



HARVARD
MEDICAL SCHOOL

**12th Annual Perioperative
Echocardiography Course:
A Transition from 2 to 3 Dimensional
Echocardiography**
September 25 – 27 2015
**The Inn at Longwood Medical
Boston, Massachusetts**

OFFERED BY

Department of Anesthesia, Critical Care and Pain Management
Beth Israel Deaconess Medical Center

COURSE DIRECTORS

Feroze Mahmood, MD • Adam B. Lerner, MD
Peter J. Panzica, MD • Charles B. Nyman, MD

COURSE DESCRIPTION: This course is designed to benefit practicing clinicians at intermediate and advanced levels of practice who desire a comprehensive review and update of the latest echocardiographic techniques practiced today. The course will focus on the transition of two to three-dimensional imaging in clinical practice and decision-making. There will also be a focus on transthoracic echocardiography and its role in perioperative patient management. The course format will include interactive hands-on skills sessions, case review, Q&A and panel presentations, which will help the learners develop strategies that will lead to improved competence and performance in practice.

LEARNING OBJECTIVES: Upon completion of this activity, participants will be able to apply the following:

- Evaluate the basics of comprehensive intraoperative echo examination, valvular assessment and repair/replacement, and advanced diastolic function and Doppler techniques
- Develop strategies to assess valves, plan surgical interventions and evaluate postoperative valvular competence.
- Operate and troubleshoot TEE equipment
- Apply the latest techniques of diastolic function assessment, strain rate imaging and 3-Dimensional echocardiography to assess complex structural relationships.
- Apply 3-Dimensional imaging for intraoperative decision making during percutaneous valve interventions.
- Define multidisciplinary nature of decision making during intraoperative valve repair surgery.

TARGET AUDIENCE: This course will particularly benefit anesthesiologists, cardiac anesthesiologists, cardiac surgeons and cardiologists.

For more information and registration: www.hmscmeregistration.org/d/rrq0c7

Program Schedule

DAY 1: BASICS OF IMAGING

6:30 – 7:00 am Continental Breakfast

Session 1 – Basics of 3D Imaging – Moderator: Peter J. Panzica, MD

7:00 – 7:30 am Basics of Physics (2D & 3D) Fred Cobey, MD

7:30 – 8:00 am Principles of Image Formation (3D) Burkhard Mackensen, MD

8:00 – 8:30 am 3D Imaging Modes and Display Gregg Hartman, MD

8:30 – 9:00 am 3D Artifacts and Pitfalls Mario Montealegre, MD

9:00 – 9:30 am Questions & Answers in Review of Concepts (Physics and Hemodynamics) with Panel Discussion Feroze Mahmood, MD/
Gregg Hartman MD

9:30 – 9:45 am Coffee Break

Session 2 – Basic Intraoperative 3D Examination Moderator: Adam B Lerner, MD

9:45 – 10:15 am A Suggested Intraoperative 3D TEE Exam Burkhard Mackensen, MD

10:15 – 10:45 am 3D Examination of the Mitral Valve Alina Nicoara, MD

10:45 – 11:15 am Principles of Multi-Planar Reformatting Han Kim, MD

11:15 – 11:45 am Questions and Answers Feroze Mahmood, MD/
Burkhard Mackensen, MD

11:45 – 12:00 LUNCH (provided)

12:00 – 1:00 pm DEBATE: 3D Imaging is not superior to 2D Imaging Pro: Gregg Hartman, MD
Con: Feroze Mahmood, MD

Session 3 – Transthoracic Symposium Moderator: Adam B. Lerner, MD

1:00 – 1:30 pm Basic Bedside Echo Examination Robina Matyal, MD

1:30 – 2:00 pm Ultrasound Evaluation of Lung/Pleura Shahzad Shaefi, MD

2:00 – 2:30 pm FATE/FAST Protocols Todd Sarge, MD

2:30 – 3:00 pm Ultrasound-Guided Resuscitation Achikam Grinberg, MD

3:00 – 3:30 pm	Coffee Break	
3:30 – 5:30 pm	Hands-On Porcine Dissection – 2D-3D Correlation <ul style="list-style-type: none"> • Detailed overview of anatomy • Echocardiographic correlations 	Faculty: Douglas Shook, MD, Lauren Cornella, MD
5:30 – 6:00 pm	Break	
6:00 – 8:00 pm	Hands-On Skills Workshop –I 3D Imaging and Transthoracic Imaging. Multiple hands-on stations with simulators/live models to practice knobology/image optimization and interpretation	Workshop Directors: Robina Matyal, MD/ Achikam Grinberg, MD
	3D Workshop 1 Faculty: Robina Matyal, MD, Burkhard Mackensen, MD, Han Kim, MD, Douglas Shook, MD Live Models Simulators	TTE/Surface Ultrasound Faculty: Achikam Grinberg, MD, Sajid Shahul, MD, Todd Sarge, MD, Shahzad Shaefi, MD Live models Simulators
8:00 pm	Adjourn	

DAY 2: CLINICAL APPLICATIONS

6:30 – 7:00 am	Continental Breakfast	
Session 1 –Aortic/Tricuspid Valve Symposium – Moderator: Adam B. Lerner, MD		
7:00 – 7:30 am	Tricuspid Regurgitation in Left Sided Disease – Echocardiographic Perspective (2D & 3D)	Greg Fischer, MD
7:30 – 8:00 am	3D Echocardiography of Aortic Valve	Han Kim, MD
8:00 – 8:30 am	Aortic Regurgitation	John Mitchell, MD
8:30 – 9:00 am	Aortic Valve Repair	Michael Andraws, MD
9:00 – 9:30 am	Questions & Answers and Review of Concepts with Panel Discussion	Adam B. Lerner, MD
9:30 – 9:45 am	Coffee Break	
Session 2 – Mitral Valve Symposium – Moderator: Peter J. Panzica, MD		
9:45 – 10:15 am	Intraoperative Mitral Valve Analysis for Mitral Valve Repair	Balachundhar Subramaniam, MD
10:15 – 10:45 am	Mitral Regurgitation and 3D Echocardiography	Fred Cobey, MD

10:45 – 11:15 am	Ischemic Mitral Regurgitation	Feroze Mahmood, MD
11:15 – 11:45 am	Echocardiographic Assessment of a Repaired Mitral Valve (2D & 3D)	Andrew Maslow, MD
11:45 – 12:15 pm	Questions & Answers in Review of Concepts with Panel Discussion	Feroze Mahmood, MD
12:15 – 12:45 pm	LUNCH (on your own)	
12:45 – 1:30 pm	Evolution of the Third-Dimension: Echocardiography	Douglas Shook, MD
Session 3 – Percutaneous Interventions and Echocardiography Aortic Valve Interventions – Moderator: Sugantha Sundar, MD		
1:30 – 2:00 pm	CORE valve	Jeffrey Popma, MD
2:00 – 2:30 pm	Sapien Valve	Jeffrey Swanson, MD
2:30 – 3:00 pm	Percutaneous Aortic Valves and Echocardiography	Greg Fischer, MD
3:00 – 3:30 pm	Complications of Percutaneous Aortic Valves	Peter J. Panzica, MD
3:30 – 4:00 pm	Assessment of Prosthetic Valves	Alexander Mittnacht, MD
4:00 – 4:30 pm	Interactive Cases/Questions and Review of Concepts with Panel Discussion	Alexander Mittnacht, MD
4:30 – 4:45 pm	Coffee Break	
Session 4 – Percutaneous Interventions and Echocardiography: Mitral Valve Interventions – Moderator: Han Kim, MND.		
4:45 – 5:15 pm	Percutaneous Mitral Valve	Jeffrey Popma, MD
5:15 – 5:45 pm	Echocardiographic Approach to Percutaneous Mitral Valves	Sugantha Sundar, MD
5:45 – 6:15 pm	Echocardiography in the Cardiac Catheterization Laboratory	Charles Nyman, MD
6:15 – 6:30 pm	Break	

6:30 – 8:00 pm	Hands-On Skills Workshop -II Multiple hands-on stations with simulators/live models to practice knobology/image optimization and interpretation	Workshop Directors: Robina Matyal, MD/ Feroze Mahmood.
	Hands-On Three-Dimensional Imaging Workshop	Faculty Burkhard Mackensen, MD, Han Kim, MD, Michael Andraws Live Models Simulators

DAY 3: PUTTING IT TOGETHER

6:30 – 7:00 am	Continental Breakfast	
Session 1 –Three-Dimensional Echocardiography Symposium – Moderator: Peter Panzica, MD		
7:00 – 7:30 am	Available 3D Echocardiographic Technologies for Intraoperative Use	Feroze Mahmood, MD
7:30 – 8:00 am	3D Interventional Echocardiography	Douglas Shook, MD
8:00 – 8:30 am	3D guidance for percutaneous Mitral Valve Repair (Mitraclip)	Burkhard Mackensen, MD
8:30 – 9:00 am	3D- Interesting Cases	Burkhard Mackensen, MD/Feroze Mahmood, MD
9:00 – 9:15 am	Break	
Session 2 –Case Presentations – Moderator: Andrew Maslow, MD		
9:15 – 12:00 pm	Challenging case presentations from course faculty and discussion with cardiologists/anesthesiologist/cardiac surgeons from the Harvard hospitals and audience participation	Faculty: Charles B. Nyman, MD, Michael Andraws, MD, Burkhard Mackensen, MD, Kamal Khabbaz, MD, David C Liu, MD, Venkatachalam Senthilnathan, MD, Prem Shekhar, MD
12:00 pm	Concluding Remarks	

ACCREDITATION: The Harvard Medical School is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Harvard Medical School designates this live activity for a maximum of 28.00 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The Royal College of Physicians and Surgeons of Canada recognizes conferences and workshops held outside of Canada that are developed by a university, academy, hospital, specialty society or college as accredited group learning activities.

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ACGM COMPETENCIES: This course is designed to meet one or more of the following Accreditation Council of Graduate Medical Education competencies:

- Patient care
- Medical knowledge
- Practice-based learning and improvement
- Interpersonal and communication skills
- Systems-based practice

REGISTRATION INFORMATION: Physicians: \$1500.00. Residents in Training and Allied Health Professionals: \$800. Processing (service fee) \$5. All fees shown in USD. Registration by credit card (VISA, MasterCard or American Express) can be made at www.hmscmeregistration.org/d/rrqoc7. Registration by check (draft on a United States bank), please make payable to Harvard Medical School. Learners who choose to pay by check will be prompted to download an online form to send in with a payment. Telephone or fax registration is not accepted. Registration with cash payment is not permitted. Upon receipt of your paid registration, you will receive an email confirmation. Be sure to include an email address that you check frequently. Your email address is used for critical information including registration confirmation, evaluation and certificate.

INQUIRIES: By phone (617-384-8600), Mon - Fri, 9 am to 5 pm (ET) or by email at: hms-cme@hms.harvard.edu.

DISCLOSURE POLICY: Harvard Medical School (HMS) adheres to all ACCME Essential Areas, Standards, and Policies. It is HMS's policy that those who have influenced the content of a CME activity (e.g. planners, faculty, authors, reviewers and others) disclose all relevant financial relationships with commercial entities so that HMS may identify and resolve any conflicts of interest prior to the activity. These disclosures will be provided in the activity materials along with disclosure of any commercial support received for the activity. Additionally, faculty members have been instructed to disclose any limitations of data and unlabeled or investigational uses of products during their presentations.

REFUND POLICY: Refunds, less an administrative fee of \$75, will be issued for all cancellations received two weeks prior to the start of the course. Refund requests must be received by postal mail, email, or fax. No refund will be issued should cancellation occur less than two weeks prior. "No shows" are subject to the full course fee and no refunds will be issued once the conference has started.

COURSE LOCATION: All sessions for this course will be at The Inn at Longwood Medical, 342 Longwood Avenue, Boston, MA 02115.

ACCOMMODATIONS/TRAVEL: Please do not purchase non-refundable airline ticket(s) until you have received an email from our office confirming your paid registration. A limited number of rooms have been reserved at the Inn at Longwood Medical. Reservations by attendees must be received on or before September 3, 2015. Reservations for the group will be made by calling (617) 731-4700. Ask for the Boston Echo Course 2015.