsmith

- 11 a.m. Data Acquisition: Challenges and Opportunities from the Frontline in Development of a Birth Defects Registry and Biorepository
Stacy Woyciechowski
- 11:15 a.m. Data Presentation and Analytics in Congenital Heart Care
Michael Gaies
- 11:30 a.m. Data Collection and Machine Learning to Improve Perioperative Care in the Pediatric Population
Jayant “Nick” Pratap
- 11:45 a.m. eHealth Technologies for CHD and Pediatric Patients
David White
- Noon Wearables in Pulmonary Hypertension
Catherine Avitabile
- 12:15 p.m. Risk Modelling in Congenital Heart Surgery
Tara Karamlou
- 12:30 p.m. Can Machine Learning Help Inform Acute Patient Care?
Michael P. Goldsmith
- 1 p.m. ADJOURN

Quality Improvement (QI): Are We Making a Difference?

Moderators: Jeffrey B. Anderson and Shobha S. Natarajan

- 11 a.m. Principles of QI and Impact in the Pediatric Cardiology Realm
Jeffrey B. Anderson
- 11:15 a.m. QI 2.0 in the Pediatric Cardiac Center: Addressing the Next Level of Challenges
Shobha S. Natarajan
- 11:30 a.m. QI Work: Challenges and Progress in the Cardiac Intensive Care Unit
David A. Hehir
- 11:45 a.m. QI Work: Challenges and Progress in the ECHO Lab
Anitha Parthiban
- Noon NPC-QIC – What Have We Achieved and What Does the Future Hold?
David Brown
- 12:15 p.m. Pediatric QI Work as a Model for the Fontan Outcomes Network: What Can We Learn from Other Networks and What are the Possibilities for Single Ventricle Care?
Carole Lannon

- 12:30 p.m. ACTION – QI Work in Advanced CHD Therapies: Challenges and Progress
Angela Lorts
- 12:45 p.m. Building a Culture of Quality in the Acute Care Pediatric Cardiology Setting
Dana Gal
- 1 p.m. ADJOURN

Perfusion Breakout Session I

Current Trends in Pediatric Cardiopulmonary Bypass

Moderators: TBD and TBD

- 11 a.m. Data Capture and QI: Evaluating and Improving Performance
Tom Klein
- 11:20 a.m. Cardiopulmonary Bypass Prime: Optimizing for Neonates
Aaron Schreck
- 11:40 a.m. What’s Working and What Isn’t: Pediatric Survey Results
Tami Rosenthal
- Noon FFP Dilemma; To Use it in the CPB Prime or Not?
Asif Padiyath
- 12:20 p.m. Systemic Cardioplegia: When All Else Fails
Tom Klein
- 12:40 p.m. Adult Congenital Open-Heart Surgery: Before and After Surgery, What Should We Be Considering?
Joseph W. Turek
- 1 p.m. ADJOURN

Thursday program continued on next page>



Thursday Nursing Breakout Session

Old and New Questions: What Does the Evidence Say?

Moderators: *Sherry Kubis and Katherine Harrison*

- 11 a.m. Sometimes More is Not More: Does Every Patient Need Famotidine?
Meghan Long
- 11:20 a.m. Is Sotalol the Best Treatment for JET?
Stacy L. Reynolds
- 11:40 a.m. Ductal Dependent Feeds: Does Which Way the Duct Flows Matter?
Molly K. King
- Noon Parental Engagement and Neurodevelopmental Outcomes
Angela Gooden
- 12:20 p.m. What Is Best Practice for Managing Surgical Site Infections – A Role for Wound Vac?
Christy K. Bosler
- 12:40 p.m. Can a Learning Network Improve Outcomes?
Linda Lambert
- 1 p.m. ADJOURN

Outdoor Luncheon

1 – 2 p.m.

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Moderated Panel of Experts

2 – 3 p.m. **This is My Approach to the Following Challenging Problem ...**

Moderator: *Stephanie Fuller*

Panelists: *Joseph W. Turek, Daniel A. Velez, Paul J. Chai, William DeCampi, Emile A. Bacha and Tara Karamlou*

3 – 4 p.m. Oral Abstracts

Moderators: *Andrew C. Glatz and Laura M. Mercer-Rosa*

4 – 4:15 p.m. Break

Plenary Session III: 4:15 – 5:15 p.m.

Case-based Experience that Helped Form Who I am as a Cardiac Care Provider ...

Moderator: *Alan H. Friedman*

Panelists: *Meryl S. Cohen, James E. O'Brien, Jack Rychik, Daniel J. Penny, Jonathan J. Rome and William T. Mahle*

Plenary Session IV: 5:15 – 6:15 p.m.

Patient & Family Roundtable: A Perspective on Compassion, Innovation and Life Challenges in Cardiovascular Disease

Moderator: *Daniel J. Penny*

Panelists: *Scott Leezer, Taylor Hartzel Houlihan, Lacie Patterson and Thomas Glenn*



Nursing Breakfast Session

7-8 a.m. Cardiac Medication Update: Diuretics, Heart Failure, Anticoagulation
Lisa Laddish, Stacy L. Reynolds and Kathryn Dodds



Sunrise Session II

7 – 8 a.m. Case-based Presentations Highlighting Practical Principles and Clinical Pearls: Optimizing Care and Outcomes in Complex CHD
Jesse J. Esch, Thomas Glenn, Jesse Hansen and Anita Parthiban

Plenary Session V: 8 – 10 a.m.

The Damn Doors Don't Work! Valves in Congenital Heart Disease

Moderators: Matthew A. Jolley and Daniel A. Velez

- 8 a.m. Characterizing Valve Dysfunction: Delicately Engineered and More Complex Than You Think!
Matthew A. Jolley
- 8:15 a.m. Nuances in Characterizing Valvular Incompetence – ECHO
Lindsay S. Rogers
- 8:30 a.m. Nuances in Characterizing Valvular Incompetence – MRI
Mark A. Fogel
- 8:45 a.m. Solutions to Aortic Insufficiency
Jonathan Chen
- 9 a.m. Solutions to the Stubbornly Incompetent Systemic Atrioventricular Valve in Single Ventricle Defects
Emile A. Bacha
- 9:15 a.m. Catheter-based Solutions for Atrioventricular Valve Insufficiency
Matthew J. Gillespie
- 9:30 a.m. Creating Pulmonary Valve Competence in the Cath Lab: In Whom and How?
Christopher Petit
- 9:45 a.m. Panel Discussion Q & A
Faculty
- 10 a.m. ADJOURN

Simultaneous Breakout Sessions: 11 a.m. – 1 p.m.

What Can We Do at the Start to Make Sure We Reach Our Destination? Perspectives on Optimizing the Life Trajectory From Fetus/Newborn to the Adult with CHD
Moderators: Stephanie Fuller and Christopher L. Lindblade

- 11 a.m. TGA – Fetus/Newborn
Sheetal R. Patel
- 11:15 a.m. TGA – Long Term
Toby A. Rockefeller
- 11:30 a.m. TOF – Fetus/Newborn
Anita J. Moon-Grady
- 11:45 a.m. TOF – Long Term
Yuli Y. Kim
- Noon HLHS – Fetus/Newborn
Amanda J. Shillingford
- 12:15 p.m. HLHS – Long Term
Alexander "Sasha" Opotowsky
- 12:30 p.m. Heterotaxy – Fetus/Newborn
Christopher L. Lindblade
- 12:45 p.m. Heterotaxy – Long Term
Jordan Awerbach
- 1 p.m. ADJOURN

Update on Heart Failure & Transplantation: Case-based Principles and Practice

11 a.m. – 1 p.m. Panel of Case Presentations
Moderators: Aliessa P. Barnes and Matthew J. O'Connor
Panelists: Steven D. Zangwill, Joseph Spinner, Jennifer Su, Angela Lorts, Irene Lytrivi, Antonio G. Cabrera and Roosevelt Bryant

Ambulatory Cardiology in Pediatric and Congenital Cardiovascular Disease

Moderators: Vivek Allada and Deepti P. Bhat

- 11 a.m. Case-based Learning: Intuition vs. Evidence in Pediatric Cardiology: Discordance or Synergy?
Zvi S. Marans
- 11:15 a.m. Telemedicine in Pediatric Cardiology – No Longer Revolution but Evolution
Tamar J. Preminger

Friday program continues on next page >

Break/Visit the Exhibits

10 – 11 a.m.

Poster Session No. II



- 11:30 a.m. Management of Pediatric Chest Pain: How to Make the Patient – and the Pediatrician – Happy
Jeffrey B. Anderson
- 11:45 a.m. What's New in Impact of COVID-19 on the Pediatric Cardiovascular System
Matthew Elias
- Noon Building a Multidisciplinary Fontan Clinic: Challenges and Opportunities
Deepti P. Bhat
- 12:15 p.m. Exercise Testing: Is It the Gold Standard for Assessing Outcomes in Congenital Heart Care?
Stephen Paridon
- 12:30 p.m. Chat-GPT and AI Generated Ambulatory Care
Robert Palermo
- 12:45 p.m. Strain Imaging in Pediatric & Congenital Cardiovascular Conditions: Clinical Value and Utility in Decision Making
Jamie Harrington
- 1 p.m. ADJOURN

Perfusion Breakout Session II

Transformation in Pediatric Mechanical Circulatory Support

Moderators: TBD and TBD

- 11 a.m. Berlin Heart Active Experience
Justin Farr
- 11:15 a.m. From Philadelphia to Phoenix: A Berlin Heart Active Case Report
Jordan Brinhall

- 11:30 a.m. Impella: A Pediatric Experience
Katsuhide Maeda
- 11:45 a.m. Temporary MCS; How Do We Decide When One Size Does Not Fit All?
Angela Lorts
- Noon HM3 Bivad – How Small Can We Go and Is It Worth the Challenge
Matthew J. O'Connor
- 12:15 p.m. Panel Discussion
Faculty
- 1 p.m. ADJOURN

Friday Nursing Breakout: Nursing Oral Abstracts

11 a.m. – 1 p.m.

Oral Presentations of the Top 8 Nursing Abstracts: New Knowledge and Innovative Practice

Moderators: Kathryn Dodds, Lisa Laddish and Linda Lambert



Adjourn for the day!
Visit Scottsdale and all it has to offer!

♡ SATURDAY, FEB. 17

HEART RUN 5K

CARING FOR KIDS' HEARTS

EXERCISE YOUR BODY
AND YOUR MIND!

6:15 – 8 a.m.

Sponsored by



Phoenix
Children's

Registration is required and limited to the first 200 registrants.

Fee: \$25 (includes 5K Heart Run event T-shirt)



Plenary Session VI: 8 – 10 a.m.

Awards and Featured Lectures

- 8 a.m. Introduction of the Annual Jack Downes Lecturer
Andrew T. Costarino
- 8:05 a.m. Annual Jack Downes Lecture
Roxanne E. Kirsch
- 8:20 a.m. Introduction of the Thomas L. Spray Lecturer
Jonathan Chen
- 8:25 a.m. Annual Thomas L. Spray Lecture
Tara Karamlou
- 8:40 a.m. Introduction of the Annual Pediatric and Congenital Cardiovascular Basic Science Lecturer
Daniel P. Kelly
- 8:45 a.m. Annual Pediatric and Congenital Cardiovascular Basic Science Lecture
Robert J. Levy
- 9 a.m. Introduction of the Annual William J. Rashkind Lecturer
Joseph Rossano
- 9:05 a.m. Annual William J. Rashkind Lecture
Craig A. Sable
- 9:20 a.m. Introduction of the Rauch Memorial Lecturer
Sherri Kubis
- 9:25 a.m. Annual Rauch Memorial Lecture
Jean Storey
- 9:40 a.m. Awards for Best Abstracts
Kathryn M. Dodds and David J. Goldberg
- 10 a.m. ADJOURN

Healthcare Administration in Pediatric & Congenital Cardiovascular Disease

Moderators: Lawrence Barnes, Lisa Graybill and Kay Stewart-Huey

- 11 a.m. Approaching the New Challenges Facing Pediatric Healthcare: Perspective from the CEO of Phoenix Children's Hospital
Robert Meyer
- 11:15 a.m. Approaching the New Challenges Facing Pediatric Healthcare: Perspectives from the CMO at Children's Hospital of Philadelphia
Ron Keren
- 11:30 a.m. Fostering and Supporting a Spirit of Innovation and Maintaining Uniqueness in a Congenital Cardiac Center
Mark Schwartz
- 11:45 a.m. Topic TBD
Speaker TBD
- Noon Leadership 101: Creating Change Through Stakeholder Engagement
Daniel Hyman
- 12:15 p.m. Meeting the Nursing Workforce Challenges of the Current Era
Sherri Kubis
- 12:30 p.m. Data-driven Operations in a Cardiac Center
Vivek Allada
- 12:45 p.m. Q & A
Faculty
- 1 p.m. ADJOURN

Genetics, Syndromes and Pediatric Cardiovascular Disease

Moderators: Elizabeth Goldmuntz and Jeffrey J. Kim

- 11 a.m. Hereditary Hemorrhagic Telangiectasia (HHT)
Elizabeth Goldmuntz
- 11:15 a.m. Aortopathies
Stacey Drant
- 11:30 a.m. LV Non-compaction
Jeffrey J. Kim
- 11:45 a.m. Arrhythmia & Channelopathies
Mitchell Cohen
- Noon Looking Towards the Future: Preventative Health and Avoiding Adult Metabolic Syndrome While Still Young
Carissa Baker-Smith
- 12:15 p.m. What the Anesthesiologist Needs to Know About Any Genetics or Syndromes Before Putting a Cardiac Patient to Sleep?
Asif Padiyath
- 12:45 p.m. Case-based presentations
Faculty
- 1 p.m. ADJOURN

Saturday program continued on next page>

Break/Visit the Exhibits

**10 – 11 a.m.
Poster Session No. III**

Sponsored by



Simultaneous Breakout Sessions: 11 a.m. – 1 p.m.

Lymphatics 101: Case-based Principles & Practice

Case-based Principles and Practice

Moderators: Yoav Dori and Jonathan J. Rome

Faculty: Christopher L. Smith, Erin Pinto, Katsuhide Maeda and Jonathan J. Rome

Perfusion Breakout Session III

Changing Dynamics in ECMO Care

Moderators: TBD and TBD

- 11 a.m. Euroset: U.S. Pediatric Experience
Justin Farr
- 11:15 a.m. ECPR Simulation: Is It Worth the Time and Effort – Optimizing Outcomes
Kiona Y. Allen
- 11:30 a.m. ECMO Equipment Selection: Circuit Components and Managing Backorders Post-COVID
Tami Rosenthal
- 11:45 a.m. Anticoagulation for ECMO – The Debate Continues
Michael Goldsmith
- Noon Ethical Dilemmas in Complex ECMO Patients
Roxanne E. Kirsch
- 12:15 p.m. Panel Discussion
Faculty
- 1 p.m. ADJOURN

Saturday Nursing Breakout Session

A Case: What I Needed to Learn and Pearls of Wisdom to Share

Moderators: Stacy Reynolds and Angela Gooden

- 11 a.m. Pearls from a Patient
Marissa Mendoza Bremer
- 11:20 a.m. Combined Heart-Liver Transplant: An Unconventional Path to Success
Beth Lang
- 11:40 a.m. Between a Rock and A Hard Place
Katherine Harrison
- Noon Never Close the Door
Carmen H. Watrin
- 12:20 p.m. Destigmatizing Mental Health Support in Nursing
Jamie Fitzgerald
- 12:40 p.m. The Complexities of Shones Complex
Carina Perez and Molly King
- 1 p.m. ADJOURN

Nursing Luncheon: 1 – 2 p.m.

Sponsored by



(Boxed Lunch is available for non-Nursing Attendees)

2 – 3 p.m. Moderated Panel of Experts:
A Conversation Amongst the Chiefs – Concerns, Challenges and Opportunities Right Now and for the Future of Pediatric Cardiology

Moderator: Joseph Rossano

Panelists: Daniel J. Penny, Aliessa P. Barnes, Christopher Petit, William T. Mahle, Paul F. Kantor and Andrew C. Glatz

Plenary Session VII: 3 – 5 p.m.

Innovations in Congenital Heart Care

Moderator: TBD

- 3 p.m. Fostering and Sustaining Innovation in Pediatric Healthcare Technologies
Vinay Vaidya
- 3:15 p.m. Wearable Biosensors in Pediatric Cardiovascular Disease and AI Analytics
Animesh Tandon
- 3:30 p.m. Update on the Artificial Placenta – Where Are We Heading?
Jack Rychik
- 3:45 p.m. Partial Heart Transplantation
Joseph W. Turek
- 4 p.m. Novel Neuromonitoring and Neuroprotection in CHD
Jennifer M. Lynch
- 4:15 p.m. Can Biomarkers Help Us Improve our Understanding of Congenital Heart Disease?
Laura M. Mercer-Rosa
- 4:30 p.m. Advances in Pacemaker Technologies
Maully J. Shah
- 4:45 p.m. Audience Q & A
Faculty Panel
- 5 p.m. ADJOURN



- 7 - 8 a.m. Breakfast with Our Nursing Executives: What Should We Keep Doing? What Should We Start Doing? What Should We Stop Doing? A moderated panel discussion
Moderators: Kathryn Dodds, Katherine Harrison
Panelists: Jill Haydusko, Katie Penson, Sherri Kubis, Lisa Laddish, Jean Storey, Carmen H. Watrin and Jill Haydusko

Sunrise Session III

- 7 - 8 a.m. Case-based Presentations Highlighting Practical Principles and Clinical Pearls: Imaging in Complex Congenital Heart Disease
Andrew Cheng, Amanda J. Shillingford, Mark A. Fogel and TBD

Plenary Session VIII: 8 a.m. – 12:15 p.m.

Clinical Wisdom: Perhaps There is Evidence, or Perhaps Not, But This is What I Do...

Moderators: Wayne J. Franklin and Chitra Ravishankar

- 8 a.m. PDE-5 Inhibition Following Fontan Circulation
David J. Goldberg
- 8:15 a.m. Digoxin Use in Single Ventricle
Michael L. O'Byrne
- 8:30 a.m. Bivalirudin Use in Ventricular Assist Devices
Deepa Mokshagundam
- 8:45 a.m. Surgery for Vascular Ring
William J. Gibson
- 9 a.m. CC-TGA With and Without Tricuspid Valve Regurgitation
Meryl S. Cohen
- 9:15 a.m. PVCs in a Structurally Normal Heart
Philip M. Chang
- 9:30 a.m. Fenestration Creation for Those Undergoing Fontan Operation
Daniel A. Velez
- 9:45 a.m. Use Sirolimus to Treat Cardiac Rhabdomyoma in the Fetus
Jack Rychik
- 10 a.m. BREAK
- 10:15 a.m. To Decide When My Patient Needs a VAD
Matthew J. O'Connor
- 10:30 a.m. For Serial Surveillance of My Patient with a Fontan Circulation
Andrew Cheng
- 10:45 a.m. When My Patient with Single Ventricle Needs Anesthesia as an Inpatient or Outpatient
Andreas W. Loepke

- 11 a.m. For My Patient with Wolff-Parkinson-White Syndrome
Christopher Janson
- 11:15 a.m. To Decide When My Patient with a Low Qp:Qs Ratio Needs to Have Surgery
Alan H. Friedman
- 11:30 a.m. To Identify the Fetus with a Questionable Aortic Arch — Do I Start Prostaglandin Infusion After Birth or Not?
Shubhika Srivastava
- 11:45 a.m. Developing a Nursing Research Role: The Path is Often Crooked
Linda Lambert
- Noon TBD
Speaker TBD
- 12:15 p.m. ADJOURN

“ Maintaining the best outcomes for our patients throughout the lifespan can only be achieved through continuous update and education. Our community must strive to avail itself of the educational resources necessary to maintain and advance the skills and knowledge base required to provide the best outcomes possible. ”

FACULTY

Faculty

Vivek Allada

Children's Hospital of Philadelphia

Kiona Y. Allen

Lurie Children's Hospital of Chicago

Jeffrey B. Anderson

*Cincinnati Children's Hospital
Medical Center*

Catherine Avitabile

Children's Hospital of Philadelphia

Jordan Awerbach

Phoenix Children's Hospital

Emile A. Bacha

*New York-Presbyterian Morgan Stanley
Children's Hospital*

Carissa Baker-Smith

*Nemours Children's Cardiac Center,
(Wilmington, DE)*

Aliessa P. Barnes

Children's Mercy Kansas City

Lawrence Barnes

Children's Hospital of Philadelphia

Andrea Z. Beaton

*Cincinnati Children's Hospital
Medical Center*

Deepti P. Bhat

Phoenix Children's Hospital

Jordan Birmhall

Phoenix Children's Hospital

Christy K. Bosler

Children's Hospital of Philadelphia

Marissa Mendoza Bremer

Children's Hospital of Philadelphia

Shira Brisman

University of Pennsylvania

David Brown

Boston Children's Hospital

Roosevelt Bryant

Phoenix Children's Hospital

Antonio G. Cabrera

*Intermountain Primary Children's Hospital
(Salt Lake City, UT)*

Paul J. Chai

Children's Healthcare of Atlanta

Philip M. Chang

Children's Mercy Kansas City

Jonathan Chen

Children's Hospital of Philadelphia

Andrew Cheng

Children's Hospital Los Angeles

Meryl S. Cohen

Children's Hospital of Philadelphia

Mitchell Cohen

*Inova L.J. Murphy Children's Hospital,
(Falls Church, VA)*

Andrew T. Costarino

Children's Hospital of Philadelphia

William DeCampi

*Orlando Health Arnold Palmer
Hospital for Children*

Meg Didier

Patient Engagement, Global Liver Institute

Jonathan Dillman

*Cincinnati Children's Hospital
Medical Center*

Kathryn M. Dodds

Children's Hospital of Philadelphia

Yoav Dori

Children's Hospital of Philadelphia

Stacy Drant

Children's Hospital of Philadelphia

Pirooz Eghtesady

St. Louis Children's Hospital

Matthew Elias

Children's Hospital of Philadelphia

Jesse J. Esch

Boston Children's Hospital

Justin Farr

Children's Hospital of Philadelphia

Jamie Fitzgerald

Children's Hospital of Philadelphia

Mark A. Fogel

Children's Hospital of Philadelphia

Wayne J. Franklin

Phoenix Children's Hospital

Mark Friedberg

*The Hospital for Sick Children (SickKids),
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Yale New Haven Hospital

Stephanie Fuller

Children's Hospital of Philadelphia

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*Cincinnati Children's Hospital Medical
Center*

Dana Gal

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Children's Mercy Kansas City

Matthew J. Gillespie

Children's Hospital of Philadelphia

Salil Ginde

Children's Wisconsin

Andrew C. Glatz

St. Louis Children's Hospital

Thomas Glenn

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David J. Goldberg

Children's Hospital of Philadelphia

Elizabeth Goldmuntz

Children's Hospital of Philadelphia

Michael P. Goldsmith

Children's Hospital of Philadelphia

Angela Gooden

Texas Children's Hospital

Lisa Graybill

Phoenix Children's Hospital

Faculty continued on next page>

FACULTY *(continued)*

Jesse Hansen

*C.S. Mott Children's Hospital,
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Jamie Harrington

Children's Hospital Los Angeles

Katherine Harrison

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David A. Hehir

Children's Hospital of Philadelphia

Moira B. Hilscher

Mayo Clinic (Rochester, MN)

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Daniel Hyman

Children's Hospital of Philadelphia

Christopher Janson

Children's Hospital of Philadelphia

Matthew A. Jolley

Children's Hospital of Philadelphia

Paul F. Kantor

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Tara Karamlou

Cleveland Clinic

Nadine Kasparian

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Medical Center*

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*Perelman School of Medicine,
University of Pennsylvania*

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Yuli Y. Kim

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Molly K. King

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*The Hospital for Sick Children (SickKids),
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Beth Lang

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Cura Strategies (Arlington, VA)

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Robert Meyer

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Deepa Mokshagundam

St. Louis Children's Hospital

Anita J. Moon-Grady

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Shobha S. Natarajan

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James E. O'Brien

Children's Mercy Kansas City

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Matthew J. O'Connor

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Children's Hospital of Philadelphia

Robert Palermo

Children's Hospital of Philadelphia

Stephen Paridon

Children's Hospital of Philadelphia

Anitha Parthiba

Texas Children's Hospital

Sheetal R. Patel

Lurie Children's Hospital of Chicago

Lacie Patterson

Sisters by Heart (Valley Center, CA)

Faculty continued on next page>

FACULTY *(continued)*

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Children's Hospital of Philadelphia

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Texas Children's Hospital

Katie Penson

Phoenix Children's Hospital

Carina Perez

Phoenix Children's Hospital

Christopher Petit

New York-Presbyterian Morgan Stanley

Children's Hospital

Diane M. Pickles

Additional Ventures (Boston)

Erin Pinto

Children's Hospital of Philadelphia

Jayant "Nick" Pratap

Children's Hospital of Philadelphia

Tamar J. Preminger

Children's Hospital of Philadelphia

Elizabeth B. Rand

Children's Hospital of Philadelphia

Chitra Ravishankar

Children's Hospital of Philadelphia

Stacy L. Reynolds

Children's Mercy Kansas City

Toby A. Rockefeller

Children's Mercy Kansas City

Lindsay S. Rogers

Children's Hospital of Philadelphia

Jonathan J. Rome

Children's Hospital of Philadelphia

Tami Rosenthal

Children's Hospital of Philadelphia

Joseph Rossano

Children's Hospital of Philadelphia

Jack Rychik (Course Director)

Children's Hospital of Philadelphia

Craig A. Sable

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(Washington, DC)

Aaron Schreck

Phoenix Children's Hospital

Mark Schwartz

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Maully J. Shah

Children's Hospital of Philadelphia

Amanda J. Shillingford

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Christopher L. Smith

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Children's Health (Dallas)

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Animesh Tandon

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