Critical Care Ultrasound & Focused Echocardiography Training for Intensivists, ER Physicians and Anesthesiologists


Offered by the St. Luke’s University Hospital Department of Continuing Education the St. Luke’s University Hospital Department of Anesthesiology

St Luke's University Hospital
Education Center
St. Luke's Hospital
801 Ostrum Street
Bethlehem, PA 18015

Course description
We have developed and implemented a training program for practitioners that do not possess previous experience in Transthoracic or Transesophageal Echocardiography and Critical Care Ultrasound (ultrasound guided vascular & pulmonary procedures). The program is specifically designed to help practitioners acquire Focused Echocardiographic and Critical Care Ultrasound skills to evaluate cardiac, vascular and pulmonary structures and assess their function. Training in Focused Echocardiography and Critical Care Ultrasound by means of a short course and acquisition of the necessary skill set is well documented in the literature. This noninvasive technique is easily learned in about 15 to 20 hours. The course incorporates many educational techniques that will enhance your learning and recall. The course consists of didactics, interactive clinical cases, and supervised hands-on training. The course is over 50% hands-on training with live models and a low student-to-machine ratio. A detailed syllabus and Focused Echo Pocket Guide will be provided.

Residents or fellows many take the course free of tuition

Course objectives
Upon successful completion of this three-day course, you will exhibit knowledge of the following:

- Echocardiography physics and machine operation
- Transthoracic Acoustic windows and cardiac ultrasound anatomy
- Transesophageal cardiac anatomy
- Assessment of LV function and contractility
- Pre-load and after-load assessment
- Pericardial effusions and tamponade assessment
- Assessment of the patient in shock
- Evaluation of the RV and vena cava
- Critical Care Ultrasound for vascular and pulmonary procedures
- Pulmonary Ultrasound
- Hemodynamic calculations
- Emergency echocardiography for CPR
- Establishing a focused echo program
- ASE focused echocardiography guidelines

Target Audience: Intensivists, ER Physicians, Anesthesiologists, Physician Assistants, Nurse Practitioners and Nurse Anesthetists

Accreditation:
The St. Luke’s Hospital & Health Network designates this live conference for 24 AMA PRA Category 1 Credit(s)™
The American Association of Nurse Anesthetists has approved this course for 24 CE Credits
AGENDA

May 31, 2013: 7:30-16:30
7:30-7:40 Course Overview
7:40-7:55 Pre Test: Echocardiography Physics
7:55-8:45 Echo Physics & Knobology: How are Echocardiography and Ultrasound Images Created?
8:45-9:05 Post Test: Echocardiography Physics
9:05-9:20 Pre Test 2: Echocardiographic Transthoracic Cardiac Anatomy
9:20-9:50 Echocardiographic Transthoracic Anatomy Acoustic Windows and Cardiac Ultrasound Anatomy
9:50-10:00 Break
10:00-12:00 Hands On Training Workshop
10:00-10:15 Echocardiography Machine Operation
10:15-12:00 How to perform the basic Focused Transthoracic Exam. The Basic views of the Left & Right Ventricles:
12:00-12:45 Lunch
12:45-13:00 Post Test: Echocardiographic Transthoracic Cardiac Anatomy
13:00-13:10 Introduction to Vascular Ultrasound
13:10-13:30 Ultrasound Vascular Anatomy
13:30-13:45 Ultrasound guided vessel cannulation techniques.
13:45-14:00 Pre Test Pulmonary Ultrasound
14:00-14:30 Pulmonary Ultrasound & Pulmonary Pathology
14:30-14:50 Post Test Pulmonary Ultrasound & Pulmonary Ultrasound Clinical Cases
14:50-15:00 Break
15:00-16:30 Hands On Training Workshop
15:00-15:15 Practice Image Acquisitions Parasternal Views
15:15-15:30 Practice Image Acquisitions Apical Views
15:30-16:00 Practice Image Acquisitions Subcostal Views
16:45-17:00 Hands On Training Workshop
16:45-16:50 Practice Image Acquisitions Subcostal Views
16:50-17:00 Practice Image Acquisitions Subcostal Views
June 1, 2013: 7:30-16:30
7:30-7:40 Focused Echo Course Overview
7:40-8:00 Test: Echocardiography Physics Review: Things you should know!
8:00-8:15 Pre Test: Echocardiographic Transthoracic and Transesophageal Cardiac Anatomy
8:15-8:45 Transthoracic Echocardiographic Anatomy Acoustic Windows and Cardiac Ultrasound Anatomy
8:45-9:30 Transesophageal Echocardiographic Probe Manipulation
9:30-10:00 Transesophageal Echocardiographic Important Views
10:00-10:10 Break
10:10-12:00 Hands On Training Workshop
10:10-10:25 Echocardiography Machine Operation
10:25-12:10 How to perform the basic Focused Transthoracic Exam. The Basic views of the Left & Right Ventricles:
12:10-13:55 Lunch
13:55-13:10 Transesophageal Echocardiography Complications and how to avoid them
13:10-13:30 Post Test: Echocardiographic Transthoracic and Transesophageal Cardiac Anatomy
13:30-13:45 Pre Test: Assessment of Ventricular Function & Volume Status
13:45-14:15 Assessment of LV Function & Contractility
14:15-14:30 Pre-Load & After-Load Assessment
14:30-14:50 Post Test: Assessment of Ventricular Function & Volume Status
14:50-15:00 Break
15:00-17:00 Hands On Training Workshop
15:00-15:40 Practice Image Acquisitions Parasternal Views
15:40-16:20 Practice Image Acquisitions Apical Views
16:20-17:00 Practice Image Acquisitions Subcostal Views
June 2, 2013 7:30-16:00
7:30-7:45 Pre Test: Pericardium & Shock Assessment 7:45-8:30 Pericardium & Pericardial Effusions:
8:30-9:30 Shock Assessment: Evaluation of Hemodynamic Instability & Shock
9:30-9:50 Post Test Pericardium & Shock Assessment
9:50-10:00 Break
10:00-12:00 Hands On Training Workshop
10:00-11:30 Image Acquisitions Subcostal Views:
11:30-12:00 Evaluation of Cardiac Valves & Doppler patterns of Cardiac Valves
12:00-12:45 Lunch
12:45-13:00 Hemodynamic Calculations & Doppler Patterns:
13:00-13:10 Emergency Echocardiography for CPR:
13:15-15:00 Hands On Training Workshop
13:15-14:00 Hemodynamic Calculations & Doppler Patterns:
14:00-14:15 Break
14:15-14:45 The Focused Echocardiogram during CPR
14:45-15:00 Pulmonary Ultrasound examination
15:00-15:10 ASE Consensus Statement on Focused Echocardiography:
15:10-15:25 Clinical Case Presentations:
15:50-16:00 Summary, Evaluations and Questions
**Course Registration Form**

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**Check Payment:** Make checks payable to St. Luke’s Hospital CME Department:

Print and mail (or email) this form to:

Manny.Changalis@sluhn.org
Manny Changalis
Department of Continuing Education
St. Luke’s Hospital
801 Ostrum Street
Bethlehem, PA 18015

You will receive email confirmation.
If you do not receive confirmation after 10 business days call 484 526-4669