

ASCeXAM/ReASCE REVIEW COURSE

The most comprehensive review to help you prepare for the NBE certification examinations.

20th ANNUAL



**Save \$100
by registering
before April 4,
2019!**

**May 4-7, 2019
Marriott Copley Place
Boston, MA**

Course Director

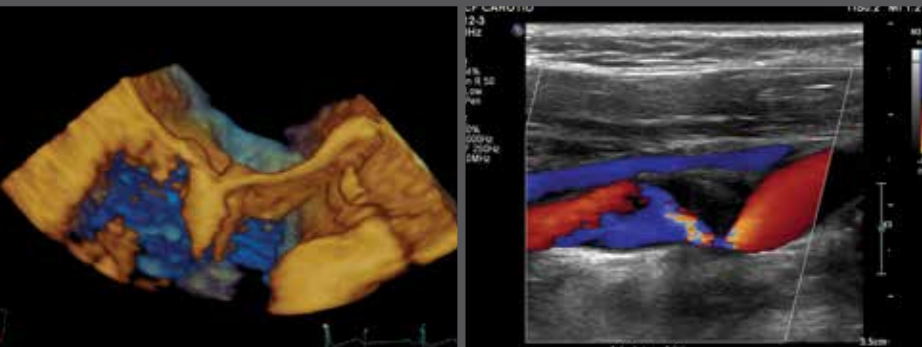
Roberto M. Lang, MD, FASE
Past President, ASE
University of Chicago Medical Center
Chicago, IL

Course Co-Director

Vera H. Rigolin, MD, FASE
Immediate Past President, ASE
Northwestern Medicine
Chicago, IL

Featuring:

- Practice Board Exam Questions
- Free Access to Online Lecture Recordings
- New Faculty and Presentations



Register now at ASEcho.org/ReviewCourse



Jointly Provided by ASE and the ASE Foundation

Program Information

Overview of the ASCeXAM/ReASCE Review Course

ASE has specifically designed the ASCeXAM/ReASCE Review Course as a preparatory course for the National Board of Echocardiography, Inc.™ (NBE) ASCeXAM® and ReASCE® examinations. Lectures given will emphasize illustrative cases and as such will not be “canned talks” from other cardiovascular ultrasound courses.

This Review Course will cover all aspects of cardiovascular ultrasound essential to these examinations, including, physics, valvular heart disease, strain and 3D imaging, contrast echocardiography, ischemic heart disease, congenital heart disease, and more.

The expert faculty will use case studies, lectures, and interactive sessions to help prepare attendees for the ASCeXAM® or ReASCE® examinations. An audience response system and question and answer sessions will facilitate faculty interaction and self-guided learning.

The ASCeXAM/ReASCE Review Course gives attendees the unique opportunity to interact with and ask questions of the expert faculty. Attendees will receive access to the presentation website that will include lectures released by faculty in PDF format. In addition, attendees will receive the recorded lectures from this course.

Why take the ASCeXAM® or ReASCE® Examinations?

NBE administers the ASCeXAM® and ReASCE® examinations to allow physicians to test and demonstrate their knowledge of echocardiography based on an objective standard. The ASCeXAM® is the Examination of Special Competence in Adult Echocardiography and is intended for those who wish to demonstrate special competence in all areas of echocardiography. The ReASCE® is the Recertification Examination of Special Competence in Adult Echocardiography designed specifically for those who have previously passed the ASCeXAM®. The purpose of ReASCE® is to promote continued excellence in all areas of echocardiography.

Passing these examinations is mandatory when applying for and maintaining NBE certification in any or all of the following areas: transthoracic echocardiography, transesophageal echocardiography, or stress echocardiography.

The examinations are given at testing centers throughout the United States. The test will consist of one case-oriented block and three multiple choice blocks covering the following content areas:

- physical principles of ultrasound;
- valvular heart disease;
- ventricular size and function, coronary artery disease, cardiomyopathies;
- congenital heart disease and fetal echocardiography;
- cardiac masses, pericardial disease, myocardial contrast, and newer applications of echocardiography.

Questions will test knowledge of M-mode, 2D and Doppler echocardiography, transesophageal, contrast, and stress echocardiography. The case-oriented block will last up to 1½ hours while the other three blocks will last up to 60 minutes per block.

The ASCeXAM® and ReASCE® exams will be held on July 22, 2019. More details concerning these examinations can be found on the NBE website at echoboards.org.

Who Should Attend

This course is designed for physicians interested in sitting for the ASCeXAM® (Examination of Special Competence in Adult Echocardiography) or the ReASCE® (Recertification Examination of Special Competence in Adult Echocardiography), as well as physicians and sonographers interested in a broad review of cardiovascular ultrasound.

Course Registration

Registration fees include breakfasts, lunches, refreshment breaks, access to course materials, all online lecture recordings, and CME credit. ASE members can take advantage of reduced registration fees as a benefit of membership. Register online at ASEcho.org/ReviewCourse.

Online Lecture Recordings

All online recordings are included with your course registration. You will be notified by email when the library of lectures has been posted to ASEUniversity.org. Look for notification about one month after the conclusion of the course.

ASE Membership

Nonmember registrants for the 20th Annual ASCeXAM/ReASCE Review Course will receive a complimentary membership through December 31, 2019, with their registration. **This membership is only available to those who have never been a member of ASE.** ASE serves its members in numerous ways by providing education, advocacy, research, practice guidelines, and a community for their profession. ASE membership includes over \$750 of FREE CME credits a year, in addition to discounts on all ASE educational courses and products. Also included is a monthly subscription to the *Journal of the American Society of Echocardiography* (JASE), access to CASE, ASE's online case reports journal, help with legislative coding and reimbursement issues, and other career resources. A plethora of online tutorials, webinars, and other educational activities make membership beneficial to echocardiographers located around the world. View the extensive list of member benefits at ASEcho.org.



Program Information

Invited Faculty

Course Director

Roberto M. Lang, MD, FASE
Past President, ASE
University of Chicago Medical Center
Chicago, IL

Expert Faculty

Amr E. Abbas, MD, FASE
Beaumont Health System
Berkley, MI

Karima Addetia, MD
University of Chicago Medical Center
Chicago, IL

Gerard P. Aurigemma, MD, FASE
University of Massachusetts
Medical School
Worcester, MA

Sidney K. Edelman, PhD
ESP Ultrasound
The Woodlands, TX

Benjamin W. Eidem, MD, FASE
Mayo Clinic
Rochester, MN

Martin G. Keane, MD, FASE
Lewis Katz School of Medicine at
Temple University
Philadelphia, PA

Itzhak Kronzon, MD, FASE
Lenox Hill Hospital
New York, NY

Course Co-Director

Vera H. Rigolin, MD, FASE
Immediate Past President, ASE
Northwestern Medicine
Chicago, IL

Steven J. Lester, MD, FASE
Mayo Clinic
Scottsdale, AZ

Robert A. Levine, MD
Massachusetts General Hospital
Boston, MA

Sunil V. Mankad, MD, FASE
Mayo Clinic
Rochester, MN

Jae K. Oh, MD, FASE
Mayo Clinic
Rochester, MN

Pravin Patil, MD, FASE
Lewis Katz School of Medicine at
Temple University
Philadelphia, PA

Sabrina D. Phillips, MD, FASE
Mayo Clinic
Jacksonville, FL

Muhamed Saric, MD, PhD, FASE
New York University
New York, NY

Accreditation & Designation



The American Society of Echocardiography is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

ASE designates this live activity for a maximum of **32.50 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Successful completion of this CME activity enables the participant to earn up to **32.50 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program**. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity.

Accommodations & Lodging


ASE's 2019 ASCeXAM/ReASCE Review Course will be held at the Boston Marriott Copley Place, 110 Huntington Avenue, Boston, MA 02116. The hotel is located in downtown, just steps away from Copley Square and captivating attractions such as Boston Common and Fenway Park. It is also close to great shopping and restaurants at the Prudential Center and Newbury Street, and is less than 10 miles from Boston Logan International Airport.

From the charming cobblestones of Beacon Hill and revolutionary landmarks of the Freedom Trail, to the iconic grounds of Harvard University, Boston is a walking city. Public transportation is accessible and convenient. The best way to enjoy this compact, friendly, and delightful city is to take to the streets and enjoy an endless variety of restaurants, music venues, museums, colleges, and sights to see. Boston's dining options are dynamic and delicious. Area chefs present signature specialties made from the freshest local ingredients. New restaurants and old favorites cater to every palate.

ASE has secured a block of rooms at the discounted rate of \$269 per night. To make reservations, please call Marriott Reservations at 877-901-2079 or visit

ASEcho.org/AccommodationsReview. The hotel room block is scheduled to be held until 6:00 PM EST on Friday, April 12, 2019, but may be sold out before this date. Therefore, we advise you to register for the program and reserve your lodging as soon as possible. All reservations must be guaranteed and accompanied by a first night room deposit or guaranteed with a major credit card. Guestroom cancellation must occur 24 hours prior to arrival. If the guest does not check-in OR has not canceled their reservation 24 hours prior to arrival, one night's room & tax will be charged to the guest's credit card.

The check-in time for the Marriott Copley Place is 4:00 PM and checkout time is 12:00 PM.



**“The faculty
was terrific and
their love of echo was
infectious.”**

*Past Review Course
Attendee*

Course Schedule

Saturday, May 4, 2019

10:30 AM **Registration**

Moderator: R. Lang

12:00 PM **Welcome**
R. Lang

12:10 PM **Normal TTE Examination, Doppler Echocardiography and Normal Antegrade Flow Patterns**
P. Patil

12:55 PM **Normal TEE Examination: Applications, Pitfalls, Probe Insertion and Manipulation, Risks and Complications**
M. Keane

1:40 PM **Chamber Quantitation: Left Ventricle, Left Atrium, Right Ventricle (2D and 3D)**
R. Lang

2:30 PM **Refreshment Break & Visit Exhibits**

Moderator: G. Aurigemma

3:00 PM **Endocarditis and Its Complications: The Role of Echocardiography**
M. Saric

3:45 PM **Echo-Doppler Assessment of Right and Left Ventricular Hemodynamics**
I. Kronzon

4:30 PM **Global and Regional Systolic Function: Basics of Remodeling, Hypertrophy and Left Ventricle Mass**
G. Aurigemma

5:15 PM **Practice Board Exam Questions on Endocarditis, Hemodynamics and Left Ventricular Remodeling**
G. Aurigemma, M. Keane, I. Kronzon, R. Lang, P. Patil, M. Saric

6:30 PM **Adjourn**

Sunday, May 5, 2019

6:30 AM **Registration, Breakfast, and Visit Exhibits**

Moderator: M. Keane

7:20 AM **Overview**
R. Lang

7:30 AM **Spectral Doppler and M-Mode Echo Cases**
G. Aurigemma, I. Kronzon

8:00 AM **Tissue Doppler and Strain Imaging**
S. Lester

8:30 AM **Cardiac Masses**
R. Lang

9:00 AM **Quantification of Mitral Regurgitation: New Guidelines**
S. Mankad

9:30 AM **Refreshment Break & Visit Exhibits**

10:00 AM **Mitral Stenosis**
R. Levine

10:30 AM **Degenerative and Functional Mitral Valve Disease**
R. Lang

11:15 AM **Practice Board Exam Questions on Mitral Valve Disease and Cardiac Masses**
G. Aurigemma, I. Kronzon, R. Lang, R. Levine, S. Lester, S. Mankad

12:15 PM **Lunch & Visit Exhibits**

Moderator: G. Aurigemma

1:15 PM **Echocardiographic Evaluation of Mitral Valve Prostheses**
S. Lester

1:50 PM **How to Assess Aortic Stenosis: New Guidelines**
M. Keane

2:30 PM **Different Variants of Aortic Stenosis**
A. Abbas

3:15 PM **Refreshment Break & Visit Exhibits**

3:45 PM **Hypertrophic Cardiomyopathy**
S. Lester

4:45 PM **Echocardiography in Systemic Disease**
S. Mankad

5:15 PM **Practice Board Exam on Aortic Valve Disease, Hypertrophic Cardiomyopathy, and Systemic Disease**
A. Abbas, M. Keane, S. Lester, S. Mankad

6:30 PM **Adjourn**



Course Schedule

Monday, May 6, 2019	
6:30 AM	Registration, Breakfast, and Visit Exhibits
Moderator: S. Mankad	
7:20 AM	Overview <i>R. Lang</i>
7:30 AM	Basic Ultrasound Physics <i>S. Edelman</i>
8:15 AM	Concepts of Imaging and Knobology <i>P. Patil</i>
9:00 AM	Fundamentals in Doppler Physics <i>S. Edelman</i>
9:45 AM	Artifacts: Theory and Illustrative Examples <i>R. Levine</i>
10:30 AM	Refreshment Break & Visit Exhibits
11:00 AM	Evaluation of the Right Ventricle <i>V. Rigolin</i>
11:45 AM	Tricuspid and Pulmonary Valve Disease: New Guidelines <i>K. Addetia</i>
12:30 PM	Practice Board Exam on Physics, Echocardiographic Artifacts, Right Ventricular Function, and Tricuspid <i>K. Addetia, S. Edelman, R. Levine, P. Patil, V. Rigolin</i>
1:15 PM	Lunch & Visit Exhibits
Moderator: G. Aurigemma	
2:15 PM	Echocardiographic Evaluation of Aortic Valve Prostheses <i>A. Abbas</i>
3:00 PM	Quantitation of Aortic Regurgitation <i>V. Rigolin</i>
3:45 PM	Stress Echocardiography: Theoretical and Practical Considerations <i>M. Keane</i>
4:30 PM	Refreshment Break & Visit Exhibits
5:00 PM	Complications of Myocardial Infarction <i>S. Mankad</i>
5:30 PM	Primer of Interventional Echo <i>M. Saric</i>
6:30 PM	Practice Board Exam on Stress Echocardiography, 3D, Hypertrophic Cardiomyopathy, and Systemic Disease <i>A. Abbas, M. Keane, S. Mankad, V. Rigolin, M. Saric</i>
7:30 PM	Adjourn

Tuesday, May 7, 2019	
6:30 AM	Registration, Breakfast, and Visit Exhibits
Moderator: V. Rigolin	
7:00 AM	Contrast Echocardiography <i>M. Saric</i>
7:30 AM	Commonly Encountered Congenital Heart Disease in Adults <i>S. Phillips</i>
8:15 AM	Congenital Heart Disease: An Approach for Simple and Complex Anomalies <i>B. Eidem</i>
9:00 AM	Congenital Heart Disease Cases <i>B. Eidem, S. Phillips</i>
9:45 AM	Refreshment Break & Visit Exhibits
10:15 AM	Echocardiographic Evaluation of Diastolic Function <i>J. Oh</i>
11:15 AM	Echocardiographic Evaluation of Pericardial Disease: Constriction vs. Restriction <i>J. Oh</i>
12:00 PM	Practice Board Exam on Diastolic Dysfunction, Pericardial Disease, and Congenital Heart Disease <i>B. Eidem, J. Oh, S. Phillips, M. Saric</i>
1:00 PM	Lunch & Visit Exhibits
Moderator: R. Lang	
2:00 PM	Diseases of the Aorta <i>R. Lang</i>
2:45 PM	Echocardiography in Heart Failure and Left Ventricular Assist Devices <i>K. Addetia</i>
3:30 PM	Adjourn

Expert faculty will walk you through board questions after each session.

The ASCeXAM/ReASCE Online **PRACTICE EXAM SIMULATION**



The **ASCeXAM/ReASCE Online Practice Exam Simulation** is designed to prepare physicians for the National Board of Echocardiography's ASCeXAM or ReASCE certification examinations. Developed by renowned experts in the field of echocardiography, the test bank consists of 300 multiple choice questions containing over 400 images and videos covering: the physical principles of cardiovascular ultrasound; valvular heart disease; ventricular size and function; coronary artery disease and cardiomyopathies; congenital heart disease and fetal echocardiography; as well as cardiac masses, pericardial disease, myocardial contrast, and the latest applications in echocardiography. M-mode, 2-Dimensional, and Doppler echocardiography are also covered.

In addition to objective-based questions, case studies are included to evaluate your knowledge of the field. After purchasing this exam simulation, you have access for 18 weeks and are given the opportunity to take two simulated exams consisting of 150 questions each, assessing your skills and knowledge in all areas. You may repeat these exams a total of six times. The grading and feedback for all six attempts will be saved. In addition to an overall grade, a percentage breakdown of your incorrect and correct answers over the five categories will be provided for each attempt, allowing you to focus your study accordingly. Feedback includes explanations of the correct and incorrect answers, offering valuable instruction.

In a recent survey conducted by ASE, 97% of the people who took ASE's ASCeXAM/ReASCE Review Course and used the Simulation Exam passed the echo boards.

The American Society of Echocardiography strives to be the premier source for ASCeXAM/ReASCE preparation.

Take advantage of this valuable preparation tool

\$199 ASE Members

\$250 Nonmembers



Visit ASEUniversity.org to purchase now!

ASCeXAM/ReASCE 20th REVIEW COURSE

REGISTER ONLINE AT:
ASECHO.ORG/REVIEWCOURSE

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Marriott Copley Place | Boston, MA

Your ASCeXAM/ReASCE Review Course registration fee includes breakfast, lunch, refreshment breaks, online access to course materials, 32.50 CME credits and ABIM MOC points. All other meals are on your own.

Name: _____

First Name

Middle Initial

Last Name

Credential: MD DO PhD RN RCS RDCS Other

Institution: _____

Email Address: _____

(All correspondence regarding your registration including your confirmation will be sent to this email address.)

Street Address: _____

City: _____ State/Province: _____ Zip/Postal Code: _____ Country: _____

Telephone: _____ Fax: _____

ASE encourages participation by all individuals. If you have a disability or other specific needs, including dietary, advance notification will help ASE to better serve you. Please contact ASE by email at Registrar@asecho.org or by telephone at 919-861-5574.

Registration Fees

Prices include access to all online lecture recordings. An email will be sent to you about one month after the course with details on how to access the content.

	Through April 4, 2019	After April 4, 2019**
ASE Physician Member	\$1,195	\$1,295
Physician Nonmember*	\$1,420	\$1,520
ASE Sonographer/Allied Health Member	\$1,065	\$1,165
Sonographer/Allied Health Nonmember*	\$1,175	\$1,275
ASE Member Fellow in Training	\$1,065	\$1,165
Fellow in Training Nonmember*	\$1,175	\$1,275

* This registration fee includes ASE membership through December 31, 2019. Membership is only available to those who have never been a member of ASE.

** On-site registration is available, but beginning May 4, 2019, all fees will increase by an additional \$100.

ASCeXAM/ReASCE Online Practice Exam Simulation

Order your ASCeXAM/ReASCE Online Practice Exam at the same time you register. \$199 ASE member \$250.00 Nonmember.

Payment Information

Payment must accompany this form.

Check (payable to American Society of Echocardiography in U.S. dollars drawn on a U.S. bank)

Credit Card: Visa MasterCard American Express

Cardholder's Name: _____

Card Number: _____ Expiration Date: _____ CVC #: _____

Registration cancellation fees may apply and ASE reserves the right to determine if a refund is possible. Please see the full cancellation policy online at ASEcho.org/ReviewCourse.



ASE Foundation

American Society of Echocardiography
2530 Meridian Parkway, Suite 450
Durham, NC 27713

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