



**PEDIATRIC EMERGENCY MEDICINE,
GENERAL PEDIATRICS, NEONATOLOGY
AND CRITICAL CARE MEDICINE:**

Bedside Ultrasound Course

Saturday and Sunday, May 20 and 21, 2023

The HUB for Clinical Collaboration



**Children's Hospital
of Philadelphia**

Breakthroughs. Every day.

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COURSE OVERVIEW

This course is intended as an alternative to adult emergency and critical care ultrasound courses, with a focus on pediatric emergency ultrasound indications. It is designed for neonatal, pediatric emergency and critical care medicine providers with limited or basic knowledge of emergency bedside ultrasound. 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 pediatric practice including: basic procedural guidance (line placement, lumbar puncture, etc.); evaluation of abscesses and foreign bodies; bladder scanning; FAST (focused assessment with sonography for trauma); lung evaluation; basic cardiac evaluation; musculoskeletal applications (fracture and joint); bowel scanning (intussusception); fluid and function evaluation; and advanced procedures (nerve blocks, chest tube placement, peritoneal/pleural fluid drainage).

The course is being taught by emergency, neonatal and critical care ultrasound experts, and will have a low student-to-teacher ratio of 4/5 to 1. A limited portion of the 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.

REGISTRATION FEES AND GENERAL INFORMATION

The conference will be held at Children's Hospital of Philadelphia in the HUB Auditorium, Saturday and Sunday, May 20 and 21, 2023. The course registration fees are as follows:

Physicians:\$950

Fellows, nurse practitioners and CHOP-affiliated providers:\$475

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

TARGET AUDIENCE

Neonatal, pediatric emergency medicine and critical care medicine providers.

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.
- If the course is cancelled for any reason, registration costs will be fully refunded. We cannot refund any expenses for travel/lodging.

COURSE OBJECTIVES

1. Demonstrate core nonprocedural ultrasound skills (basic fluid and cardiac function assessment, FAST exam, pulmonary ultrasounds) using bedside ultrasound
2. Demonstrate core procedural ultrasound skills (intravenous line insertion and fluid drainage)
3. Discuss appropriate indications and limitations of the bedside ultrasound exam in pediatric acute care settings

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 *15.75 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, May 12, 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](https://chop.cloud-cme.com)

PROGRAM — SATURDAY, MAY 20, 2023

- 7 a.m. **Registration and Breakfast**
- 7:30 a.m. **Welcome and Course Overview**
Aaron Chen, MD; Thomas Conlon, MD; Maky Fraga, MD; Beryl M. Greywoode, MD
- 7:45 a.m. **Physics and Fundamentals of Ultrasonography**
Jason Stoller, MD
- 8:15 a.m. **Introduction to FAST/FAFF**
Jamie Nong, MD
- 8:45 a.m. **Vascular Access and Basic Procedures**
Steven Loscalzo, MD
- 9:15 a.m. **Lung Ultrasound: Pneumonia, Pneumothorax and Pleural Effusions**
Abhineet "Monti" Sharma, MD
- 9:45 a.m. **Break**
- 10 a.m. **Hands-on Skills (FAST/FAFF, Vascular Access, Lung)**
- Noon **Lunch**
- 12:45 p.m. **Approach to Ultrasound Guided Lumbar Puncture**
William Corder, MD
- 1 p.m. **Introduction to Ocular Ultrasound**
Jacob Hemberger, MD
- 1:15 p.m. **Cardiac Views**
Leah Carr, MD
- 1:45 p.m. **LV Systolic Function Assessment**
Cecile Tissot, MD
- 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, MAY 21, 2023

7 a.m. Breakfast

BREAKOUTS

EMERGENCY MEDICINE/GENERAL PEDIATRICS BREAKOUT SESSIONS

7:30 a.m. Day 1 Review

7:45 a.m. Advanced Procedural Applications for General and Emergency Medicine
Pediatric Providers
Thomas Lee, MD

8:15 a.m. Abdominal Ultrasonography in Acute Care Settings
Maher Abulfaraj, MD

8:45 a.m. Musculoskeletal Applications
Lauren Kinneman, DO

9:15 a.m. Inpatient Ultrasound in Pediatric Medicine
Ria Dancel, MD; Erin Finn, MD

NEONATAL/CRITICAL CARE BREAKOUT SESSIONS

7:30 a.m. Day 1 Review

7:45 a.m. Advanced Volume Assessment
Christie Glau, MD

8:15 a.m. Pulmonary Hypertension, Right Ventricular Function and the PDA
Diana Vargas, MD

8:45 a.m. Approach to Shock and Hypotension
Jennifer Macdonald, MD, PhD

9:15 a.m. Functional Lung Ultrasound in Neonatology and Considerations in Critical Care
Almudena Alonso-Ojembarrena, MD, PhD

9:45 a.m. Break

10 a.m. Hands-on Skills (*EM/Gen Peds; Abdominal Review, Procedures, Musculoskeletal*)

Hands-on Stations (*ICU- Shock/Volume, Right Ventricular Function, Left Ventricular Function*)

Noon Working Lunch

- 12:20 p.m. **Ultrasound in ECMO**
Thomas Pawlowski, MD
- 12:40 p.m. **Translating Education to Curriculum**
Stephanie Marshall, MD
- 1 p.m. **Umbilical Venous Cannulation in Neonates**
Benjamin Kozyak, MD
- 1:20 p.m. **Head Ultrasound Basics and Neuro-ultrasound**
Juan Mayodormo-Colunga, MD
- 1:45 p.m. **Ultrasound in COVID: The Italian Emergency Medicine Experience**
Ana Maria Musolino, MD
- 2:10 p.m. **Guidelines and Certification – The International Perspective**
Yogen Singh, MD
- 2:45 **Break**
- 3 p.m. **Skill Assessment (GP/EM: FAST/Bladder, IVC/Foreign Body, Cardiac/Lung, Neonatal/CCM: Cardiac, Lung, Abdomen/Procedure)**
- 4:30 p.m. **Conference Adjourns**



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

Aaron Chen, MD

*Director of Emergency Ultrasound
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