

**The 8th HANDS-ON SURGICAL TRAINING (HOST)
CONGENITAL HEART DISEASE SURGERY
On-line Course on Aortic Arch Repair**

December 4, 7:40-10:40 am EST and 10-12, 7:40-11:50 am EST 2021

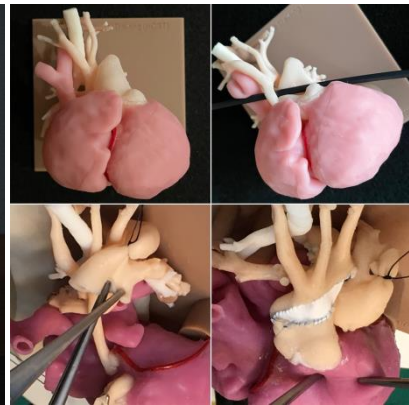
Hospital for Sick Children, Toronto, Canada

Co-Host: Congenital Heart Academy



**The Labatt Family
Heart Centre**

www.3dprintheart.ca



PROGRAM

Day 0: Priming session with lectures		
December 4		
7:30-7:40 am	Log-in to Zoom	
7:40-7:50 am	Introduction to the course	S. Yoo
7:50-8:20 am	Obstructive lesions of the aortic arch. Morphological overview	S. Yoo
8:20-9:10 am	Surgical principles and modifications of aortic arch reconstruction	D. Barron
9:10-9:40 am	3D modeling and printing in congenital heart surgery	S. Yoo
9:40-9:50 am	Break	
9:50-10:20 am	HOST-CHS assessment tools for aortic arch reconstruction	N. Hussein
10:20-10:35 am	Introduction to on-line HOST course setting	B. Peel
10:35-11:00 am	Demonstration: Coarctation of the aorta	C. Haller
HOST Day 1		
December 10		
6:40-6:50 am	Log-in to Zoom	
6:50-7:00 am	Opening Address	D. Barron
7:00-7:15 am	Warming up and getting started	B. Peel / N. Hussein
7:15-8:00 am	Hands-on Session 1: Coarctation of the aorta	All surgeons
8:00-8:20 am	Break	
8:20-9:20 am	Hands-on Session 2: Hypoplastic aortic arch with COA	All surgeons
9:20-9:50 am	Evaluation / Q & A	All surgeons
9:50-10:05 am	A patient's perspective: Flattening the worldwide standard of congenital heart surgery	P. Butler
10:05-11:20 am	Demonstration: Norwood operation	O. Honjo / D. Barron
HOST Day 2		
December 11		
6:40-6:50 am	Log-in to Zoom	
6:50-8:40 am	Hands-on Session 3: Norwood operation, Case 1	All surgeons
8:40-9:00 am	Evaluation / Q & A	All surgeons
9:00-10:40 am	Hands-on Session 4: Norwood operation, Case 2	
10:40-11:00 am	Evaluation / Q & A	All surgeons
HOST Day 3		
December 12		
6:40-6:50 am	Log-in to Zoom	
6:50-7:20 am	Demonstration: Interrupted aortic arch with VSD	D. Barron
7:20-9:20 am	Hands-on Session 5: Interrupted aortic arch with VSD	All surgeons
9:20-9:40 am	Evaluation of / Q & A	All surgeons
9:40-10:10 am	Q/A and Adjourn	All surgeons
10:10 am -	Networking	N. Hussein

Proctors:

Salvatore Agati, Chief of Pediatric Cardiac Surgery, Bambino Gesù Hospital, Taormina, Italy
David Barron, Head of Cardiovascular Surgery Appointee, Hospital for Sick Children, Toronto
John Coles, Staff Cardiovascular Surgeon, Hospital for Sick Children, Toronto
Osami Honjo, Staff Cardiovascular Surgeon, Hospital for Sick Children, Toronto
Christoph Haller, Staff Cardiovascular Surgeon, Hospital for Sick Children, Toronto
Glen van Arsdell, Chief of Cardiovascular Surgery, Ronald Reagan UCLA Medical Center, USA

Course Coordinators:

Shi-Joon Yoo, Staff Cardiac Radiologist, Hospital for Sick Children, Toronto
Ankavipar Saprungruang, 3D Printing Research Fellow, Hospital for Sick Children, Toronto
Brandon Peel, 3D Printing Program Manager, Hospital for Sick Children, Toronto
Caroline Robertson, Administrative Assistant, Hospital for Sick Children, Toronto

Eligible applicants: Cardiovascular surgeons on staff position or in training

Registration fee (regular): Canadian \$2200 plus freight charges (\$200 less for previous attendees who have a simulation table set with webcam and surgical light)

Registration fee (Surgeons-in-Training): Canadian \$1200 plus freight charges (Proof of Surgeon-in-Training status must be submitted) (\$200 less for previous attendees who have a simulation table set with webcam and surgical light)

Registration deadline: October 15, 2021. Accepted on a first-come, first-served basis.

Registration: visit <https://www.3dprintheart.ca/events>

Contact Ms. Caroline Robertson or Brandon Peel for further information.

E-mail: caroline.robertson@sickkids.ca, brandon.peel@sickkids.ca / Phone: 1-416-813-6029

Course Format:

This online course is focused on the aortic arch reconstruction. The registered applicants will be provided with five surgical simulation models in advance by mail. After a short introductory lecture and demonstration by a proctor, the attendees will practice the procedure, which will be viewed in real-time by the proctors through a webcam. The proctors will monitor the attendee's procedure to give technical advice and take questions throughout the session.

Models and simulation table setting:

The surgical simulation models are manufactured with soft flexible materials and mounted on a base plate. The models will be provided with a plastic stand, a suture retraction disc, a web-cam and lighting equipment. The base plate of the model is mounted in the plastic stand that can be firmly placed with adhesive tape on a standard table top or a box. The environment and surgical ergonomics in the operating room can further be simulated by using a Chest-wall Operating-table Simulator (photo attached). This Chest-wall and Operating-table simulator can be purchased after registration is complete. The attendees should set a high-resolution webcam that is properly angled and zoomed to capture the surgical scene for recording and real-time technical advice from the proctor..

Course requirements:

Provided by the Course Organizers:

1. Simulation heart models
2. Simulated surgical patches
3. Videos of demonstration of the procedures and Assessment Tools
(available at: <https://www.3dprintheart.ca/host-videos-assessments>)

Equipment required by attendees:

1. Laptop computer and Zoom® account
2. Surgical instruments
3. Sutures
4. Chest-wall Operating-table Simulator (optional)

Chest-wall Operating table Simulator

(<https://threedmedprint.biomedcentral.com/articles/10.1186/s41205-020-00067-4>. Can be purchased at Canadian \$1500 on advanced order by October 15, 2021)

