



**International Symposium on 3D Imaging for
Interventional Catheterization in CHD
Nationwide Children's Hospital
October 13 -15, 2016**

Course Directors

Aimee Armstrong and Gregor Krings
Stecker Auditorium

Thursday, October 13

1:00-2:45 PM

Multimodality 3D Imaging Part I

Moderators: John Cheatham and Sebastian Goreczny

1:00-1:05 PM

Welcome [Aimee Armstrong and Gregor Krings](#)

1:05-1:10 PM

Welcome by NCH Leadership [John Barnard](#)

1:10-1:15 PM

Audience Response: Who is Using 3D Imaging? [Aimee Armstrong and Gregor Krings](#)

1:15-1:30 PM

Do We Need 3DRA? [Sharon Cheatham](#)

1:30-1:50 PM

Utrecht Cookbook: How to do 3DRA [Gregor Krings](#)

1:50-2:35 PM

Getting the Most of Your 3DRA System: 3 Perspectives on Equipment Capabilities and Limitations [Darren Berman, Gregor Krings, Thomas Fagan](#)

2:35-2:45 PM

Panel Discussion/Q&A [Sharon Cheatham, Gregor Krings, Darren Berman, and Thomas Fagan](#)

2:45-3:00 PM

COFFEE BREAK

3:00-5:15 PM

Multimodality 3D Imaging Part II

Moderators: Orlando Simonetti and Michael Markl

3:00-3:20 PM

3D Echo in the Cath Lab: The Non-Invasive Imager's Perspective [John Kovalchin](#)

3:20-3:40 PM

3D Echo in the Cath Lab: The Interventionalist's Perspective [Shakeel Qureshi](#)

3:40-4:00 PM

Echo Overlay on Fluoroscopy [Pei-Ni Jone](#)

4:00-4:15 PM

TAPED CASE 1: EchoNav [Pei-Ni Jone, Children's Hospital Colorado](#)

4:15-4:30 PM

Panel Discussion/Q&A [Pei-Ni Jone, John Kovalchin, and Shakeel Qureshi](#)

4:30-4:45 PM

State-of-the-Art CTA: When Should We Use It Instead of MRI? [Kan Hor](#)

4:45-4:55 PM

From 3D to 4D Rotational Angiography: Technical Feasibility and Clinical Value [Gregor Krings](#)

4:55-5:10 PM

Abstract Presentation #1: Visualisation in True 3D Volumetric Display [Valts Ozolins](#)

5:10-5:15 PM

Thursday Wrap Up [Aimee Armstrong and Gregor Krings](#)



**International Symposium on 3D Imaging for
Interventional Catheterization in CHD
Nationwide Children's Hospital
October 13 -15, 2016**

Friday, October 14

8:00-10:05 AM	Aortic Session Part I Moderators: Shakeel Qureshi and John Kovalchin
8:00-8:05 AM	Welcome Gregor Krings
8:05-8:15 AM	Aortic 3DRA: Case Presentation: Stenting Complex Aortic Coarctation: Simulation in a 3D Printed Model Francesca R. Pluchinotta
8:15-8:30 AM	Stenting the Transverse Arch Darren Berman
8:30-8:45 AM	Who Needs Hemodynamic Cath When We Have MR 4D Flow? Michael Markl
8:45-9:00 AM	Who Needs Hemodynamic Cath When We Have MR T2 Relaxometry for O2 Saturation Measurement? Orlando Simonetti
9:00-9:15 AM	Who Needs MRI When We Have Computational Fluid Dynamics From 3DRA? Aimee Armstrong
9:15-9:25 AM	Panel Discussion/Q&A Michael Markl, Orlando Simonetti, and Aimee Armstrong
9:25-9:40 AM	I Like My MR Scanner Adjacent to My Angio Suite Because.... Lee Benson
9:40-9:55 AM	Optimizing Aortic Interventions with 3DRA Sven Dittrich
9:55-10:05 AM	Panel Discussion/Q&A Lee Benson and Sven Dittrich
10:05-10:25 AM	COFFEE BREAK
10:25-11:40 AM	Aortic Session Part II Moderators: Patrick McConnell and Michael Seckeler
10:25-11:00 AM	LIVE CASE 1: 3DRA in Aortic Coarctation John Cheatham, Darren Berman and Brian Boe, Nationwide Children's Hospital Panelists: Sharon Cheatham and Shakeel Qureshi
11:00-11:15 AM	How Should We Follow Patients after Aortic Arch Interventions? Martin Bocks
11:15-11:30 AM	Coarctation: Will There Still Be a Need for Surgery in the Future? Mark Galantowicz
11:30-11:40 AM	Panel Discussion/Q&A Martin Bocks and Mark Galantowicz
11:40 AM-1:00 PM	LUNCH AND NETWORKING

LUNCH BREAKOUT SESSIONS (CME is not available for the Workshops)	
12:15-1:45 PM	Optional Hands-On 3DRA Workshop: Toshiba (Lower Level Room ED025B)
12:15-1:45 PM	Optional Hands-On 3DRA Workshop: Siemens (Lower Level Room ED025A)
12:15-1:45 PM	Optional Hands-On 3DRA Workshop: Philips (Lower Level Room ED040)



**International Symposium on 3D Imaging for
Interventional Catheterization in CHD
Nationwide Children's Hospital
October 13 -15, 2016**

Friday, October 14

1:45-3:20 PM

PPS Session Part I

Moderators: Thomas Fagan and Mark Galantowicz

1:45-2:15 PM

TAPED CASE 2: PPS Nationwide Children's Hospital

2:15-2:25 PM

PPS 3DRA: Case Presentation: Pulmonary Sequestration in Scimitar Syndrome Demonstrated by Three-Dimensional Rotational Angiography **Thomas Fagan**

2:25-2:40 PM

3D Fusion: What Do I Need From the MRI to Perform Fusion? **Shyam Sathanandam**

2:40-2:55 PM

Vessel Navigator and CT Overlay **Sebastian Goreczny**

2:55-3:05 PM

Panel Discussion/Q&A **Shyam Sathanandam and Sebastian Goreczny**

3:05-3:20 PM

Abstract Presentation #2: CT Angiography-Fluoroscopy Image Fusion during Complex Congenital Heart Disease Interventions: Preliminary Experience and Illustrations of 3D-3D and 2D-3D Workflows **Ponraj Chinnadurai**

3:20-3:40 PM

COFFEE BREAK

3:40-5:00 PM

PPS Session Part II

Moderators: Lee Benson and Francisco Garay

3:40-3:55 PM

To Tell the Truth: "Will the Real Measurement Please Stand Up?" **Thomas Fagan**

3:55-4:10 PM

How Do I Reduce Radiation Exposure During 3DRA? **Shyam Sathanandam**

4:10-4:25 PM

The Newborn with PA/VSD/MAPCAs: What the Surgeon Needs to Prepare For Unifocalization **Patrick McConnell**

4:25-4:40 PM

3DRA Assessment of Airway Compression in Biventricular CHD **Thomas Fagan**

4:40-4:55 PM

Panel Discussion/Q&A **Shyam Sathanandam, Patrick McConnell, and Thomas Fagan**

4:55-5:00 PM

Friday Wrap Up **Aimee Armstrong**

6:30 PM-9:00 PM

3DI3 CONFERENCE DINNER

Grand Atrium and Zen Terrace, Franklin Park Conservatory
1777 E. Broad Street, Columbus



**International Symposium on 3D Imaging for
Interventional Catheterization in CHD
Nationwide Children's Hospital
October 13 -15, 2016**

Saturday, October 15

- 8:00-9:55 AM **PPVI Session Part I**
Moderators: Martin Bocks and Darren Berman
- 8:00-8:05 AM Welcome **Aimee Armstrong**
- 8:05-8:15 AM PPVI 3DRA: Case Presentation: Venus P-Valve in Native RVOT with 3DRA Guidance
Francisco Garay
- 8:15-8:30 AM Predicting Implanting Characteristics in PPVI **Francesca Pluchinotta**
- 8:30-8:45 AM Coronary Evaluation for PPVI: 2D vs. 3DRA vs. CTA/MRI **Francisco Garay**
- 8:45-9:00 AM Starting a 3D Program on the Cheap **Michael Seckeler**
- 9:00-9:10 AM Panel Discussion/Q&A **Francisco Garay, Francesca Pluchinotta, and Michael Seckeler**
- 9:10-9:55 AM LIVE CASE 2: PPVI **Mario Carminati, San Donato Milanese, Milan, Italy**
Panelists: **Sharon Cheatham, Gregor Krings, and Patrick McConnell**
- 9:55-10:10 AM COFFEE BREAK
- 10:10-11:20 AM **PPVI Session Part II**
Moderators: Aimee Armstrong and Pei-Ni Jone
- 10:10-10:25 AM Abstract Presentation #3: Use of 3D Rotational Angiography for Assessment of Coronary Arteries During Melody Valve Implantation: Introducing a Technique That May Improve Outcomes
Howaida El-Said
- 10:25-10:40 AM How Do I Deal With Distal Conduit Stenosis? **Martin Bocks**
- 10:40-10:55 AM 3D Intracardiac Echo: Hype or Underrated? **John Cheatham**
- 10:55-11:05 AM Panel Discussion/Q&A **Martin Bocks and John Cheatham**
- 11:05-11:20 AM Abstract Presentation #4: Motion-compensated Cone-beam CT for 3D Imaging of Prosthetic Devices Implanted Using Transcatheter Techniques **Kenneth Fetterly**
- 11:20 AM-12:20 PM LUNCH AND NETWORKING

LUNCH BREAKOUT SESSIONS (CME is not available for the Workshops)	
11:45-12:45 PM	Optional Hands-On 3DRA Workshop: Toshiba (Lower Level ED025B)
11:45-12:45 PM	Optional Hands-On 3DRA Workshop: Siemens (Lower Level ED025A)
11:45-12:45 PM	Optional Hands-On 3DRA Workshop: Philips (Lower Level ED040)



**International Symposium on 3D Imaging for
Interventional Catheterization in CHD
Nationwide Children's Hospital
October 13 -15, 2016**

Saturday, October 15

1:00-2:25 PM

Single Ventricle Session Part I

Moderators: Sharon Cheatham and Sven Dittrich

1:00-1:15 PM

3DRA Assessment of Cavopulmonary Connections: Tips and Tricks **Darren Berman**

1:15-1:30 PM

3DRA Assessment of Airway Compression in Single Ventricle Heart Disease **Lee Benson**

1:30-1:45 PM

Can We Get Back to the Transcatheter Fontan? **Mark Galantowicz**

1:45-2:00 PM

One Country-One Center: Changes in the Management of Single Ventricle Disease Stages I-III
Sebastian Goreczny

2:00-2:10 PM

Panel Discussion/Q&A **Darren Berman, Lee Benson, Mark Galantowicz, and Sebastian Goreczny**

2:10-2:25 PM

Abstract Presentation #5: Additional Value of Three-Dimensional Rotational Angiography in the Diagnostic Evaluation and Percutaneous Treatment of Children with Univentricular Hearts **MMC Molenschot**

2:25-2:45 PM

COFFEE BREAK

2:45-4:00 PM

Single Ventricle Session Part II

Moderators: Kan Hor and Gregor Krings

2:45-3:00 PM

Urgent Cath Intervention in the Interstage: Is 3DRA Worth the Risk? **Brian Boe**

3:00-3:15 PM

State of the Art Single Ventricle Evaluation Using MRI: No Need for Invasive Diagnostics **Michael Markl**

3:15-3:30 PM

Evaluation of the Failing Fontan **Shakeel Qureshi**

3:30-3:40 PM

Panel Discussion/Q&A **Brian Boe, Michael Markl, and Shakeel Qureshi**

3:40-3:55 PM

The Future of 3D Imaging for Intervention **John Cheatham**

3:55-4:00 PM

Conference Wrap Up **Aimee Armstrong and Gregor Krings**