

Cardiology 2018

21st Annual
Update on Pediatric
and Congenital
Cardiovascular Disease

EFFECTIVE TEAMS, IMPROVING OUTCOMES

Feb 21 – 25, 2018

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



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Children's Hospital
of Philadelphia®
Cardiac Center

Welcome

Today's practice of pediatric and congenital cardiovascular medicine spans a wide spectrum of care both from the temporal perspective, as well as across a wide variety of disciplines. State-of-the-art management today not only includes proper treatment of the heart disease itself, but also better understanding and care strategies for the myriad consequences and associated challenges of congenital and pediatric heart disease. With this approach in mind, we present our conference, the **21st Annual Update on Pediatric and Congenital Cardiovascular Disease**. Our theme this year is "Effective Teams, Improving Outcomes." The course faculty will present multiple talks in plenary sessions, as well as presentations in subspecialty breakout sessions and a series of moderated panels of experts, covering all areas and topics related to the comprehensive care of the unborn, neonate, child and young adult with cardiovascular disease. Through effective learning and improved understanding, the goals of this educational conference are to give healthcare providers the tools necessary to create a normal quality and duration of life for individuals with pediatric and congenital cardiovascular disease.

Topics will include:

- Future directions in pediatric and congenital cardiovascular care and science
- The "team approach" to best managing pediatric and congenital cardiovascular disease
- Overcoming adversity: Surviving and thriving with congenital heart disease
- Exercise and cardiovascular wellness in the child and young adult
- Quality improvement in pediatric and congenital heart care
- Updates on the latest in cardiac surgery, single ventricle care, lymphatics, heart failure/transplant, fetal heart care, adult congenital heart care and many other topics
- PLUS — a symposium dedicated to understanding the Fontan circulation, its challenges, and what we can do about them

The many benefits of attending include:

- Opportunities to attend focused panel discussions of controversial topics and clinical conundrums
- Individual program tracks for nurses and for cardiology fellows/trainees, including research training
- Opportunities to network with hundreds of colleagues from around the world
- More than 150 abstracts and posters on the latest research in our field
- More than 35 hours of physician and more than 30 hours of nursing continuing medical education credits

Course Objectives 2018

At the completion of this full program, the participant will be better able to:

- Identify the challenges and dilemmas as well as the latest innovations in science, clinical management and healthcare delivery for the patient with pediatric and congenital cardiovascular disease
- Manage complex conditions of pediatric and congenital cardiovascular disease
- Describe the latest innovations in science, clinical management and healthcare delivery for the patient with pediatric and congenital cardiovascular disease
- Understand the pathophysiology of pediatric and congenital cardiovascular disease throughout the different stages of life from fetus through adult
- Describe current challenges, dilemmas and innovative strategies for management of the patient with the single ventricle type of congenital heart disease

Call for Abstracts

Abstract Submission Deadline:
Monday, Nov. 20, 2017 (Noon EST)

Notification of Acceptance:
Monday, Dec. 11, 2017

Oral Abstract Presentations:
Thursday, Feb. 22 and
Friday, Feb. 23, 2018

Poster Abstract Presentation:
Thursday, Feb. 22 through
Saturday, Feb. 24, 2018

Registration

The conference will be held Wednesday, Feb. 21 through Sunday, Feb. 25, 2018, at the Hyatt Regency Scottsdale Resort and Spa at Gainey Ranch, Scottsdale, Ariz. Registration will take place Wednesday, Feb. 21, from 6:30 a.m. to 6 p.m., and Thursday, Feb. 22, from 6:30 a.m. to 6 p.m.

Course Fees

The registration fee for the five-day conference is \$950 for physicians and \$595 for other healthcare professionals and physicians-in-training. The registration fee includes tuition, online presentations, daily continental breakfast, lunch and conference gala reception.

Full Conference Registration: Wed, Feb. 21, 4 p.m. to Sunday, Feb. 25, 10:45 a.m.

Physicians	\$950
Nurses, Medical Students, Residents, Fellows and Other Healthcare Professionals	\$595

Register online: chop.cloud-cme.com

Optional Preconference Seminars

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

- #1: The Essentials for Successful Training and Early Career Skills in Pediatric Cardiology \$150
- #2: Advanced Imaging in Pediatric and Congenital Cardiovascular Disease \$150
- #3: Congenital Heart Disease and Postoperative Management: A Comprehensive Review for Nursing and Front-line Providers \$150

One-day Symposium: "The Challenges of the Fontan Circulation: Where We Are Today, Where We Need to Be" ONLY

Sunday, Feb. 25, 7:45 a.m. to 5:45 p.m.

- Physicians \$200
- Other Healthcare Professionals \$125
- Parents/Guardians \$100

Register online: chop.cloud-cme.com

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 46.25 *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. 21, 2018

Optional Preconference Seminars – 8 a.m. to 3:30 p.m.

- #1 Congenital Heart Disease and Postoperative Management: A Comprehensive Review for Nursing and Front-line Providers = 7.25
- #2 Advanced Imaging in Pediatric and Congenital Cardiovascular Disease = 6.75
- #3 The Essentials for Successful Training and Early Career Skills in Pediatric Cardiology = 5.75

Main Conference: Wednesday, Feb. 21, 4 p.m. to Sunday, Feb. 25, 2018, 10:45 a.m.

Total *AMA PRA Category 1 credits*[™] = 32.75

Post Conference: Sunday, Feb. 25, 7:45 a.m. – 5:45 p.m.

Total *AMA PRA Category 1 credits*[™] = 9.25

Nursing Accreditation Statement

This activity has been submitted to the PA State Nurses Association for approval to award contact hours. The PA State Nurses Association is accredited as an approver of continuing nursing education 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. In order to process refunds for course withdrawals, cancellations must be received in writing by Monday, Feb. 5, 2018. Refunds will be issued for the amount of registration less a \$75 service charge.

Hotel Information

A block of rooms has been reserved at the Hyatt Regency Scottsdale Resort and Spa at Gainey Ranch. The group rate is \$299 single or double occupancy plus a 13.92 percent room tax. Participants must reserve their own hotel accommodations by calling Passkey at 1-888-421-1442. Please do not call the hotel directly. To reserve your hotel room online, please go to <https://aws.passkey.com/go/chop>. For the reduced conference rate, mention the CHOP Pediatric Cardiology Conference when making the reservation. The conference rate begins Monday, Feb. 19, 2018. This rate will only be available until Monday, Jan. 29, 2018. Reservations made after Jan. 29 will be accepted on space and rate availability.

Ground Transportation

Shuttle service from Phoenix Sky Harbor Airport to the Hyatt Regency Scottsdale Resort and Spa at Gainey Ranch is available through SuperShuttle Shared-ride Van Service. Round-trip tickets cost approximately \$48. Reservations are not necessary for the SuperShuttle Van Service. Reservations are only needed if you require a wheelchair van. For wheelchair van reservations, please call 602-244-9000 or 800-258-3826 at least 24 hours in advance.

WEDNESDAY, FEB. 21

Optional Preconference #1

Congenital Heart Disease and Postoperative Management:
A Comprehensive Review for Nursing and Front-line Providers

- 7:30 a.m. Terminology of “Normal” Cardiac Anatomy
Paul Weinberg, MD
- 7:45 a.m. How Soon Can We Know?
Jill Combs, MSN
- 8 a.m. Open Heart Surgery: CPB, X clamp, Circulatory Arrest
Stephanie Fuller, MD
- 8:30 a.m. Early Postoperative Management Issues and Concerns
Maryam Naim, MD
- 8:45 a.m. Break
- 9 a.m. ECHO: Effusions, Function, Obstruction, Regurgitation, Thrombus and Holes
David Goldberg, MD
- 9:15 a.m. What the Chest X-ray Can and Cannot Show You
Geoffrey Bird, MD
- 9:30 a.m. How to Decipher Cardiac Catheterization Data
Matthew Schwartz, MD
- 9:45 a.m. Postoperative Arrhythmias: SVT, JET, Heart Block, VT
Maully Shah, MBBS
- 10 a.m. ECMO and Mechanical Support in Children with CHD
Chitra Ravishankar, MD
- 10:15 a.m. Sedation and Pain Management after Cardiac Surgery
Aaron Dewitt, MD
- 10:30 a.m. Break
- 10:40 a.m. Ventricular Septal Defect
Anatomy/Morphology – *Paul Weinberg, MD*
Surgery – *William DeCampli, MD, PhD*
Postoperative Care and Outcomes – *Kristen Sullivan, CRNP*
- 11 a.m. Complete Common Atrioventricular Canal Defect
Anatomy/Morphology – *Paul Weinberg, MD*
Surgery – *James E. O'Brien, MD*
Postoperative Care and Outcomes – *Lisa Laddish, DNP, RN, CPNP-AC, PC*
- 11:20 a.m. Tetralogy of Fallot
Anatomy/Morphology – *Paul Weinberg, MD*
Surgery – *James O'Brien, MD*
Postoperative Care and Outcomes – *Lisa Laddish, DNP, RN, CPNP-AC, PC*
- 11:40 a.m. Truncus Arteriosus
Anatomy/Morphology – *Paul Weinberg, MD*
Surgery – *William DeCampli, MD, PhD*
Postoperative Care and Outcomes – *Kathryn Dodds, MSN, CPNP-AC*
- Noon D-Transition of the Great Arteries/Arterial Switch
Anatomy/Morphology – *Paul Weinberg, MD*
Surgery – *Stephanie Fuller, MD*
Postoperative Care and Outcomes – *Kathryn Dodds, MSN, CPNP-AC*
- 12:20 p.m. Lunch



- 12:40 p.m. Total Anomalous Pulmonary Venous Return
Anatomy/Morphology – *Paul Weinberg, MD*
Surgery – *James O'Brien, MD*
Postoperative Care and Outcomes – *Lisa Laddish, DNP, RN, CPNP-AC, PC*
- 1 p.m. Coarctation
Anatomy/Morphology – *Paul Weinberg, MD*
Surgery – *William DeCampli, MD, PhD*
Postoperative Care and Outcomes – *Lisa Laddish, DNP, RN, CPNP-AC, PC*
- 1:15 p.m. Single Ventricle: Stage 1, Bidirectional Glenn, Fontan
Anatomy/Morphology – *Paul Weinberg, MD*
Surgery – *Stephanie Fuller, MD*
Postoperative Care and Outcomes – *Kathryn Dodds, MSN, CPNP-AC*
- 2:15 p.m. Discharge Planning and Home Monitoring
Courtney Howell, CPNP, AC-PC
- 2:30 p.m. Congenital Heart Disease and the Brain
Daniel Licht, MD
- 2:45 p.m. Growing Up with Congenital Heart Disease
Yuli Kim, MD
- 3 p.m. Q and A
- 3:30 p.m. Adjourn

Optional Preconference #2

Advanced Imaging in Pediatric and Congenital
Cardiovascular Disease

- 8 a.m. Advanced Techniques in Echocardiography
Michael Quartermain, MD
- 8:30 a.m. Echocardiography to Assess Ventricular Function:
Techniques, Strengths and Limitations
Laura Mercer-Rosa, MD
- 9 a.m. Computed Tomographic (CT) Imaging in CHD:
Indications and Utility
Anthony Hlavacek, MD
- 9:30 a.m. Cardiac MR: Anatomy and Tissue Characterization
Lars Grosse-Wortmann, MD



- 10 a.m. Break
- 10:15 a.m. “I Didn’t Know You Could Do That!”
New Techniques in Cardiac MRI
Mark Fogel, MD
- 10:30 a.m. MRI-based Cardiac Catheterization
Kanishka Ratnayaka, MD
- 10:50 a.m. Lymphatic Imaging: A Revolution in Circulatory Imaging Is Taking Place
Yoav Dori, MD, PhD
- 11:10 a.m. Cardiac MR: Ventricular Function and Flow
Kevin Whitehead, MD, PhD
- 11:30 a.m. 3D Printing of Complex Cardiac Structures
Mark Fogel, MD
- 11:50 a.m. Advanced Imaging Q & A
Advanced Imaging Faculty
- Noon Lunch
- 12:30 p.m. Advanced Imaging in Specific Condition: Tetralogy of Fallot and Truncus Arteriosus – ECHO – *Shobha Natarajan, MD*
- 12:50 p.m. Advanced Imaging in Specific Condition: Tetralogy of Fallot and Truncus Arteriosus – MRI – *Lars Grosse-Wortmann, MD*
- 1:10 p.m. Advanced Imaging in Specific Condition: Cardiomyopathy/ Myocarditis/Heart Failure – ECHO – *Matthew O’Connor, MD*
- 1:30 p.m. Advanced Imaging in Specific Condition: Cardiomyopathy/ Myocarditis/Heart Failure – MRI – *Kevin Whitehead, MD, PhD*

- 1:50 p.m. Advanced Imaging in Specific Condition: Single Ventricle Throughout Stages of Reconstruction – ECHO
Peter Frommelt, MD
- 2:20 p.m. Advanced Imaging in Specific Condition: Single Ventricle Throughout Stages of Reconstruction – MRI
Rahul Rathod, MD
- 3 p.m. The Conventional, the Controversial and the Unusual (but Fascinating): Cases Where Advanced Imaging Altered Understanding and Care
Faculty
- 3:30 p.m. Adjourn

Optional Preconference #3
The Essentials for Successful Training and Early Career Skills in Pediatric Cardiology

- 8 a.m. Fostering the Right Culture in the Workplace
Alan Friedman, MD
- 8:20 a.m. Research Training: Having the Right Training and Platform for a Successful Academic Career
Andrew Glatz, MD
- 8:40 a.m. Choosing a Track: Subspecialty Interest, Academics and Developing a Busy Clinical Practice
Cheryl Kurer, MD
- 9 a.m. The Delicate Relationship Between Career and Home Life
Meryl Cohen, MD

- 9:20 a.m. Mentorship and Research Training for a Career in Pediatric Cardiology
Bruce Gelb, MD
- 9:40 a.m. Panel Discussion
Faculty
- 10 a.m. Break
- 10:20 a.m. Academics: How to Craft and Write a Great Paper (What Reviewers Are Looking for)
Tara Karamlou, MD
- 10:40 a.m. New Approaches to Learning: Cardiology Fellow Boot Camp
Catherine Krawczeski, MD
- 11 a.m. Academics: Crafting the Right Research Project
Laura Mercer-Rosa, MD
- 11:20 a.m. Mentorship and Research Training for a Career in Pediatric Cardiology
Jane Newburger, MD, MPH
- 11:40 a.m. Panel Discussion
Faculty
- Noon Lunch
- 12:30 p.m. Academics: How to Give a Great Talk
Girish Shirali, MD, MBBS
- 1-3 p.m. Abstract Presentations: Presentations and Critique
David Goldberg, MD, and Faculty
- 3 p.m. Adjourn

WEDNESDAY, FEB. 21

Opening Plenary Session • 4 – 6:20 p.m.

Let's Begin With the Future:
What to Expect in the Next Decade

- 4 p.m. **Opening Remarks**
Jack Rychik, MD
- 4:05 p.m. **Genetics and the Potential for “Personalized Precision Medicine” in Congenital Heart Care**
Bruce Gelb, MD
- 4:20 p.m. **The Artificial Womb: Extracorporeal Support for the Fetus**
Marcus Davey, PhD
- 4:35 p.m. **How We Expect Data Will Drive Discovery and Innovative Care**
Adam Resnick, PhD
- 4:50 p.m. **Special Featured Lecture: Alternative Medicine and its Role in Healthcare**
Paul Offit, MD
- 5:05 p.m. **Transcatheter Valves = “Plastics” ... (*The Graduate*)**
Matthew Gillespie, MD
- 5:20 p.m. **Congenital Heart Surgery: Are We Done with Surgical Innovation or Is There Room to Do More?**
Sitaram Emani, MD
- 5:35 p.m. **The Digital Transformation of Healthcare**
Simon Kos, MBBS, MBA – CMO, Microsoft
- 5:50 p.m. **The Increasing Role of Social Media in CHD Care**
Kurt Shumacher, MD
- 6:05 p.m. **Managing the Growing ACHD Population Worldwide and Their Unique Concerns**
Thomas Glenn, MD
- 6:20 p.m. **Adjourn**

Dinner on your own



THURSDAY, FEB. 22

- 7 – 8 a.m. **Sunrise Session I**
Electrocardiography: How to Read ECGs and Real Cases
Mitchell Cohen, MD; Maully Shah, MBBS; Edward Walsh, MD

- Sunrise Session II**
Understanding the Principles of Cardiac Catheterization
Stephen Kaine, MD; Matthew Schwartz, MD

Plenary Session II

Where Did We Come from and Where Are We Going:
How Our History Informs the Future in the Field of ...

- 8 a.m. **Cardiac Catheterization**
Jonathan Rome, MD
- 8:20 a.m. **Electrophysiology**
Edward Walsh, MD
- 8:40 a.m. **Echocardiography**
Norman Silverman, MD
- 9 a.m. **Congenital Heart Surgery**
Thomas Spray, MD
- 9:20 a.m. **Pediatric Heart Nursing**
Patricia Hickey, PhD, MBA, RN
- 9:40 a.m. **Heart Transplantation**
Robert Shaddy, MD

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

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

- NURSING: Truth or Fiction ... What Does the Evidence Say?**
- 11 a.m. **Can Patients Safely Go Home on Inotropic Infusion Therapy?** – *Leigh Ann Difusco, MSN, RN, PCNS-BC*
- 11:15 a.m. **Preventing Wound Infections: Is the Truth Out There?** – *Catherine Woodward, DNP, PNP-AC*
- 11:30 a.m. **So Which Is Safer at Home: GT or NGT?** – *Belinda Large, RN, MSN, CPNP-AC/PC*
- 11:45 a.m. **Is Thermoregulation Important?** – *Stephanie Helman, MSN, RN, CCRN, CCNS*
- Noon **“What the Heck, Is It Really NEC?”** – *Lisa Laddish, DNP, RN, CPNP-AC/PC*
- 12:15 p.m. **What Are the Risks for Interstage Mortality?** – *Alyson Stagg, MSN, CRNP*
- 12:30 p.m. **Is Breastfeeding Possible in the Infant with HLHS?** – *Britt Fredriksen, RN, MS*
- 12:45 p.m. **Can't Digital Technology Improve Nursing Care?** – *Molly McCarthy, RN, MBA*
- 1 p.m. **Adjourn**

THURSDAY, FEB. 22

Simultaneous Breakout Sessions continued

Exercise and Sports in Pediatric and Congenital Cardiovascular Conditions

- 11 a.m. What to Recommend: Coronary Artery Anomalies – *Julie Brothers, MD*
- 11:15 a.m. Sexual Activity in CHD and Channelopathies: The Pink Elephant No One Wants to Discuss – *Mitchell Cohen, MD*
- 11:30 a.m. What to Recommend: Fontan Circulation – *Yves D’Udekem, MD*
- 11:45 a.m. Wellness Aspects of Physical Fitness: How the Physiology of Exercise Improves Physical Health, Mental Health and Quality of Life – *Todd Nowlen, MD*
- Noon What to Recommend: Aortic Valve Disease – *Stephen Paridon, MD*
- 12:15 p.m. Beyond Beta-blockers: Moving to Gene-specific Therapies for Channelopathies – *Maully Shah, MBBS*
- 12:30 p.m. What to Recommend: Tetralogy of Fallot – *Edward Walsh, MD*
- 12:45 p.m. Q and A – *Faculty*
- 1 p.m. Adjourn

The Era of Transcatheter Device and Interventional Therapies Has Arrived!

- 11 a.m. Innovations in Device Technology for Congenital Heart Care – *Daniel Levi, MD*
- 11:15 a.m. Who Are the Candidates for Pulmonary Valve Implantation and How Should We Evaluate Candidacy? – *Andrew Glatz, MD*
- 11:30 a.m. How Should We Follow Patients after Transcatheter Valve Implantation? What Are the Outcomes Thus Far? – *Bryan Goldstein, MD*
- 11:45 a.m. The Spectrum of Current Devices for Pulmonic and Aortic Valves and Techniques for Implantation – *Audrey Marshall, MD*
- Noon Transcatheter Creation of a Cavopulmonary Connection: Evolution of a New Strategy – *Kanishka Ratnayaka, MD*
- 12:15 p.m. Future Innovations and Applications – *Matthew Gillespie, MD*
- 12:30 p.m. Case Reviews – *Stephen Kaine, MD, and Faculty Panel*
- 1 p.m. Adjourn

Focus On: The Tricuspid Valve

- 11 a.m. Anatomy of the Tricuspid Valve: Normal and Abnormal – *Paul Weinberg, MD*
- 11:20 a.m. Tricuspid Valve Disease: Manifestations in the Fetus – *Norman Silverman, MD*
- 11:40 a.m. Imaging and Grading Tricuspid Valve Dysfunction and Its Impact on RV Performance – *Laura Mercer-Rosa, MD*
- Noon Tricuspid Valve Disease: Manifestations in the Child and Young Adult – *Craig Fleishman, MD*
- 12:20 p.m. The Spectrum of Surgical Interventions for Tricuspid Valve Conditions and Their Outcomes – *Ram Kumar Subramanyan MD, PhD*
- 12:40 p.m. Managing the Faulty Tricuspid Valve When It Is the Systemic Atrioventricular Valve – *Stephanie Fuller, MD*
- 1 p.m. Adjourn

Surgical Strategies for Complex Conditions

- 11 a.m. Techniques for Approaching the Challenging Mitral Valve – *Sitaram Emani, MD*
- 11:20 a.m. Aortic Valve Repair – *James Kirklin, MD*
- 11:40 a.m. Aortic Arch Hypoplasia – *E. Dean McKenzie, MD*
- Noon Solutions for TGA, VSD and LV Outflow Obstruction – *Victor Morell, MD*
- 12:20 p.m. The “Double-Switch” for Corrected TGA – *Richard Ohye, MD*
- 12:40 p.m. The Ross Procedure – *Peter Pastuszko, MD*
- 1 p.m. Adjourn

Let’s Get Mechanical: Mechanical Assist and ECMO

- 11 a.m. Bivalrudin Use for Mechanical Assist – *Aaron DeWitt, MD*
- 11:15 a.m. Challenges and Lessons Learned for ECMO Transport – *Klayton Buckley, CCP*
- 11:30 a.m. Use of Revolution for Short-term VAD/ECMO – *Daniel Velez, MD*
- 11:45 a.m. Roller Versus Centrifugal Pump for ECMO – *Tami Rosenthal, CCP, MBA*
- Noon Hemostasis and Anticoagulation – *Venkat Shankar, MBBS*
- 12:15 p.m. Heartware: Unique Pediatric Applications – *Brandon Shade, CCP, LP*
- 12:30 p.m. Outcomes of Pediatric Patients Supported with Continuous Flow VAD – *Joseph Rossano, MD, MS*
- 12:45 p.m. Panel Discussion
- 1 p.m. Adjourn

THURSDAY, FEB. 22

Boxed Lunch • 1 – 2 p.m.

- 1:15 – 1:45 p.m. **Lunch Talk: Focus on ...**
Quality Improvement in Congenital Heart Care
Michael Gaies, MD; Stephen Kaine, MD; Shobha Natarajan, MD; Anitha Parthiban, MD; and Susan Schachtner, MD
- 2:15 – 3:15 p.m. **Moderated Panel of Experts**
Decision-making in Complex Situations: We Are Going to Do the Following ...
Panel Leader: Jack Rychik, MD
Yves D'Udekem, MD; Carlos Mery, MD; Victor Morell, MD; Richard Ohye, MD; and Luca Vricella, MD
- 3:15 – 4:15 p.m. **Oral Abstracts**

Plenary Session III

Effective Teams, Improving Results

- 4:15 p.m. **The Organization and Dynamics of Teams in Achieving High-level Outcomes (Organizational Structure, Communication, Authority/Independence)**
James Steven, MD
- 4:30 p.m. **Node of Transitional Care I: From Prenatal to Postnatal Life – Role of the Obstetrical Specialist in Congenital Heart Care**
Julie Moldenhauer, MD
- 4:45 p.m. **Node of Transitional Care II: Delivery, Stabilization and Neonatal Care**
Natalie Rintoul, MD
- 5 p.m. **Node of Transitional Care III: Between the Operating Room and Intensive Care Unit – Continuity, Hand-off and Communication**
Geoffrey Bird, MD
- 5:15 p.m. **Node of Transitional Care IV: Between Inpatient and Outpatient Care Services**
Stuart Berger, MD
- 5:30 p.m. **Nursing Care as a Team Sport in Pediatrics**
Kim Delaney, RN, BSN
- 5:45 p.m. **I Am Not a Cardiologist! (Paraphrasing *The Elephant Man*)**
Daniel Licht, MD
- 6 p.m. **Panel Discussion**
- 6:15 p.m. **Adjourn**



FRIDAY, FEB. 23

7 – 8 a.m. **Sunrise Session I**
Understanding the Benefits and Limitations of Echocardiography for the Frontline Provider
Meryl Cohen, MD; Shobha Natarajan, MD; Michael Quartermain, MD

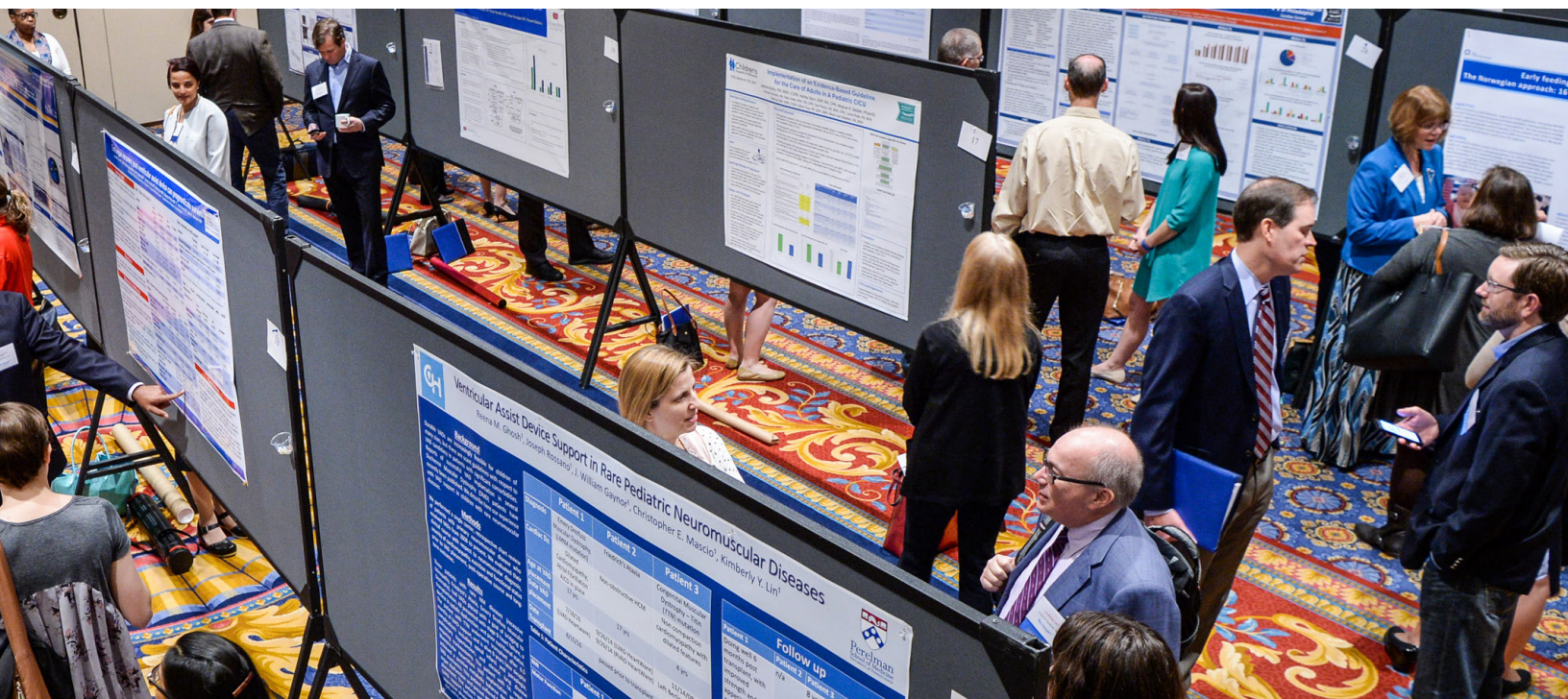
Sunrise Session II
My Favorite “Category” of Medications: What Should You Know About These Medications?
Stephanie Culver, DNP, CPNP-BC; Susan Park, CPNP, CCTC; Kathryn Dodds, MSN, CPNP-AC; Stacy Reynolds, DNP, CPNP

Plenary Session IV

Surviving and Thriving With ...

- 8 a.m. **Ebstein’s Anomaly**
Frank Cetta, MD
- 8:20 a.m. **Tetralogy of Fallot**
Elizabeth Goldmuntz, MD
- 8:40 a.m. **Aortic Valve Disease**
Yuli Kim, MD
- 9 a.m. **D-Transposition of the Great Arteries**
Jane Newburger, MD, MPH
- 9:20 a.m. **Hypoplastic Left Heart Syndrome**
Jack Rychik, MD
- 9:40 a.m. **Panel Discussion**
Faculty
- 10 a.m. **Adjourn**

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



FRIDAY, FEB. 23

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

NURSING: The Top 8 Nursing Abstracts Will Be Formally Presented and Discussed – *Nursing Faculty*

Heart Care Before Birth

- 11 a.m. The Fetal Surgery MMC Experience: A Model for How a Systematic Prenatal Approach for a Birth Defect Impacts Long-term Outcomes – *Julie Moldenhauer, MD*
- 11:20 a.m. Characterizing Severity and Counseling for Heterotaxy Syndrome Before Birth – *Christopher Lindblade, MD*
- 11:40 a.m. Twin-twin Transfusion Syndrome: Prenatal Pathophysiology Influences Long-term Outcomes – *Jay Pruetz, MD*
- Noon Maternal Hyperoxygenation: Utility as a Provocative Test in Fetal Cardiovascular Evaluation – *Jack Rychik, MD*
- 12:20 p.m. Will We Ever Be Able to Prenatally Predict the Need for Postnatal Balloon Atrial Septostomy in the Fetus with TGA? – *Norman Silverman, MD*
- 12:40 p.m. Integrated Counseling for the Fetus and Family in Prenatal Heart Disease – *Tara Swanson, MD*
- 1 p.m. Adjourn

This Is so Frustrating! How do I Deal with and Handle ...

- 11 a.m. Characterizing and Deciding the Significance of a Post-operative Residual Ventricular Septal Defect – *Meryl Cohen, MD*
- 11:20 a.m. Plastic Bronchitis after Fontan – *Yoav Dori, MD, PhD*
- 11:40 a.m. The Restrictive Conoventricular VSD (But with High Qp: Qs) That Won't Spontaneously Close – *Daniel Levi, MD*
- Noon Vessel "Resistance" to Intervention: Recurrent Aortic Arch Narrowing or Branch Pulmonary Artery Narrowing – *Audrey Marshall, MD*
- 12:20 p.m. Fetal Heart Block with Impending Fetal Hydrops – *Jay Pruetz, MD*
- 12:40 p.m. Recurrent Syncope of Unclear Etiology – *Paul Stephens, MD*
- 1 p.m. Adjourn

Focus on: Aortopathy in the Young

- 11 a.m. Anatomical Considerations – *Paul Weinberg, MD*
- 11:15 a.m. Genetic Considerations in Aortopathy – *Harry Dietz, MD*
- 11:30 a.m. The Spectrum of Disease: William's Syndrome – *Marie Gleason, MD*
- 11:45 a.m. Aortic Dilation in CHD: When Is It Normal? When Is It Abnormal? – *Yuli Kim, MD*
- Noon The Spectrum of Disease: Marfan's Syndrome – *Stephen Paridon, MD*
- 12:15 p.m. Imaging Guidelines for Intervention in Aortopathy – *Michael Quartermain, MD*
- 12:30 p.m. Surgical Strategies for Treating Aortopathy in the Young – *Luca Vricella, MD*
- 12:45 p.m. Panel Discussion – *Faculty*
- 1 p.m. Adjourn

Cardiomyopathy, Heart Failure and Transplantation

- 11 a.m. Cardiac Transplant in the Adult with CHD – *Victor Morell, MD*
- 11:15 a.m. Cardiomyopathies in Noonan Syndrome and the Other RASopathies – *Bruce Gelb, MD*
- 11:30 a.m. Functional Status of Survivors of Mechanical Assist Devices and of Heart Transplantation – *Christopher Almond, MD*
- 11:45 a.m. Human Leukocyte Antibodies (HLA) in Pediatric Heart Transplantation – *Matthew O'Connor, MD*
- Noon Medical Frailty: A New Approach to Characterizing Chronic Pediatric Cardiovascular Conditions – *Anitha Parthiban, MD*
- 12:15 p.m. Resource Utilization and the Growing Cost of Care for Pediatric Heart Failure – *Joseph Rossano, MD, MS*
- 12:30 p.m. Drug Therapy for Pediatric Heart Failure: The Old, the New and the Future – *Robert Shaddy, MD*
- 12:45 p.m. Transplant Rejection: Mechanisms, Diagnosis and Current Treatment Strategies – *Steven Zangwill, MD*
- 1 p.m. Adjourn

Let's Get Innovative in Blood Management

- 11 a.m. Bloodless Cardiopulmonary Bypass: Is It Possible for Everyone? – *James Steven, MD*
- 11:20 a.m. VAVD: Does Sucker Return Make a Difference? – *Brandon Shade, CCP*
- 11:40 a.m. Use of TEG to Customize Blood Management – *Klayton Buckley, CCP*
- Noon Modified Ultrafiltration: Is It Worth Your Time? – *Edward Harman, MS, CCP*
- 12:20 p.m. Current Practice and Trends: Interactive Audience Participation Session: Audience Will Be Presented with a Series of Questions, Responses Will Be Posted and a Panel-led Discussion Will ensue – *Perfusion Faculty*

Boxed Lunch • 1 – 2 p.m.

- 1:15 – 1:45 p.m. **Lunch Talk: Focus on ...**
Vascular Health and Angiogenesis in Congenital Heart Care
Andrew Glatz, MD; Ram Kumar Subramanyan, MD, PhD
- 2:15 – 3:15 p.m. **Situation Room: Moderated Panel of Experts**
Crisis in the ICU: What to Do About ...
Panel Leader: Joseph Rossano, MD, MS
Chris Feudtner, MD, PhD; Michael Gaies, MD; Catherine Krawczeski, MD; Maryam Naim, MD; Venkat Shankar, MBBS
- 3:15 – 4:15 p.m. **Oral Abstracts**

Plenary Session V

What Besides the Heart Influences Outcomes in Congenital Heart Disease?

- 4:15 p.m. **The Unmeasured Variables Surrounding Care**
Michael Gaies, MD
- 4:30 p.m. **Life Before Birth: Impact of Prenatal Environment**
J. William Gaynor, MD
- 4:45 p.m. **The Blue Print: Our Genes**
Elizabeth Goldmuntz, MD
- 5 p.m. **Psychological and Social Factors**
Adrienne Kovacs, PhD
- 5:15 p.m. **Extracardiac Malformations and Their Influence on Surgical Outcomes**
Carlos Mery, MD
- 5:30 p.m. **Nutrition and Weight Gain in the Infant with CHD**
Chitra Ravishankar, MD
- 5:45 p.m. **Panel Discussion**
Faculty
- 6 p.m. **Adjourn**

6:15 p.m. Sunset Reception



SATURDAY, FEB. 24

HEART RUN 5K

CARING FOR KIDS' HEARTS

Exercise your body and your mind!

Date: Saturday, Feb. 24, 2018

Time: 6:15 – 8 a.m.

Where: Hyatt Regency Scottsdale Resort and Spa at Gainey Ranch

Registration is required and is limited to the first 200 registrants.

The fee is \$25 (which includes a 5K Heart Run event T-shirt).

Come out to run or to cheer on your colleagues!



Plenary Session VI

Awards and Featured Lectures

- 8 a.m. 15th Annual William J. Rashkind Memorial Lecture in Pediatric Cardiology
Tal Geva, MD
- 8:20 a.m. 17th Annual C. Walton Lillehei Memorial Lecture in Cardiovascular Surgery
James Kirklin, MD
- 8:40 a.m. Ninth Annual Jack Downes Lecture in Cardiac Anesthesia and Critical Care
Dean Andropoulos, MD
- 9 a.m. Sixth Annual Featured Lecture in the Cardiovascular Basic and Translational Sciences
Harry Dietz, MD
- 9:20 a.m. 17th Annual Featured Lecture in Cardiovascular Nursing: T. Garrett Rauch Memorial Lecture
Kathryn Dodds, MSN, CRNP-AC
- 9:40 a.m. Presentation of the Outstanding Investigator and Nursing Scientist Awards
David Goldberg, MD; and Kathryn M. Dodds, MSN, CRNP-AC

10 – 11 a.m. Break/Visit the Exhibits/Poster Session III

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

NURSING — Challenging Cases: It Takes a Village to Care for Patients

Join the nursing faculty in a presentation of challenging cases that highlight the importance of working as a team.

Acquired Heart Disease in the Young: What's New in 2018?

- 11 a.m. Hyperlipidemia – *Julie Brothers, MD*
- 11:20 a.m. Endocarditis – *Alan Friedman, MD*
- 11:40 a.m. Kawasaki Disease – *Jane Newburger, MD, MPH*
- Noon Myocarditis – *Matthew O'Connor, MD*
- 12:20 p.m. Rheumatic Fever – *Lloyd Tani, MD*
- 12:40 p.m. Obesity and Its Impact on CHD – *Meryl Cohen, MD*
- 1 p.m. Adjourn

Focus on: The Atrioventricular Canal Defect

- 11 a.m. Anatomical Considerations – *Paul Weinberg, MD*
- 11:20 a.m. Imaging Considerations and Assessment of Valve Balance – *Meryl Cohen, MD*
- 11:40 a.m. Neonatal Down Syndrome: Implications and its Influence on Care and Management – *Natalie Rintoul, MD*
- Noon Surgical Repair I: Initial Approach to Repair – *James O'Brien, MD*
- 12:20 p.m. Imaging Techniques for Assessment after Surgery – *Anthony Hlavacek, MD*
- 12:40 p.m. Surgical Repair II: Late Complications (Residual Valve Insufficiency, Valve Replacement, LV Outflow Obstruction) – *Stephanie Fuller, MD*
- 1 p.m. Adjourn

Healthcare Administration in CHD: Creating and Sustaining a High-functioning Team

- 11 a.m. How Does One Innovate as a Team? The Tension Between Creative Innovation and Safety in Healthcare – *Daniel Penny, MD, PhD*
- 11:15 a.m. Transparency and Patient Satisfaction in CHD Care Through the “EASE” App – *William DeCampi, MD, PhD*
- 11:30 a.m. Building the Integrated Clinical Service Line: Strategy and Implementation • The Chicago Perspective – *Benjamin Black, MBA*
- 11:45 a.m. Defining and Quantifying the Pediatric Cardiac Service Line: Understanding the Service Line's Full Economic and Financial Impact • The CHOP Perspective – *Mark Schwartz, MBA*
- Noon Regional Geographic Program Development: Benefits, Challenges and Opportunities – *Thomas Dole*
- 12:15 p.m. Building the Culture You Desire and Achieving Objectives in Your Organization: Perspective from the CEO of Phoenix Children's Hospital – *Robert Meyer*
- 12:30 p.m. Building the Culture You Desire and Achieving Objectives in Your Organization: Perspective from the CEO of Los Angeles Children's Hospital – *Paul Viviano*
- 12:45 p.m. Panel Discussion – *Faculty*
- 1 p.m. Adjourn

continued>

SATURDAY, FEB. 24

Critical Care and Anesthesia for Congenital Heart Care: 2018

- 11 a.m. The Opioid Crisis ... – *Paul Offit, MD*
- 11:20 a.m. Troubleshooting Mechanical Circulatory Device Complications in the Intensive Care Unit – *Christopher Almond, MD*
- 11:40 a.m. Utility of Dexmedetomidine in Congenital Heart Care – *Dean Andropoulos, MD*
- Noon Don't Forget the **Kidney** in the **Cardiac** Intensive Care Unit! – *Catherine Krawczeski, MD*
- 12:20 p.m. EEG Monitoring after Neonatal Cardiac Surgery – *Maryam Naim, MD*
- 12:40 p.m. Challenges in Anticoagulation in the Cardiac Intensive Care Unit – *Venkat Shankar, MBBS*
- 1 p.m. Adjourn

Let's Get Operating: Pediatric Congenital Surgery

- 11 a.m. The RCA Event: Cause and Effect – *Tami Rosenthal, CCP, MBA*
- 11:20 a.m. Lessons Learned Creating/Using a Mini Bypass Circuit – *Edward Harman, MS, CCP*
- 11:40 a.m. Selected Cerebral Perfusion: Is There a Best Practice – *James O'Brien, MD*
- Noon Pediatric CPB: Does Practice Affect Outcomes? – *J. William Gaynor, MD*
- 12:20 p.m. How We Do It and Why: Panel of Multidisciplinary Faculty Will Share Their Techniques and Rationale (with Audience Participation) – *Perfusion Faculty*
- 1 p.m. Adjourn

Lunch • 1–2 p.m.

- 1:15 – 1:45 p.m. Lunch Talk: Focus on ...
Overcoming Adversity: The Struggles of Living with CHD (school age, teenage years and adult)
Yuli Kim, MD; Adrienne Kovacs, PhD; Stacey Lihn; Thomas Glenn, MD; Scott Leezer
- 2:15 – 3:15 p.m. Situation Room: Moderated Panel of Experts
So This Is When You Need an Experienced Clinician ...
Frank Cetta, MD; Craig Fleishman, MD; Peter Frommelt, MD; Daniel Penny, MD, PhD; Chitra Ravishankar, MD; Norman Silverman, MD; Lloyd Tani, MD

Plenary Session VII

Professional Challenges for the Healthcare Provider

- 3:15 p.m. Techniques and Methods for Delivering Bad News
Aaron DeWitt, MD
- 3:30 p.m. How to Approach the Ethical Dilemma ...
Chris Feudtner, MD, PhD
- 3:45 p.m. Balancing the Personal and the Professional
E. Dean McKenzie, MD
- 4 p.m. Special Session: Dealing with and Managing Conflict: A Workshop that Will Provide You with the Tools to Change Your Professional Life!
Autumn Fiester, PhD
- 5:15 p.m. Adjourn

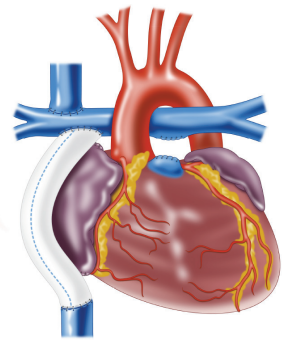
5:15 – 6:15 p.m. Highlighted Poster Session: Wine and Wisdom

- 6:15 – 7:15 p.m. QUIZ BOWL!
Your Host: Matthew Gillespie, MD
- 7:15 p.m. Adjourn



SUNDAY, FEB. 25

CHOP and The International Fontan Interest Group Present a Symposium: The Challenges of the Fontan Circulation — Where We Are, Where We Need to Be



The Fontan population is steadily growing, and close to half of them are young adults who are active members of our society. As this success unfolds, we are uncovering the burden and challenges posed by the Fontan circulation. We need to find solutions to the hurdles ahead. This one-day symposium will be composed of formal presentations by experts in the field followed by a dynamic brainstorming discussion and presentations of new ideas and projects. We want all of those interested in this extraordinary circulation to join us to share views, debate ideas and build projects. This day will see the creation of a vibrant, dynamic platform involving all the key players, including healthcare providers, patients and families.

Full conference registrants can attend until 11 a.m., but may extend for the full-day symposium for \$75. One-day symposium attendees may register as follows:

Sunday, Feb. 25, 7:45 a.m. to 5:45 p.m.

Physicians	\$200
Other Healthcare Professionals	\$125
Parents/Guardians	\$100

Session I AMA PRA Category 1 Credit(s)TM = 2.75
Session II AMA PRA Category 1 Credit(s)TM = 6.25

Day 5 Total AMA PRA Category 1 Credit(s)TM = 9.0

Register online: chop.cloud-cme.com

Session I: What We Believe We Know

- 7:45 a.m. Orientation to the Day's Activities and Sessions
Yves D'Udekem, MD; Jack Rychik, MD
- 8 a.m. Introduction: As a Patient/Parent What I Hope to Get Out of Today ...
Stacey Lihn
- 8:15 a.m. Survival Outcomes after Fontan Operation
Frank Cetta, MD
- 8:30 a.m. Pathophysiology and Mechanisms of Fontan Failure
Marc Gewillig, MD
- 8:45 a.m. Aortopulmonary Collateral Flow: Natural Adaptation or Harmful Development?
Andrew Glatz, MD
- 9 a.m. Thromboembolic Disease after Fontan
Alexander Egbe, MBBS
- 9:30 a.m. Concern about End-organ Consequences: The "Fontan Circulatory Syndrome"
Jack Rychik, MD
- 10 a.m. Concern about Neurodevelopmental Outcomes
Jane Newburger, MD, MPH
- 10:15 a.m. Concern about Mental Health and Quality of Life
Nancy Pike, PhD, RN, CPNP-AC
- 10:30 a.m. Summary and Discussion: What We (Believe) We Know
Faculty Panel
- 10:45 a.m. **ADJOURN FOR FULL CONFERENCE ATTENDEES**
- 10:45 – 11 a.m. BREAK



continued>

SUNDAY, FEB. 25

Session II: What We Are Currently Trying to Do

11 a.m. Patient and Family-centered Advocacy Goals: Where Are We with Influencing the Healthcare Community and Other Societal Agencies?
Scott Leezer

11:15 a.m. Clinical Surveillance Strategies Are Emerging: Building Consensus
Adel Younoszai, MD

11:30 a.m. Establishment of the Model for a Specialized Fontan Clinic: Challenges and Benefits
Kathryn Dodds, MSN, CPNP-AC

11:45 a.m. Developing a Specialized Fontan Clinic: The Stanford Experience
Gail Wright, MD

Noon **BOX LUNCH** for participants registered for the full day only

12:15 p.m. Data-driven Quality Care Initiatives Through the NPC-QIC: A Methodology for Improving Outcomes after Fontan Operation
Carole Lannon, MD, MPH

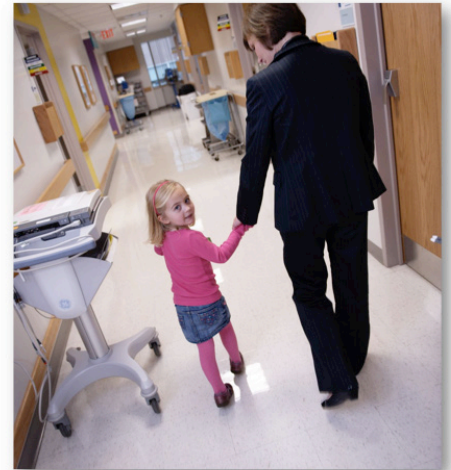
12:30 p.m. Trying to Find the Right Medications to Improve the Fontan Circulation
David Goldberg, MD

12:45 p.m. Techniques for More Accurate Characterization of the Fontan Circulation: Provocative Assessments
Bryan Goldstein, MD

1 p.m. Characterization of the Lymphatic System and Treating Complications after Fontan Operation
Maxim Itkin, MD

1:15 p.m. Transplant Can Work for Some but Is Not for All and Is Not a Cure
Daphne Hsu, MD

1:30 p.m. Mechanical Circulatory Support for the Failing Fontan
Yves D'Udekem, MD



Session III: Where We Need to Be

1:45 p.m. Brainstorming with Our "Fontan Think Tank" Panel
Faculty Panel

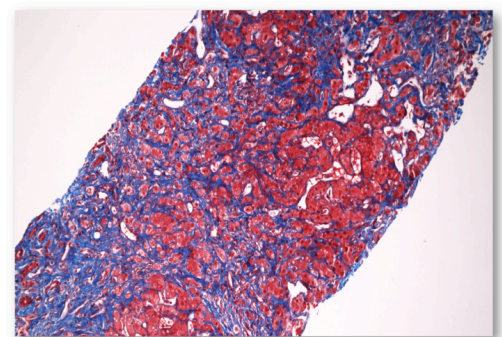
2:30 p.m. BREAK

Session IV: Exploring the Next Steps • Future Research and New Ideas: 10-minute Presentations; 10 Minutes of Discussion

2:45 p.m. Open Session with Solicitation of Abstracts • One-page Formatted Submissions to be Reviewed and Chosen
Panel Discussions

5:45 p.m. ADJOURN

6:30 p.m. RECEPTION



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Robert Shaddy, MD, Los Angeles
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Girish Shirali, MBBS, Kansas City
James Steven, MD, Philadelphia
Mark Schwartz, MBA, Philadelphia

Faculty

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Dean Andropoulos, MD, Houston
Stuart Berger, MD, Chicago
Benjamin Black, MBA, Chicago
Julie Brothers, MD, Philadelphia
Klayton Buckley, CCP, Philadelphia
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Autumn Fiester, PhD, Philadelphia
Mark Fogel, MD, Philadelphia
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Peter Frommelt, MD, Milwaukee

Michael Gaies, MD, Ann Arbor
J. William Gaynor, MD, Philadelphia
Bruce Gelb, MD, New York
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Marc Gewillig, MD, Leuven, Belgium
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Andrew Glatz, MD, Philadelphia
Marie Gleason, MD, Philadelphia
Thomas Glenn, MD, Newark
Elizabeth Goldmuntz, MD, Philadelphia
Bryan Goldstein, MD, Cincinnati
Lars Grosse-Wortmann, MD, Toronto
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Anthony Hlavacek, MD, Charleston, S.C.
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