

ASCeXAM/ReASCE REVIEW COURSE

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

21st ANNUAL

**Content available on
May 9, 2020**

Course Director

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

NEW!
...
**VIRTUAL
EXPERIENCE**

Featuring:

- LIVE Q&A Sessions on May 30 and May 31
- Access to All Presentation Recordings, including Physics
- New Faculty and Presentations

Register now at ASEcho.org/ReviewCourse

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 and lectures to help prepare attendees for the ASCeXAM[®] or ReASCE[®] examinations. Registrants will have the opportunity to submit questions for two 2-hour live webinar sessions on May 30 and 31 that will facilitate faculty interaction and self-guided learning.

Registrants will have access to recordings and PDF slides of all scheduled presentations, including physics, for three years.

Learning Objectives

- 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, diastolic function and heart failure.
- 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 and 3D echocardiography.
- Explain the utility of Doppler echocardiography in disease of the Aorta.

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.

As of now, the ASCeXAM[®] and ReASCE[®] exams will be held on Tuesday, July 28, 2020. 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 all recorded presentations, post test questions, two 2-hour question and answer sessions and 30 CME credits. ASE members can take advantage of reduced registration fees as a benefit of membership. Register online at ASEcho.org/ReviewCourse.

Program Information

Invited Faculty

ASE Membership

Nonmember registrants for the 21st Annual ASCeXAM/ReASCE Review Course will receive a complimentary membership through December 31, 2020, 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.

Accreditation and 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 **30 AMA PRA Category 1 Credits™** pending approval. 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 **30 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.



Course Director

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

Expert Faculty

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

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

Benjamin W. Eidem, MD, FASE
Mayo Clinic
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Lewis Katz School of Medicine at Temple University
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Muhamed Saric, MD, PhD, FASE
New York University
New York, NY

Partho P. Sengupta, MBBS, MD, DM, FASE
West Virginia University Healthcare
Morgantown, WV

James A. Zagzebski, PhD
University of Wisconsin-Madison
Madison, WI



Course Schedule

TTE, TEE, Right and Left Ventricular Hemodynamics, Endocarditis, Chamber Quantitation, and Systolic Function

Welcome and Overview of ASCeXAM/ReASCE Exam

V. Rigolin

Normal TTE Examination, Doppler Echocardiography, and Normal Antegrade Flow Patterns

P. Patil

Normal TEE Examination: Applications, Pitfalls, Probe Insertion and Manipulation, Risks and Complications

M. Keane

Echo-Doppler Assessment of Right and Left Ventricular Hemodynamics

G. Aurigemma

Endocarditis and Its Complications: The Role of Echocardiography

P. Patil

Chamber Quantitation: Left Ventricle, Left Atrium, Aorta (2D&3D)

G. Aurigemma

Global and Regional Systolic Function: Basics of Remodeling, Hypertrophy, and Left Ventricular Mass

G. Aurigemma

Spectral Doppler, Deformation, Stress Echo, Mitral Stenosis, Mitral Valve Disease, and Mitral Regurgitation

Spectral Doppler and M-Mode Echo Cases

G. Aurigemma

Deformation Imaging

S. Lester

Stress Echocardiography: Theoretical and Practical Considerations

M. Keane

Mitral Stenosis

R. Mankad

Degenerative Mitral Valve Disease

K. Addetia

Functional Mitral Valve Disease

V. Rigolin

Quantification of Mitral Regurgitation: New Guidelines

S. Mankad

Mitral Valve Prostheses, Aortic Stenosis, HCM, Systemic Disease and Formulas

Echocardiographic Evaluation of Mitral Valve Prostheses

S. Lester

How to Assess Aortic Stenosis: New Guidelines

V. Rigolin

Different Variants of Aortic Stenosis

S. Mankad

Hypertrophic Cardiomyopathy

S. Lester

Echocardiography in Systemic Disease

R. Mankad

Which Formulas Should I Know For the Exam?

A. Narang

Physics, Knobology, Artifacts, Right Ventricular Function, Tricuspid and Pulmonary Valve Disease, Appropriate Use Criteria, and IAC Accreditation

Overview

V. Rigolin

Basic Ultrasound Physics

J. Zagzebski

Concepts of Imaging and Knobology

P. Patil

Fundamentals in Doppler Physics

J. Zagzebski

Artifacts: Theory and Illustrative Examples

M. Keane

Evaluation of the Right Ventricle

V. Rigolin

Tricuspid and Pulmonary Valve Disease: New Guidelines

K. Addetia

More Formulas I Need to Know for the Exam

A. Narang

Aortic Regurgitation, Aortic Prosthesis, Cardiac Masses, Myocardial Infarction, and Interventional Echocardiography

Quantitation of Aortic Regurgitation

V. Rigolin

Evaluation of Aortic Prosthesis

S. Mankad

Cardiac Masses

A. Narang

Complications of Myocardial Infarction

S. Mankad

Primer of Interventional Echocardiography

M. Saric

Contrast, Congenital Heart Disease, Diastolic Function, Pericardial Disease, Diseases of the Aorta, Heart Failure and LVADs

Contrast Echocardiography

M. Saric

Commonly Encountered Congenital Heart Disease in Adults

S. Phillips

Congenital Heart Disease: An Approach for Simple and Complex Anomalies

B. Eidem

Congenital Heart Disease Cases

B. Eidem, S. Phillips

Echocardiographic Evaluation of Diastolic Function

P. Sengupta

Echocardiographic Evaluation of Pericardial Disease: Constriction vs. Restriction

P. Sengupta

Diseases of the Aorta

M. Saric

Echocardiography in Heart Failure and Left Ventricular Assist Devices

K. Addetia



Expert faculty
will walk you
through board
questions during live
Q&A sessions.

Faculty Disclosures

The following faculty members do not have any relationships with industry/commercial supporters to disclose:

Karima Addetia, MD
Benjamin W. Eidem, MD, FASE
Martin G. Keane, MD, FASE
Steven J. Lester, MD, FASE
Rehka Mankad, MD, FASE
Sunil V. Mankad, MD, FASE
Akhil Narand, MD
Pravin Patil, MD, FASE
Sabrina D. Phillips, MD
Muhammed Saric, MD, PhD, FASE
Partho P. Sengupta, MBBS, MD, DM, FASE
Vera H. Rigolin, MD, FASE

The following faculty members do have financial relationships with industry/commercial supporters to disclose:

Gerard P. Aurigemma, MD, FASE – TomTec (Speaker/Speaker's Bureau)
James A. Zagzebski, PhD – SunNuclear (Consultant/Advisor), Gammex (Consultant Advisor)

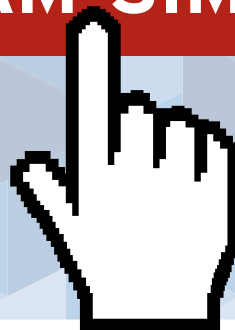
The following members of the ASE CME Committee (not serving as faculty) do not have any relationship with industry/commercial supporters to disclose:

Bhawna Arya, MD, FASE
Jennifer Betz, BS, RDCS, FASE
Mary Corretti, MD, FASE
Loren Francis, MD
Denise Ignatowski, BS, RDCS, FASE
Eric Kallstrom, MBA, ACS, RDCS, FASE
Jin Kyung Kim, MD, PhD, FASE, FACC
Rebecca Klug, BA, ACS, RDCS, PE, FASE
Smadar Kort, MD, FASE
Aparna Kulkarni, MD
Maan Malahfji, MD
Matthew Parker, MD, FASE
Rene Quiroz, MD, FASE
Eileen Richardot, RCS, RDCS, FASE
Danita Sanborn, MD, MMSc, FASE
Jeffrey Scott, DO
Timothy Slesnick, MD, FASE
Richard Stacey, MD, FASE
Carolyn Lee Taylor, MD, FASE
Ratna Vadlamudi, MD, FASE
Anita Wokhlu, MD, FASE

All members of the ASE staff who were involved in the planning and implementation of this activity do not have any relationships with industry/commercial supporters to disclose:

Jennifer Goss, Healthcare Education Specialist
Kelly Joy, Meeting Planner
Christina LaFuria, Vice President of Educational Activities
Elizabeth Lane, Online Education Manager
Jaclyn Levine, Meeting Planner Manager
Robin Wiegnerink, MNPL, Chief Executive Officer

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



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American Society of
Echocardiography

Visit ASEUniversity.org to purchase now!

ASceXAM/ReASCE 21st REVIEW COURSE

NEW! VIRTUAL EXPERIENCE
REGISTER ONLINE AT:
ASECHO.ORG/REVIEWCOURSE
Content available on May 9, 2020
Live Q&A Sessions on May 30 and May 31

Your ASceXAM/ReASCE Review Course registration fee includes all recorded presentations, post test questions, two 2-hour Q&A sessions and 30 CME credits.

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, post test questions, and two 2-hour Q&A sessions.

ASE Physician Member	\$1,045
Physician Nonmember*	\$1,240
ASE Sonographer/Allied Health Member/International Member	\$915
Sonographer/Allied Health/International Nonmember*	\$1,030
ASE Member Fellow in Training	\$915
Fellow in Training Nonmember*	\$1,030

* This registration fee includes ASE membership through December 31, 2020. Membership is only available to those who have never been a member of ASE.

ASceXAM/ReASCE Online Practice Exam Simulation

☐ Order your ASceXAM/ReASCE Online Practice Exam at the same time you register. \$199 ASE member \$250 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.

Register online and receive an immediate receipt! ASEcho.org/ReviewCourse

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