



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

Saturday, Nov. 4 and Sunday, Nov. 5, 2023

The HUB for Clinical Collaboration

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**Children's Hospital
of Philadelphia®**

Breakthroughs. Every day.®

COURSE OVERVIEW

This course is focused on neonatal and pediatric critical care medicine bedside ultrasound best practices. 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.

GENERAL INFORMATION

The conference will be held at Children’s Hospital of Philadelphia in the HUB for Clinical Collaboration on Saturday, Nov. 4, and Sunday, Nov. 5, 2023.

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

NURSING CONTINUING PROFESSIONAL DEVELOPMENT APPROVED PROVIDER STATEMENT

Nurses will receive a CME certificate of completion. Nurses may use CME category 1 credits for re-licensure in many states, as well as most re-certifications. Please check your state board and certifying body for re-licensure and re-certification requirements.

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. 23, 2023. 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, NOV. 4, 2023

7 a.m.	Registration and Breakfast
7:30 a.m.	Welcome and Course Overview
7:45 a.m.	Physics and Fundamentals of Ultrasonography <i>Jason Stoller, MD</i>
8:15 a.m.	Introduction to FAST/FAFF <i>Awni Al-Subu, MD</i>
8:45 a.m.	Vascular Access and Basic Procedures <i>Eric Will, PA</i>
9:15 a.m.	Lung Ultrasound: Anatomy and Pathology <i>Belinda Chan, MD</i>
9:45 am	Break
10 a.m.	Hands-on Skills: FAST/FAFF, Vascular Access, Lung
Noon	Lunch
12:20 p.m.	Approach to LPs <i>William Corder, MD</i>
12:40 p.m.	Umbilical Venous Cannulation in Neonates (15 min) <i>Benjamin Kozyak, MD</i>
1 p.m.	Cardiac Views <i>Ashley Osborne, MD</i>
1:45 p.m.	LV Systolic Function Assessment <i>Fatima Eskandar-Afshari, DO</i>
2:15 p.m.	Break
2:30 p.m.	Hands-on Skills (Subcostal/IVC, Apical and Parasternal Views)
4:30 p.m.	Questions/Adjourn

ANESTHESIA TRACK • SATURDAY, NOV. 4, 2023

7 a.m.	Registration and Breakfast
7:30 a.m.	Welcome and Course Overview <i>Elaina Lin, MD</i>
7:45 a.m.	Physics and Fundamentals of Ultrasonography <i>Elizabeth O'Brien, MD</i>
8:15 a.m.	Cardiac Basics <i>Asif Padiyath, MBBS</i>
8:45 a.m.	LV and RV Functional Assessment <i>Benjamin Kozyak, MD</i>
9:15 a.m.	Shock and Hypotension <i>Samuel Rosenblatt, MD</i>
9:45 a.m.	Break
10 a.m.	Hands-on Skills: Subcostal/IVC, Parasternal, Apical Views
Noon	Lunch
12:45 p.m.	Basics of Lung Ultrasound <i>Melissa Byrne, DO, MPH</i>
1:15 p.m.	Airway and Gastric Ultrasound <i>Elaina Lin, MD</i>
1:45 p.m.	Advanced Vascular Access Techniques and Concepts <i>Mark Weber, RN, CRNP-AC</i>
2:15 p.m.	Neuraxial Ultrasound <i>Vanessa Mazandi, MD</i>
2:45 p.m.	Break
3 p.m.	Hands-on Skills: Airway/Gastric/Lung, Advanced Vascular Access, More Cardiac Fun
4:30 p.m.	Questions/Adjourn

PROGRAM • SUNDAY, NOV. 5, 2023

7 a.m.	Breakfast
7:30 a.m.	Day 1 Review (15 minutes)
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>Minso Kim, MD</i>
8:45 a.m.	Approach to Shock and Hypotension <i>Jesse Wenger, MD</i>
9:15 a.m.	Advances in Clinical Lung Ultrasound in Neonatology and Critical Care <i>Daniele De Luca, MD, PhD</i>
9:45 a.m.	Break
10 a.m.	Hands-on Skills: (EM/Gen Peds; Abdominal Review, Procedures, Musculoskeletal) Hands-on Stations (ICU- Shock/Volume, RV Function, LV Function)
Noon	Lunch
12:20 p.m.	ECMO and Bedside Ultrasound <i>Thomas Pawlowski, MD</i>
12:40 p.m.	Basics of Head Ultrasound <i>Joel Lim Kian Boon, MBBS, MRCPCH, MMed (Paeds)</i>
1 p.m.	Ultrasound Integration in Hemodynamic Research <i>Gabriel Altit, MDCM, MSc</i>
1:30 p.m.	Ultrasound in the International Setting <i>Carolyn McGann, MD</i>
2 p.m.	Translating Point-of-care Training to Clinical Care: A Multidisciplinary Perspective <i>Thomas Conlon, MD; Maky Fraga, MD</i>
2:30 p.m.	Discussion
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 of N/IICU Ultrasound
Professor of Clinical Pediatrics, Division of Neonatology*

Elaina Lin, MD

*Director of Perioperative Anesthesiology Ultrasound
Assistant Professor of Anesthesiology and Critical Care Medicine*

Jason Stoller, MD

*Associate Director of N/IICU Ultrasound
Professor of Clinical Pediatrics, Division of Neonatology*

COURSE FACULTY

Awni Al-Subu, MD

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*Principal Investigator, NeoCardio Lab
Assistant Professor, Department of Pediatrics- Neonatology
Montreal Children's Hospital*

David Baker, MD

Ultrasound Fellow, Department of Anesthesiology and Critical Care Medicine

Andrew Becker, MD

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*Consultant, Children's Intensive Care Unit
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Erik Brandsma, MD

*Attending Neonatologist
Associate Professor of Clinical Pediatrics, Division of Neonatology*

Melissa Byrne, DO, MPH

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Leah Carr, MD

*Attending Physician, Division of Neonatology
Fellow, Department of Biomedical and Health Informatics*

Belinda Chan, MD

*Neonatal POCUS Director, Primary Children's Hospital (Salt Lake City, Utah)
Associate Professor, University of Utah
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William Corder, MD

Fellow, Division of Neonatology

Daniele De Luca, MD, PhD

Medical Director and Professor of Neonatology

APHP, South Paris University Hospital and South Paris-Saclay University, Paris, France

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Minso Kim, MD

Neonatologist and Cardiac Critical Care Specialist

University of California San Francisco Benioff Children's Hospital

Assistant Professor, Neonatology and Cardiac Intensive Care, Department of Pediatrics

University of California San Francisco

Kimberly Kristoff, BSN, RN, CBC

Clinical Nurse Expert

Neonatal/Infant Intensive Care Unit

Benjamin Kozyak, MD

Attending Physician, Cardiac Intensive Care Unit, Cardiac Center

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Steven Loscalzo, MD

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Instructor of Clinical Pediatrics, Division of Neonatology*

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*Co-Medical Director, Center for Simulation, Advanced Education and Innovation
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