



# Anesthesiology, Neonatology and Critical Care Medicine: Bedside Ultrasound Course

Saturday, Nov. 5 and Sunday, Nov. 6, 2022

Joseph Stokes Jr. Auditorium

Learn more: [chop.cloud-cme.com](https://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 you are 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, Nov. 5, and Sunday, Nov. 6, 2022.

## REGISTRATION FEES

Physicians.....	\$950
Fellows, nurse practitioners and CHOP-affiliated providers.....	\$475

The registration fee includes 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)*<sup>™</sup>. 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 Monday, Oct. 24, 2022. 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](https://chop.cloud-cme.com)**

## PROGRAM • SATURDAY, NOV. 5, 2022

7 a.m.	<b>Registration and Breakfast</b>
7:30 a.m.	<b>Welcome and Course Overview</b>
7:45 a.m.	<b>Physics and Fundamentals of Ultrasonography</b> <i>Jason Stoller, MD</i>
8:15 a.m.	<b>Introduction to FAST/FAFF</b> <i>Steffen Schmidt, MD</i>
8:45 a.m.	<b>Vascular Access and Basic Procedures</b> <i>Ryan Good, MD</i>
9:15 a.m.	<b>Lung Ultrasound: Anatomy and Pathology</b> <i>Nadya Yousef, MD, MSc</i>
9:45 a.m.	<b>Break</b>
10 a.m.	<b>Hands-on Skills: FAST/FAFF, Vascular Access, Lung</b>
Noon	<b>Lunch</b>
12:45 p.m.	<b>Approach to LPs</b> <i>Will Corder, MD</i>
1 p.m.	<b>Umbilical Venous Cannulation in Neonates</b> <i>Benjamin Kozyak, MD</i>
1:15 p.m.	<b>Cardiac Views</b> <i>Leah Carr, MD</i>
1:45 p.m.	<b>LV Systolic Function Assessment</b> <i>Nicole Sekarski, MD</i>
2:15 p.m.	<b>Break</b>
2:30 p.m.	<b>Hands-on Skills: (Subcostal/IVC, Apical and Parasternal Views)</b>
4:30 p.m.	<b>Adjourn for Day</b>

## PROGRAM • SUNDAY, NOV. 6, 2022

7 a.m.	<b>Breakfast</b>
7:30 a.m.	<b>Day 1 Review</b>
7:45 a.m.	<b>Advanced Volume Assessment</b> <i>Christie Glau, MD</i>
8:15 a.m.	<b>Pulmonary Hypertension, Right Ventricular Function and the PDA</b> <i>Shazia Bhombal, MD</i>
8:45 a.m.	<b>Approach to Shock and Hypotension</b> <i>Adam Himebauch, MD</i>
9:15 a.m.	<b>ECMO and Bedside Ultrasound</b> <i>Thomas Pawlowski, MD</i>
9:30 a.m.	<b>Basics of Head Ultrasound</b> <i>Levy Onyango, MD</i>
9:45 a.m.	<b>Break</b>
10 a.m.	<b>Hands-on Stations: (ICU-Shock/Volume, RV Function, LV Function)</b>
Noon	<b>Lunch</b>
12:45 p.m.	<b>Advances in Lung Ultrasound: The Neonatal Experience</b> <i>Francesco Raimondi, MD, PhD</i>
1:15 p.m.	<b>Ultrasound in the International Setting</b> <i>Alexandra Vinograd, MD, MSHP, DTM&amp;H</i>
1:45 p.m.	<b>Translating Point-of-care Training to Clinical Care: A Multidisciplinary Perspective</b> <i>Thomas Conlon, MD; Summer Kaplan, MD</i>
2:15 p.m.	<b>Review of Pathology</b> <i>Maky Fraga, MD</i>
2:45 p.m.	<b>Break</b>
3 p.m.	<b>Skill Assessment: Cardiac, Lung, Abdomen/Procedure</b>
4:30 p.m.	<b>Conference Adjourns</b>

## 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*

#### **Elaina Lin, MD**

*Director of Pediatric Anesthesiology Ultrasound*

*Assistant Professor of Anesthesiology and Critical Care Medicine*

#### **Maky Fraga, MD**

*Co-director of 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

#### **Andrew Becker, MD**

*Fellow, Pediatric Critical Care Medicine*

#### **Shazia Bhombal, MD**

*Clinical Assistant Professor, Pediatrics*

*Medical Director, NICU Heart Team*

*Division of Neonatal & Developmental Medicine*

*Stanford University School of Medicine*

#### **Erik Brandsma, MD**

*Attending Neonatologist*

*Associate Professor of Clinical Pediatrics, Division of Neonatology*

#### **Leah Carr, MD**

*Attending Physician, Division of Neonatology*

*Fellow, Department of Biomedical and Health Informatics*

#### **William Corder, MD**

*Fellow, Division of Neonatology*

#### **Rodrigo Daly-Guris, MBBS, MSc**

*Pediatric Anesthesiologist, Department of Anesthesiology and Critical Care Medicine*

*Assistant Professor of Anesthesiology and Critical Care Medicine*

#### **Ryan DeSanti, DO**

*Assistant Professor of Pediatrics*

*Drexel College of Medicine*

*St. Christopher's Hospital for Children, Philadelphia, PA*

**Christie Glau, MD**

*Attending Physician, Department of Anesthesiology and Critical Care Medicine  
Assistant Professor of Anesthesiology and Critical Care Medicine*

**Sarah Ginsburg, MD**

*Assistant Professor  
UT Southwestern*

**Ryan Good, MD**

*Assistant Professor, Pediatrics- Critical Care Medicine  
Children's Hospital of Colorado (Aurora, CO)*

**Adam Himebauch, MD**

*Attending Physician, Department Critical Care Medicine  
Assistant Professor of Anesthesiology and Critical Care Medicine*

**Greg Johnson, MD**

*Attending Physician, Department of Anesthesiology  
Assistant Professor of Anesthesiology and Critical Care Medicine*

**Summer Kaplan, MD**

*Director of Emergency Radiology and Point of Care Ultrasound  
Assistant Professor of Clinical Radiology*

**Garrett Keim, MD**

*Attending Physician, Department Critical Care Medicine  
Assistant Professor of Assistant Professor of Clinical Anesthesiology and Critical Care*

**Kimberly Kristoff, BSN, RN, CBC**

*Clinical Nurse Expert  
Neonatal/Infant Intensive Care Unit*

**Benjamin Kozyak, MD**

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

**Steven Loscalzo, MD**

*Attending Physician Division of Critical Care Medicine  
Clinical Instructor, Department of Anesthesiology and Critical Care Medicine*

**Carolyn McGann, MD**

*Attending Neonatologist, Division of Neonatology  
Instructor of Clinical Pediatrics, Division of Neonatology*

**Akira Nishisaki, MD, MSCE**

*Attending Physician, Pediatric Critical Care Medicine  
Associate Medical Director for Clinical Implementation Programs, Critical Care Medicine  
Co-Medical Director, Center for Simulation, Advanced Education and Innovation*

**Elizabeth O'Brien, MD**

*Fellow, Department of Anesthesiology  
Instructor, Department of Anesthesiology and Critical Care Medicine*

**Levy Onyango, MD**

*Radiologist*

*Instructor of Clinical Radiology*

**Thomas Pawlowski, MD**

*Attending Physician, Division of Neonatology*

*Assistant Professor, Division of Neonatology*

**Francesco Raimondi, MD, PhD**

*Professor of Pediatrics and Chief of Neonatology*

*University of Naples, Italy*

**Steffen Schmidt, MD**

*Senior Physician Emergency Department Paediatrics and Adolescent Medicine*

*University Hospital Bern, Switzerland*

**Nicole Sekarski, MD**

*Associate Professor and Division Chief Pediatric Cardiology*

*University Hospital Lausanne, Switzerland*

**Alexandra Vinograd, MD, MSHP, DTM&H**

*Attending Physician, Division of Emergency Medicine*

*Assistant Professor of Pediatrics*

**Mark Weber, RN, CRNP-AC, FCCM**

*Nurse Practitioner, Department of Anesthesiology and Critical Care Medicine*

**Eric Will, MS, PA-C**

*Neonatal Physician Assistant, Division of Neonatology*

**Nadya Yousef, MD, MSc**

*Attending Neonatologist, Division of Pediatrics and Neonatal Critical Care*

*Hôpital Antoine-Béclère Medical Center, Paris Saclay University Hospitals, APHP, Paris, France*

**Mahsun Yuerek, MD**

*Attending Physician, Division of Cardiac Critical Care Medicine*

*Assistant Professor, Department of Anesthesiology and Critical Care Medicine*