



Neonatal and Critical Care Medicine

Bedside Ultrasound Course

Saturday, Dec. 4, and
Sunday, Dec. 5, 2021

Joseph Stokes Jr. Auditorium

Learn more:
chop.cloud-cme.com

COURSE OVERVIEW

This course is focused on neonatal and pediatric critical care medicine bedside ultrasound. It is designed for neonatal, critical care and anesthesia providers with limited or basic knowledge of bedside ultrasonography. Through a combination of lectures and hands-on practical sessions using live pediatric models and simulation equipment, course attendees will learn ultrasound fundamentals (physics and principles of scanning) and ultrasound scanning techniques pertinent to neonatal and pediatric practice, including: basic procedural guidance (central line placement, arterial access, lumbar puncture, suprapubic tap, etc.); bladder scanning; FAFF (focused assessment of free abdominal fluid); lung evaluation; basic cardiac evaluation; and fluid and cardiac function. The course is being taught by neonatologists, cardiologists, emergency medicine physicians, anesthesiologists, pediatric radiologists and critical care medicine ultrasound experts, and will have a low student-to-teacher ratio of 5-to-1. A limited portion of this course will be devoted to a knowledge and skills assessment exam and a brief discussion of program development and administrative issues with regard to point-of-care ultrasound.

IN-PERSON CONFERENCE GUIDELINES RELATED TO COVID

- **ALL faculty and registrants are expected to be vaccinated** by the time of the course. Please reach out to course directors if interested in the course but remain unvaccinated.
- **Faculty and learners must be masked** at all times except in designated eating spaces.
- Hands-on stations will have **child models** – many of them will likely be unvaccinated but they will be masked at all times and parents/guardians are expected to be vaccinated.
- *If the course is cancelled for any reason, registration costs will be fully refunded. We cannot refund any expenses for travel/lodging.*

GENERAL INFORMATION

The conference will be held at Children’s Hospital of Philadelphia in the Joseph Stokes Jr. Auditorium on Saturday, Dec. 4, and Sunday, Dec. 5, 2021.

REGISTRATION FEES

Physicians.....	\$900
Fellows, nurse practitioners and CHOP-affiliated providers.....	\$450

The registration fee includes continental breakfast, refreshments, lunch, parking and course materials.

COURSE OBJECTIVES

Upon completion of this course, participants will be able to:

- Demonstrate core nonprocedural ultrasound skills (basic fluid and cardiac function assessment, abdominal ultrasounds, pulmonary ultrasounds and cranial ultrasounds) using bedside ultrasound
- Demonstrate core procedural ultrasound skills (intravenous line insertion and fluid drainage)
- Discuss appropriate indication and limitation of bedside ultrasound exam in a neonatal acute care setting

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 *15.5 AMA PRA Category 1 Credit(s)*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

CANCELLATION AND REFUND POLICY

Children's Hospital of Philadelphia reserves the right to cancel or postpone any course due to any unforeseen circumstances. In the event of cancellation or postponement, the Hospital will refund registration fees, but is not responsible for any related costs, charges or expenses to participants, including cancellation charges assessed by airlines or travel agencies. In order to process refunds, cancellations must be received in writing by Friday, Nov. 26, 2021. No refunds will be issued thereafter.

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.

Register online: chop.cloud-cme.com

PROGRAM • SATURDAY, DEC. 4, 2021

7 a.m.	Registration and Breakfast
7:30 a.m.	Welcome and Course Overview <i>Thomas Conlon, MD; Maky Fraga, MD; Jason Stoller, MD</i>
7:45 a.m.	Physics and Fundamentals of Ultrasonography <i>Jason Stoller, MD</i>
8:15 a.m.	Introduction to FAST/FAFF <i>Akira Nishisaki, MD, MSCE</i>
8:45 a.m.	Vascular Access and Basic Procedures <i>Mark Weber, RN, CRNP-AC; Erik Brandsma, MD</i>
9:15 a.m.	Lung Ultrasound: Pneumonia, Pneumothorax and Pleural Effusions <i>Garrett Keim, MD</i>
9:45 am	Break
10 a.m.	Hands-on Skills: FAST/FAFF, Vascular Access, Lung
Noon	Lunch
12:45 p.m.	Approach to LPs <i>William D. Corder, MD</i>
1 p.m.	Approach to UVC Placement and CICU Considerations <i>Benjamin Kozyak, MD</i>
1:15 p.m.	Basic Cardiac Views <i>Leah Carr, MD</i>
1:45 p.m.	Basic LV Systolic Function Assessment <i>Mjaye Mazwi, MBChB, MD</i>
2:15 p.m.	Break
2:30 p.m.	Hands-on Skills: Subcostal/IVC, Apical and Parasternal Views
4:30 p.m.	Adjourn

PROGRAM • SUNDAY, DEC. 5, 2021

7 a.m.	Breakfast
7:30 a.m.	Cardiac Basics Review <i>Maky Fraga, MD</i>
7:45 a.m.	Advanced Volume Assessment <i>Christie Glau, MD</i>
8:15 a.m.	Pulmonary Hypertension, Right Ventricular Function and the PDA <i>Shazia Bhombal, MD</i>
8:45 a.m.	Approach to Shock and Hypotension <i>Adam Himebauch, MD</i>
9:15 a.m.	ECMO and Bedside Ultrasound <i>Thomas Pawlowski, MD</i>
9:45 a.m.	Break
10 a.m.	Hands-on Skills
Noon	Lunch
12:45 p.m.	Head Ultrasound <i>Hansel Otero, MD</i>
1:15 p.m.	Airway Ultrasound <i>Bereketeab Haileselassie, MD</i>
1:45 p.m.	Review of Pathology <i>Thomas Conlon, MD; Jason Stoller, MD</i>
2:15 p.m.	Ultrasound Education and Program Development <i>Thomas Conlon, MD</i>
2:45 p.m.	Break
3 p.m.	Skill Assessment: Cardiac, Lung, Abdomen/Procedure
4:30 p.m.	Adjourn

FACULTY

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

Course Directors

Thomas Conlon, MD

Director of Pediatric Critical Care Ultrasound

Assistant Professor of Anesthesiology and Critical Care Medicine

Maky Fraga, MD

Director, N/IICU Ultrasound

Associate Professor of Clinical Pediatrics, Division of Neonatology

Jason Stoller, MD

Co-director of N/IICU Ultrasound

Associate Professor of Clinical Pediatrics, Division of Neonatology

Course Faculty

Shazia Bhombal, MD

Medical Director, NICU Heart Team

Division of Neonatal and Developmental Medicine

Clinical Assistant Professor, Pediatrics

Stanford University School of Medicine

Erik Brandsma, MD

Associate Professor of Clinical Pediatrics, Division of Neonatology

Leah Carr, MD

Attending Physician, Division of Neonatology

Fellow, Department of Biomedical and Health Informatics

William D. Corder, MD

Fellow, Division of Neonatology

Ryan DeSanti, DO

Assistant Professor of Pediatrics

Drexel College of Medicine

St. Christopher's Hospital for Children (Philadelphia)

Christie Glau, MD

Assistant Professor of Anesthesiology and Critical Care Medicine

Bereketeab Haileselassie, MD

Assistant Professor of Pediatrics (Critical Care)

Stanford University School of Medicine

Adam Himebauch, MD

Assistant Professor of Anesthesiology and Critical Care Medicine

Garrett Keim, MD

Assistant Professor of Anesthesia and Critical Care Medicine

Benjamin Kozyak, MD

*Assistant Professor of Anesthesiology and Critical Care Medicine
Cardiac Intensive Care Unit, Cardiac Center*

Steven Loscalzo, MD

Clinical Instructor, Department of Anesthesiology and Critical Care Medicine

Mjaye Mazwi, MBChB, MD

*Staff Physician, Cardiac Critical Care Medicine
Assistant Professor, Department of Pediatrics
Toronto SickKids*

Akira Nishisaki, MD, MSCE

*Associate Medical Director for Clinical Implementation Programs
Department of Anesthesiology and Critical Care Medicine*

Hansel Otero, MD

*Director of International Pediatric Radiology Education and Outreach
Assistant Professor, Department of Radiology*

Thomas Pawlowski, MD

Assistant Professor, Division of Neonatology

Mark Weber, RN, CRNP-AC

Pediatric Critical Care Medicine