

# ASCeXAM/ReASCE REVIEW COURSE

**NEW for 2015 – Bonus Day Added**

*Featuring more interaction with faculty and expanded topic coverage.*

# 16th ANNUAL

**May 2 - 5, 2015**  
**Sheraton Philadelphia**  
**Downtown**  
**Philadelphia, PA**

#### Course Director

Martin G. Keane, MD, FASE  
Temple Heart and Vascular Center  
Philadelphia, PA

#### Course Co-Director

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

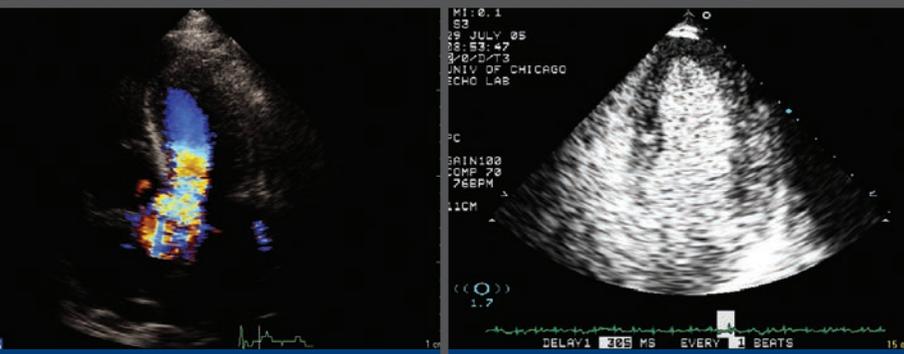
**The most comprehensive review to help you  
prepare for the NBE certification examinations**

#### Featuring:

- Review Lectures
- Illustrative Cases
- Expert Faculty Advice
- Audience Response System

#### Invited Expert Faculty Includes:

Sidney K. Edelman, PhD  
Itzhak Kronzon, MD, FASE  
Miguel A. Quiñones, MD  
Natesa G. Pandian, MD  
Sunil Mankad, MD, FASE  
And, many more experts in echocardiography!



# Program Information

## Overview of the four day ASCeXAM/ReASCE Review Course

The American Society of Echocardiography (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. The course is longer by an entire day to maximize time with faculty and ensure complete coverage of the topics. Almost 100% of previous attendees have indicated that this course helped them prepare well for the examinations.

*You asked, we listened.  
Past attendees indicated that  
they wanted more time for  
questions with faculty.  
ASE listened and added a day to  
ensure the best exam  
preparation experience  
possible.*

## 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. The ASCeXAM® 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 (1) case-oriented block and three (3) multiple choice blocks covering the following content areas:

- 1) physical principles of ultrasound;
- 2) valvular heart disease;
- 3) ventricular size and function, coronary artery disease, cardiomyopathies;
- 4) congenital heart disease and fetal echocardiography;
- 5) 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 (3) blocks will last up to 60 minutes per block.

More details concerning these examinations can be found on the NBE website at [www.echoboard.org](http://www.echoboard.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.



## Learning Objectives

Upon completion of this course, participants should be better able to:

- Explain the essential physical principles of cardiac ultrasound.
- Recognize common ultrasound artifacts and their genesis.
- Estimate systolic function using standard M-mode and 2D echocardiography, as well as newer modalities such as strain imaging and 3D echocardiography.
- Identify and quantitate valvular heart disease severity.
- Describe the application of Doppler in the assessment of hemodynamics and diastolic function.
- Perform clinically relevant calculations of valve areas and intracardiac pressures.
- Explain proven techniques for interpreting stress echocardiographic examinations.
- Differentiate features of cardiac tamponade, constrictive pericarditis, and restrictive cardiomyopathy.
- List appropriate applications of echocardiography.
- Recognize newer applications of echocardiography such as myocardial contrast.



# Accreditation & Designation

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint providership of the American Society of Echocardiography and the American Society of Echocardiography Education and Research Foundation. The American Society of Echocardiography is accredited by the ACCME to provide continuing medical education for physicians.

The American Society of Echocardiography designates this live activity for a maximum of 31.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ARDMS, CCI, and Sonography Canada recognize ASE's certificates and have agreed to honor the credit hours toward their registry requirements for sonographers.

All or a portion of this educational activity may meet the CME requirement for IAC Echocardiography accreditation.

The American Society of Echocardiography is committed to ensuring that its educational mission and all educational programs are not influenced by the special interests of any corporation or individual, and its mandate is to retain only those speakers whose financial interests can be effectively resolved to maintain the goals and educational integrity of the program. While a monetary or professional affiliation with a corporation does not necessarily influence a speaker's presentation, the Essential Areas and policies of the ACCME require that any relationships that could possibly conflict with the educational value of the program be resolved prior to the educational session and disclosed to the audience.

*This was a fantastic course!*

*Overall the lectures were excellent. The energy and time put into the talks was clearly evident. The desire to help us reach a greater understanding was clear.*

*Excellent course; all speakers were very, very good.*

*I am convinced that if I had not attended the course I would've had difficulty passing the exam. You'll probably see me at the course next year – not because I have to take the exam again but because I learned so much and thought that the lectures were all outstanding.*

## Review Course Location & Lodging

ASE's 2015 ASCeXAM/ReASCE Review Course will be held at the Sheraton Philadelphia Downtown Hotel, 201 N. 17th St., Philadelphia, PA19103. The hotel is located in the heart of Center City Philadelphia and is within walking distance to all of the city's major attractions, including the Philadelphia Museum of Art, Love Park, the Franklin Institute, Barnes Foundation and more. The Sheraton Philadelphia Downtown is located just 7 miles from the Philadelphia International Airport.

ASE has secured a block of rooms at the Sheraton Philadelphia Downtown. Special discounted rates for the course are \$174 for a single or double occupancy.

To make reservations by phone, call 1-800-325-3535.

Callers should identify themselves as being with the ASE 2015 - ASEeXAM/ReASCE Review Course in order to receive this special room rate. To make reservations online please visit <https://www.starwoodmeeting.com/Book/ASE2015>

Reservations must be made by Monday, March 28, 2015 at 5:00 pm EST. All reservations must be guaranteed and accompanied by a first night room deposit or guaranteed with a major credit card. Guestroom cancellation must occur by 4:00 pm the day prior to arrival. If guest does not check-in OR has not cancelled their reservation by 4:00 pm the day prior to arrival, one night's stay & tax will be charged to the guest's credit card. The check-in time for the Sheraton Philadelphia Downtown is 3:00 pm and check-out time is 12:00 pm.

# Syllabus



Attendees will be provided with a black & white printed syllabus and a memory stick. Both will include lectures released by faculty in a PowerPoint handout format. In addition, attendees will be given the option to purchase a copy of the recorded lectures at a discounted rate during the pre-registration process.

## Course Director:

Martin G. Keane, MD, FASE  
Temple Heart and Vascular Center  
Philadelphia, PA

## Course Co-Director:

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

## Expert Faculty:

Amr Abbas, MD, FASE  
Beaumont Northpointe Heart Center  
Berkley, MI

Dennis Atherton, RDCS, RCT, RRT, FASE  
Maine Medical Center  
Portland, ME

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

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

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

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

Sunil Mankad, MD, FASE  
Mayo Clinic  
Rochester, MN

Natesa G. Pandian, MD  
Tufts Medical Center  
Boston, MA

Michael D. Pettersen, MD  
Rocky Mountain Pediatric Cardiology  
Denver, CO

Sabrina Phillips, MD, FASE  
Mayo Clinic  
Rochester, MN

Miguel Quiñones, MD  
Methodist DeBakey Heart & Vascular Center  
Houston, TX

Lawrence G. Rudski, MD, FASE  
Jewish General Hospital  
Montreal, QC, Canada

Dennis A. Tighe, MD, FASE  
University of Massachusetts Medical School  
Worcester, MA

Susan E. Wieggers, MD, FASE  
Temple University  
Philadelphia, PA





# Course Schedule

Saturday, May 2, 2015

9:30 am	<b>REGISTRATION</b>
<b>M. Keane, presiding</b>	
12:00 pm	<b>Welcome</b> M. Keane
12:15 pm	<b>Overview of ASCeXAM®</b> D. Tighe S. Wiegiers
12:45 pm	<b>Pre Test Board Review Questions</b> M. Keane
1:30 pm	<b>Normal Transthoracic/Transesophageal Examination</b> S. Wiegiers
2:30 pm	<b>Classic M-Mode Echocardiography</b> G. Aurigemma I. Kronzon
3:15 pm	<b>VISIT EXHIBITS AND REFRESHMENT BREAK</b>

<b>G. Aurigemma, presiding</b>	
3:45 pm	<b>Spectral Doppler Cases</b> G. Aurigemma I. Kronzon
4:30 pm	<b>Basic Chamber Quantification</b> D. Atherton
5:00 pm	<b>Right Heart Hemodynamics: Echocardiography; PA catheter in a Box</b> I. Kronzon
5:45 pm	<b>Read with the Experts: Cases and Audience Response Questions</b> D. Atherton G. Aurigemma I. Kronzon S. Wiegiers
6:35 pm	<b>ADJOURN</b>



# Course Schedule

Sunday, May 3, 2015



6:30 am	<b>REGISTRATION</b>
6:40 am	<b>VISIT EXHIBITS &amp; CONTINENTAL BREAKFAST</b>
<b>M. Keane, presiding</b>	
7:20 am	<b>Overview</b> M. Keane
7:30 am	<b>Imaging/Knobology/Artifacts</b> D. Atherton
8:10 am	<b>Echocardiographic Evaluation of the Right Ventricle</b> L. Rudski
8:50 am	<b>Myocardial Imaging: Tissue Doppler and Strain Imaging</b> S. Lester
9:30 am	<b>Cardiac Masses</b> D. Tighe
10:15 am	<b>VISIT EXHIBITS &amp; REFRESHMENT BREAK</b>
10:45 am	<b>Anatomy of the Mitral Valve and Quantification of Mitral Regurgitation</b> S. Mankad
11:30 am	<b>Mitral Valve Stenosis</b> R. Levine
12:10 pm	<b>Echocardiographic Evaluation of Mitral Valve Prostheses</b> D. Tighe
12:45 pm	<b>VISIT EXHIBITS &amp; LUNCH</b>

<b>G. Aurigemma, presiding</b>	
1:45 pm	<b>Spectrum of Aortic Stenosis</b> M. Keane
2:25 pm	<b>Aortic Stenosis: Severe by Gradient but not Valve Area</b> A. Abbas
3:05 pm	<b>Etiology and Quantification of Aortic Regurgitation</b> M. Keane
3:45 pm	<b>VISIT EXHIBITS &amp; REFRESHMENT BREAK</b>
4:15 pm	<b>Echocardiographic Evaluation of Aortic Valve Prostheses</b> A. Abbas
4:55 pm	<b>Endocarditis: The Role of Echocardiography</b> S. Wiegers
5:35 pm	<b>Valve Disease: Board Review Questions</b> A. Abbas M. Keane D. Tighe
6:15 pm	<b>ADJOURN</b>

# Course Schedule

Monday, May 4, 2015



6:30 am	<b>REGISTRATION</b>
6:40 am	<b>VISIT EXHIBITS &amp; CONTINENTAL BREAKFAST</b>
<b>M. Keane, presiding</b>	
7:20 am	<b>Overview</b> M. Keane
7:30 am	<b>Tricuspid and Pulmonary Valve Disease</b> L. Rudski
8:15 am	<b>Basic Ultrasound Physics</b> S. Edelman
9:00 am	<b>Contrast Echocardiography</b> S. Lester
9:45 am	<b>Typical Board Questions in Physics</b> S. Edelman
10:30 am	<b>VISIT EXHIBITS &amp; REFRESHMENT BREAK</b>
11:00 am	<b>Artifacts: Theory and Illustrative Examples</b> R. Levine
11:40 am	<b>Read With the Experts: Cases and Audience Response Questions</b> S. Edelman R. Levine S. Mankad
12:30 pm	<b>VISIT EXHIBITS &amp; LUNCH</b>

<b>G. Aurigemma, presiding</b>	
1:30 pm	<b>Hypertrophic Cardiomyopathy or Phenocopy</b> S. Lester
2:15 pm	<b>Echocardiography in Systemic Disease</b> S. Mankad
3:30 pm	<b>VISIT EXHIBITS &amp; BREAK</b>
3:45 pm	<b>Stress Echocardiography: Theoretical and Practical Considerations</b> S. Lester
4:25 pm	<b>Case Based Echo in Ischemic Heart Disease and Myocardial Infarction</b> D. Tighe
5:05 pm	<b>Stress Echocardiography: Illustrative Cases</b> G. Aurigemma S. Lester S. Mankad
6:00 pm	<b>ADJOURN</b>

# Course Schedule

Tuesday, May 5, 2015



6:30 am	<b>REGISTRATION</b>
6:30 pm	<b>VISIT EXHIBITS &amp; CONTINENTAL BREAKFAST</b>
<b>M. Keane, presiding</b>	
7:30 am	<b>Overview</b> M. Keane
7:40 am	<b>Commonly Encountered Congenital Heart Disease in Adults</b> S. Phillips
8:15 am	<b>Congenital Heart Disease: An Approach for Simple and Complex Anomalies</b> M. Pettersen
9:00 am	<b>Congenital Heart Disease Cases</b> M. Pettersen S. Phillips
10:00 am	<b>VISIT EXHIBITS &amp; REFRESHMENT BREAK</b>
10:30 am	<b>Echocardiographic Evaluation of Diastolic Function</b> M. Quiñones

11:25 am	<b>Echocardiographic Evaluation of Hemodynamics in Pericardial Disease</b> N. Pandian
12:05 pm	<b>Case Studies in Diastolic Dysfunction and Pericardial Disease</b> G. Aurigemma M. Quiñones
1:00 pm	<b>VISIT EXHIBITS &amp; LUNCH</b>
<b>G. Aurigemma, presiding</b>	
2:00 pm	<b>Applications of 3D Imaging a Case Based Approach</b> S. Mankad
2:45 pm	<b>Diseases of Aorta</b> N. Pandian
3:30 pm	<b>Post Test Board Review Questions</b> M. Keane
4:15 pm	<b>ADJOURN</b>

## Course Registration Information

Due to the popularity of the Review Course, it is recommended that you submit your registration as soon as possible. To ensure that all participants have adequate space and resources to maximize their learning experience, ASE reserves the right to limit the number of attendees for the Review Course.

ASE will make every effort to accommodate as many registrants as possible. Registrations received after the course is full will be placed on a waiting list.

On-site registrations will not be allowed if the course fills before May 1, 2015. ASE is not responsible for airline ticket or hotel accommodations should registrants be unable to register for the course. Please make sure you have a confirmed registration via email from ASE before making any travel reservations.

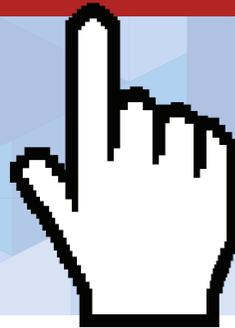
## Questions and Contact Information

If you have any questions about the ASCeXAM/ReASCE Review Course, please call ASE Headquarters at (919) 861-5574 or email us at [ReviewCourse@asecho.org](mailto:ReviewCourse@asecho.org).

## Cancellation Policy

If you wish to cancel your participation in the 2015 ASCeXAM/ReASCE Review Course, your registration fee, less a \$100.00 administrative fee will be refunded when written notification is received on or before April 2, 2015. No refunds will be made after April 2, 2015 or given for no-shows. Registration for any ASE course is non-transferable to another participant or another course. In the event that an individual is unable to attend the conference due to inclement weather or chooses not to attend due to a health epidemic, ASE is unable to refund the conference fee. In the unlikely event the course is cancelled, ASE is responsible only for refund of the registration fee, minus the administrative fee, and not for transportation, hotel accommodations, or any miscellaneous expenses incurred by the participant.

# The new 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 four hundred 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 thirteen 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.

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 Non-Members**



Visit **[www.ASEUniversity.org](http://www.ASEUniversity.org)** to purchase now!

# ASCeXAM/ReASCE REVIEW COURSE

**May 2 – 5, 2015**

Sheraton Philadelphia Downtown,  
Philadelphia PA  
Course Director: Martin G. Keane, MD, FASE

Your registration fee includes breakfast and lunch on Sunday, Monday, and Tuesday, daily breaks, and a printed syllabus and thumb drive containing the syllabus, and 31.5 hours of CME credit. 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.)*

Which is your preferred mailing address?  Work/Business  Home

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State/Province: \_\_\_\_\_ Zip/Postal Code: \_\_\_\_\_ Country: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

If you need disability accommodations, please check here and advise us of your needs at least two weeks before the program.

**Special Needs:** ASE encourages participation by all individuals. If you have a disability or other specific needs, advance notification will help ASE to better serve you. Please contact ASE by email at [ReviewCourse@asecho.org](mailto:ReviewCourse@asecho.org) or telephone at (919) 861-5574.

Special Dietary Needs: \_\_\_\_\_

## Registration Fees: Prior to April 2, 2015\*

ASE/CSE Physician Member (\$925)

ASE/CSE Sonographer Member (\$800)

ASE Fellows in Training (\$875)

Physician Non-Member (\$1,145)

Sonographer Non-Member (\$950)

Fellows in Training Non-Member (\$1,000)

\*After April 2, 2015: ASE Physician Member- \$1,025; Nonmember Physician- \$1,245; ASE/Allied Health Member\*\$900; Nonmember Allied Health \$1,050; ASE Member Resident/Fellow in Training: \$975; Nonmember Resident/Fellow in Training: \$1,000.

## Syllabus

Course registration comes with a copy of the black and white printed syllabus of the PowerPoint slides. If you do not want the printed syllabus and only want the thumb drive please check here to opt out.

## ASCeXAM/ReASCE Conference Online Library

\$199.00 Order now and save! The Review Course library includes unlimited online access to the 2015. ASCeXAM/ReASCE Review Course recorded sessions. Study prior to the exam and educate your staff year-round with the ASE Online Library.

## 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: \_\_\_\_\_ Security Code: \_\_\_\_\_

**Register online and receive an immediate receipt! [www.asecho.org/ReviewCourse](http://www.asecho.org/ReviewCourse)**

AMERICAN SOCIETY OF ECHOCARDIOGRAPHY INC, P.O. Box 890082, Charlotte, NC 28289-0082

Phone: 919-861-5574, Fax: 919-882-9900 • Email: [ReviewCourse@asecho.org](mailto:ReviewCourse@asecho.org), Web site: [www.asecho.org/ReviewCourse](http://www.asecho.org/ReviewCourse)



**ASE** Foundation

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Morrisville, NC 27560

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10th  
ASCeXAM/ReASCE  
REVIEW COURSE

**May 2 - 5, 2015**

**Philadelphia Marriott  
Downtown Philadelphia, PA**

**97%** of attendees who took this  
course passed the NBE exam



Get prepared for the NBE exams by  
registering for this premier ASE educational course.

Register now at [www.asecho.org/ReviewCourse](http://www.asecho.org/ReviewCourse)

AMERICAN SOCIETY OF ECHOCARDIOGRAPHY  
**40**<sup>th</sup> ANNIVERSARY  
established 1975