

COURSE ORGANIZERS:

Rangasamy Ramanathan, MD – Course Director
Chief, Neonatology Cedars Sinai Guerin Children's
PIH Health, Good Samaritan Hospital Professor of Pediatrics
Director, Division of Neonatology

Shahab Noori, MD, MS CBTI, RDSCS - Co-Director
Professor of Clinical Pediatrics
Keck School of Medicine, University of Southern California

Yogen Singh, MD, MA (Cantab), FRCPH – Co-Director
Professor of Pediatrics-Neonatology,
UC Davis Children's Hospital, University of California

Mahmood "Mac" Ebrahimi, RDSCS - Co-Director
Instructor of Clinical Pediatrics
Keck School of Medicine, University of Southern California

FACULTY:

Ruben Acherman, MD
Professor of Pediatrics, Cardiology
University of Nevada, Las Vegas, Nevada

Ruchira Garg, MD.
Professor of Pediatrics, Cedars Sinai Guerin Children's
Director, Congenital Non-Invasive Cardiology
Cedars Sinai-Cardiology Department

Merujan Uzunyan, MD
Associate Professor of Clinical Pediatrics
Keck School of Medicine, University of Southern California
Director, Division of Cardiology, LAC+USC Medical Center

Jennifer Shepherd, MD
Assistant Professor of Pediatrics
Keck School of Medicine, University of Southern California

Belinda Chan, MD
Associate Professor of Pediatrics
UC Davis Children's Hospital, University of California

Tai-Wei Wu, MD
Associate Professor of Pediatrics
Keck School of Medicine, University of Southern California



Registration fee for 5 days including course material
\$1500. For those in training the registration fee is \$1000

**For program information please contact: Dr Mahmood
Ebrahimi (Mac) Program Coordinator at
macebrahimi@yahoo.com
or call 818-462-3851**

**Space is limited.
Please register prior to July 31, 2025**

Simulator Instructors including

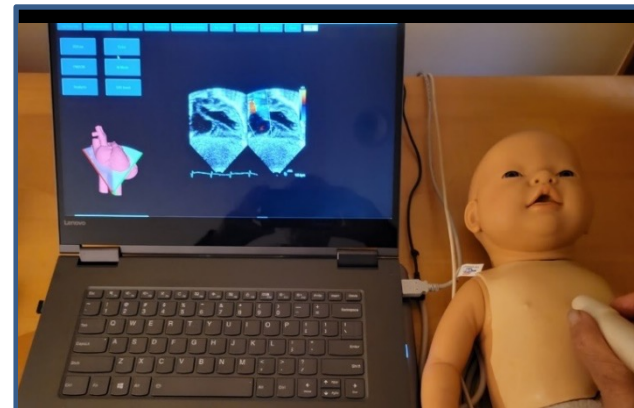
Rangasamy Ramanathan, MD
Mahmood Ebrahimi, RDSCS
Shahab Noori, MD,
Yogen Singh, MD
Tai Wei Wu, MD
Belinda Chan, MD
Jennifer Shepherd, MD
Ivonne Sierra-Strum, MD
Caroline Noh, MD.
Hemananda Muniraman, MD.

Recommended Book for the course:

Practical Neonatal Echocardiography
Mc Graw Hill, 2019

Website for the course material and echo simulator:

www.neoechosim.com



The 22nd Annual Echo Course

**Point of care
Echocardiography in the
Neonate**

Sept 8-12, 2025

**PIH Health Good Samaritan Hospital
Los Angeles, California**



Course Highlights

Hands-on training on fifteen echo simulators:

- Obtain complete set of images from all cardiac windows and recognize various structures of a normal heart
- Recognition of spatial relationship of cardiac structures obtained from cutting planes through a 3-dimensional heart image
- Assessment of cardiac function and estimation of flow using calculation package
- Differentiating abnormal cardiac structures from a normal heart
- Opportunity to perform echocardiography on volunteers

Course Objectives

Upon completion of this course, the participants are expected to:

- Understand basic principles of ultrasonography
- Identify correctly basic echocardiographic views
- Evaluate blood flow direction and velocity by pulse and continuous wave and color flow Doppler
- Identify correctly shunts through patent ductus arteriosus and foramen ovale
- Understand application of indices used in measurements of systolic and diastolic function of the heart
- Be able to do quantitative measurements of blood flow through aortic valve, pulmonary valve.
- Evaluate presence of pulmonary hypertension.
- Recognize presence of hypertrophic cardiomyopathy in infants of diabetic mothers
- know echocardiographic findings of pericardial effusion and early signs of cardiac tamponade
- Be able to suspect presence of CHD.

Basic Point of Care Echocardiography is part of core curriculum during neonatal fellowship at USC + LAG Medical Center, and Cedars Sinai Guerin Children's. The participants are introduced to some elements of this training. However, development of competence to independently obtain quality echocardiograms requires training under supervision in our or any other Neonatal echocardiography laboratory .

Presented by:

**Divisions of Neonatology, Cedars Sinai Guerin Children's,
University of California Davis, CHLA and PIH Health Good
Samaritan Hospital**

Course Presentation Schedule

Monday, Sept 8, 2025

08:00	Introductory remarks Rangasamy Ramanathan, MD
08:20	Basic physical principles of ultrasonography: 2D and Color flow Merujan Uzunyan, MD
09:00	Basic physical principles of ultrasonography: M-mode and Doppler Merujan Uzunyan, MD
10:00	Standard echocardiographic views Mahmood "Mac" Ebrahimi, RDCS
11:00	11:00-11:20 Introduction to Simulator & Test
12:00	Lunch
13:00	Echo simulation and hands on practice (3 Hours) Mac Ebrahimi and staff
16:00	Adjourn

Tuesday, Sept 9, 2025

09:00	Assessment of systolic, diastolic and global cardiac function in Neonates Shahab Noori, MD
10:00	Severe myocardial dysfunction, heart failure and shock in term and preterm neonates Yogen Singh, MD
11:00	Assessment of aortic, pulmonary and intestinal, renal and cerebral blood flows. Tai-Wei Wu, MD
12:00	Lunch
13:00	Echo simulation and hands on practice (3 Hours) Mac Ebrahimi and staff
16:00	Adjourn

Website for the course material and echo simulator:

www.neoechosim.com

Wednesday, Sept 10, 2025

09:00	Assessment of pulmonary hypertension in term and preterm neonates Yogen Singh, MD
10:00	Assessment of hemodynamic significance of patent ductus arteriosus in premature neonates Shahab Noori, MD
11:00	Effect of assisted ventilation on cardiovascular function Rangasamy Ramanathan, MD
12:00	Lunch
13:00	Echo simulation and hands on practice (3 Hours) Mac Ebrahimi and staff
16:00	Adjourn

Thursday, Sept 11, 2025

09:00	Screening for CHD for the neonatologist Yogen Singh, MD
10:00	Contraindications of transcatheter PDA Closure: neonatal echo findings Ruchira Garg, MD
11:00	Recognition and early management of critical CHDs Yogen Singh, MD
12:00	Lunch
13:00	Echo simulation and hands on practice (3 Hours) Mac Ebrahimi and staff
16:00	Adjourn

Friday, Sept 12, 2025

8:00	Cardiomyopathies Ruben Acherman, MD
8:30	Fetal echocardiography and Doppler Ultrasonography in the diagnosis of Congenital Heart Disease :and non cardiac conditions leading to fetal distress Ruben Acherman, MD
10:00	Break
10:30	Use of non-cardiac ultrasonography in assessment and management of neonates in the NICU Jennifer Shepherd, MD and Belinda Chan, MD
11:30	Echo simulation student test
12:00	Lunch with Faculty
13:00	Adjourn

