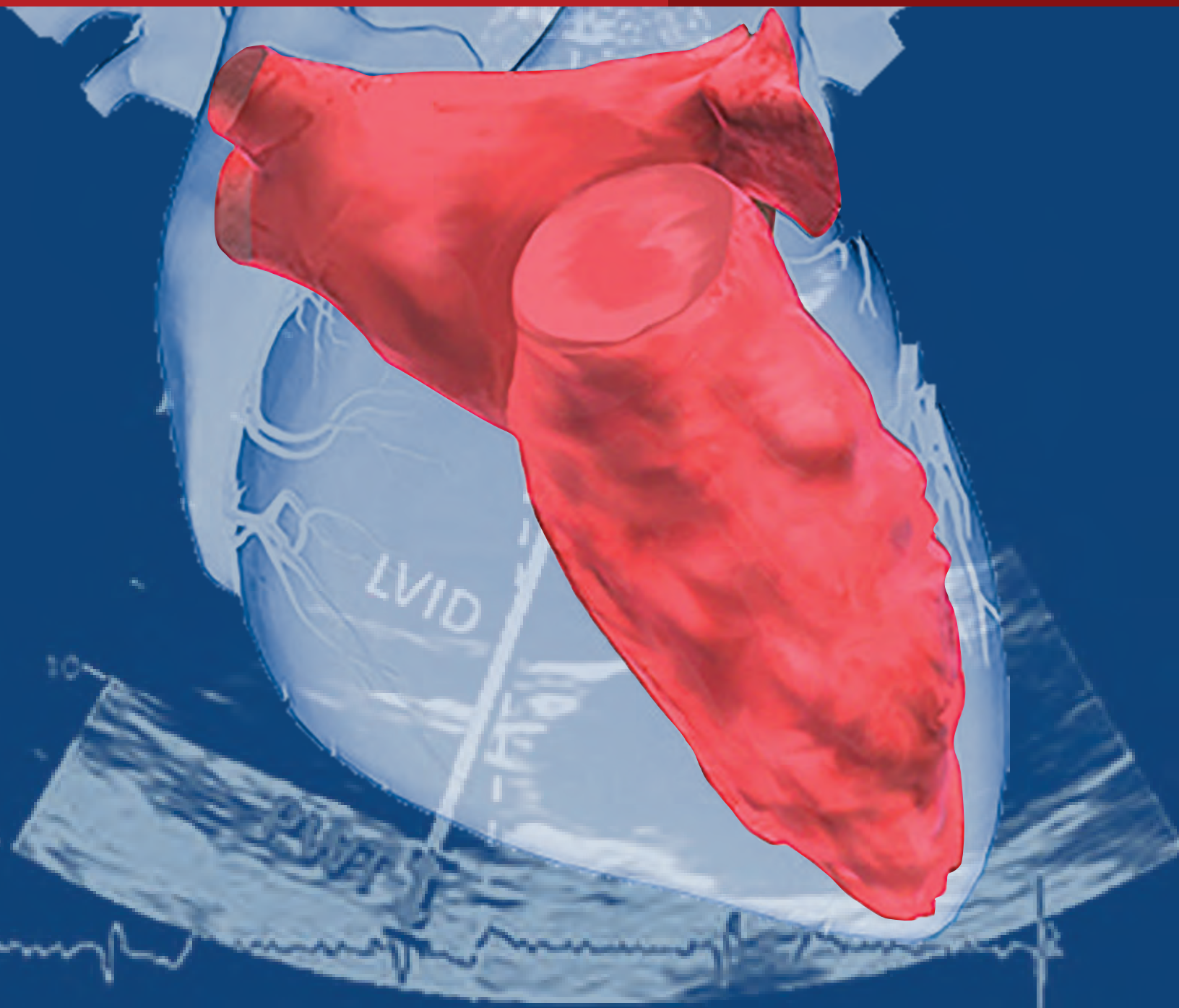


# EDUCATION & PRODUCTS CATALOG

THE AMERICAN SOCIETY  
OF ECHOCARDIOGRAPHY



**ASE** American Society of  
Echocardiography

ASE is a member organization of professionals committed to excellence in cardiovascular ultrasound and its application to patient care through education, advocacy, research, innovation, and service.



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ASE is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education (CME) for physicians. ASE is committed to ensuring that its educational mission and all sponsored 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 its programs. While a monetary or professional affiliation with a corporation does not necessarily influence a presentation, the ACCME's Essential Areas, Criteria, and Policies require that any relationship that could possibly conflict with the educational value of a program be resolved prior to the educational session and disclosed to the audience. In accordance with these policies, ASE implements mechanisms prior to the planning and implementation of CME activities to identify and resolve conflicts of interest for all individuals in a position to control content.



Maintenance of Certification in Anesthesiology Program® and MOCA® are registered certification marks of the American Board of Anesthesiology®. MOCA 2.0® is a trademark of the American Board of Anesthesiology

## **29<sup>th</sup> Annual Echo Hawaii**

**January 19-26, 2019**

**Hapuna Beach Prince Hotel, Kohala Coast, HI**

*Course Director: Neil J. Weissman, MD, FASE*

Echo Hawaii presents the latest information on established and emerging cardiovascular ultrasound technologies. Expert U.S. and international faculty discuss state-of-the-art technologies with a particular focus on how they can be effectively applied in the clinical setting. Case-based approaches are used to discuss new and established uses of echocardiography for diagnosis and guiding management in patients with a broad array of cardiovascular conditions. Topics include: advanced assessment of systolic and diastolic function, 3D/4D imaging, adult congenital heart disease, and contemporary approaches to valve disease, guidance of interventional procedures, contrast echocardiography, ischemic heart disease, and aortic pathology. Special sessions include workshops on perioperative and critical care and 3D echocardiography.



***“Beautiful setting, excellent speakers...wouldn’t change a thing!”***  
***“I would like to thank ASE for putting together an amazing, educational, and enriching conference.”***

### **Registration**

#### **Main Conference**

ASE Member Physician: \$775

Nonmember Physician: \$895

ASE Member Sonographer/Allied Health: \$650

Nonmember Sonographer/Allied Health: \$750

ASE Member Resident/Fellow in Training: \$555

Nonmember Resident/Fellow in Training: \$655

**Register for all ASE courses  
at [ASEcho.org/Education](http://ASEcho.org/Education)**

Register Early and Save! Rates subject to change.  
Please visit [ASEcho.org/education](http://ASEcho.org/education) for up-to-date pricing.

# State-of-the-Art Echocardiography

# ASCeXAM/ReASCE Review Course

## **32<sup>nd</sup> Annual State-of-the-Art Echocardiography February 16-18, 2019**

**Paradise Point Resort & Spa, San Diego, CA**

Course Director: Bijoy K. Khandheria, MD, FASE

State-of-the-Art Echocardiography is a premier educational venue for echocardiography in clinical practice. More than 100 cases will be used to show strain imaging, 3D echocardiography, valve disease, and intervention. Expert faculty will lead a percutaneous workshop with an in-depth exploration of the use of echocardiographic imaging in valve disease. An echo quiz, coverage of the new guidelines, and case-based learning round out this superbly rated meeting that is filled to capacity year after year.

Participants should have practical knowledge of echocardiography in order to benefit fully from this program. The setting is ideal for participants to bring their families, and add on some vacation time.

***“Amazing conference. I loved the environment and felt like I learned a lot more than usual. Thank you!”***

***“Fantastic course! The learning lab was a truly unique and outstanding experience!”***

### **Registration**

#### **Preconference Learning Lab**

ASE Member: \$450

Nonmember: \$550

#### **Main Conference**

ASE Member Physician: \$875

Nonmember Physician: \$1,025

ASE Member Sonographer/Allied Health/Fellow in Training: \$675

Nonmember Sonographer/Allied Health/Fellow in Training: \$825

## **20<sup>th</sup> Annual ASCeXAM/ReASCE Review Course May 4-7, 2019**

**Marriott Copley Place, Boston, MA**

Course Director: Roberto M. Lang, MD, FASE

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

The Review Course covers all aspects of cardiovascular ultrasound essential to these examinations, including physics, valvular heart disease, ischemic heart disease, congenital heart disease, and new technologies. The expert faculty uses case studies, lectures, and interactive sessions to help prepare the attendees for the ASCeXAM® or ReASCE®. Practice board exam questions after each session will facilitate faculty interaction and self-guided learning.

The ASCeXAM/ReASCE Review Course has been designed with the computer-based examination administration in mind. There is case-based learning and use of an audience response system to simulate a digital, multiple choice examination. CME from this course is “echo-specific” and therefore appropriate for IAC Accreditation and NBE education prerequisites.

The ASCeXAM/ReASCE Review Course gives attendees the unique opportunity to interact with and ask questions of the expert faculty.

**This course has a stellar preparation track record with 96% of people who attended this course and practiced with ASE's simulation exam (see page 16) passing the ASCeXAM on the first try.**

### **Registration**

ASE Member Physician: \$1,025

Nonmember Physician: \$1,300

ASE Member Sonographer/Allied Health: \$925

Nonmember Sonographer/Allied Health: \$1,025

ASE Member Resident/Fellow in Training: \$975

Nonmember Resident/Fellow in Training: \$1,075

Register Early and Save! Rates subject to change.  
Please visit [ASEcho.org/education](http://ASEcho.org/education) for up-to-date pricing.



# Echo Florida

# Echo on the Inside Passage of Alaska

## 7<sup>th</sup> Annual Echo Florida

October 7-9, 2018

Disney's Grand Floridian Resort & Spa

Walt Disney World®, FL

Course Director: Gerard P. Aurigemma, MD, FASE

## 8<sup>th</sup> Annual Echo Florida

October 13-15, 2019

Disney's Yacht & Beach Club Resort

Walt Disney World®, FL

Course Director: Gerard P. Aurigemma, MD, FASE

## 9<sup>th</sup> Annual Echo Florida

October 11-13, 2020

Disney's Grand Floridian Resort & Spa

Walt Disney World®, FL

Course Director: Linda D. Gillam, MD, FASE

The Echo Florida course is a comprehensive review of cardiovascular ultrasound in clinical practice. The faculty is composed of U.S. and international experts who will discuss the strengths and limitations of established and emerging technologies and illustrate how these technologies can be used to improve and streamline patient care in a cost-conscious manner. There is a heavy emphasis on case-based learning. This course is designed for adult and pediatric cardiologists, cardiovascular surgeons, cardiovascular anesthesiologists, cardiac radiologists, fellows in training, cardiovascular sonographers, cardiovascular nurse specialists, internists, intensivists, and emergency physicians with special interest in clinical cardiology and echocardiography.

Topics include: coronary artery disease including stress testing, valvular heart disease, heart failure (systolic and diastolic), and cardiomyopathy, emerging technologies including contrast and 3D/4D echocardiography, complex congenital heart disease, and case-based demonstrations on the role of 2D and real time 3D/4D echocardiography to select, guide, and follow percutaneous

### Registration

#### Preconference Learning Lab

ASE Member: \$350

Nonmember: \$450

#### Main Conference

ASE Member Physician: \$875

Nonmember Physician: \$1,025

ASE Member Sonographer/Allied Health/Fellow in Training: \$675

Nonmember Sonographer/Allied Health/Fellow in Training: \$825

Register Early and Save! Rates subject to change.

Please visit [ASEcho.org/education](http://ASEcho.org/education) for up-to-date pricing.

## Echo on the Inside Passage of Alaska

**NEW**

July 21-28, 2018

Seven-Night Alaskan Cruise from Seattle, WA

Four Stops: Juneau, Skagway, Ketchikan, and Victoria, B.C.

Course Director: Steven J. Lester, MD, FASE

The Inaugural Echo on the Inside Passage of Alaska will take place on an Alaskan cruise as a new educational opportunity that differs from ASE's other courses by providing attendees with a small, intimate environment to learn from the experts. Ships have been sailing from Seattle to Alaska since the gold rush. Now it is your turn to follow in the wake of history on a seven-day cruise vacation filled with glacier-carved fjords, forested islets, and quaint ports along Alaska's famed Inside Passage. Cruise to Alaska from Seattle with ASE; stops in Juneau, Skagway, Ketchikan, and Victoria British Columbia.

Participants will attend sessions while the ship is at sea. The expert faculty will present traditional lectures, facilitate workshops, and lead Chalk Talks where they will do a deep dive into a popular topic.

### Registration

ASE Member Physician: \$700

Nonmember Physician: \$850

ASE Member Sonographer/Allied Health /Fellow in Training: \$500

Nonmember Sonographer/Allied Health/Fellow in Training: \$750



# Scientific Sessions

## 30<sup>th</sup> Annual Scientific Sessions

June 21-25, 2019

Oregon Convention Center, Portland, OR

Program Chair: Marielle Scherrer-Crosbie, MD, PhD, FASE

## 31<sup>st</sup> Annual Scientific Sessions

June 19-23, 2020

Gaylord Rockies Resort & Convention Center, Denver, CO

Program Chair: Theodore P. Abraham, MD, FASE

ASE's Scientific Sessions are the premier international conference devoted specifically to cardiovascular ultrasound in clinical patient care. It is a vital event for practicing echocardiographers and offers a full spectrum of educational events including symposia discussing novice, intermediate, and advanced techniques. Research featuring leading cardiovascular ultrasound experts is also highlighted. The program is an opportunity for all interested healthcare practitioners to explore contemporary issues and emerging developments in the field of cardiovascular ultrasound.

All levels of practioners will find sessions that meet their needs, help improve their practice, and benefit their professional growth. Participants are encouraged to actively participate in sessions and interact with available faculty. **This is the meeting that everyone attends; you won't want to miss the ample opportunities to socialize with your peers and luminaries in the cardiovascular ultrasound field.**

### Registration

ASE Member Physician: \$795

Nonmember Physician: \$995

ASE Member Sonographer/Allied Health: \$595

Nonmember Sonographer/Allied Health: \$695

ASE Member Resident/Fellow in Training: \$395

Nonmember Resident/Fellow in Training: \$495

*"I thoroughly enjoyed this conference and learned so much."*

Register Early and Save! Rates subject to change.  
Please visit [ASEScientificSessions.org](http://ASEScientificSessions.org) for up-to-date pricing.

# ASE Courses Mobile App

Stay up-to-date on all of ASE's live educational courses by downloading the free ASE Courses app. Find detailed information on each of ASE's courses including faculty, agendas, exhibitors, networking events, and more! Use the app to create or sync your event schedule and receive notifications of special activities and sessions while on site.

The app is available for download on both Apple and Android devices. Simply search for "ASE Courses" in the Google Play or Apple stores. Learn more about other ASE apps at [ASEcho.org/apps](http://ASEcho.org/apps).

The ASE Courses app includes the following:

- Echo Hawaii
- State-of-the-Art Echocardiography
- ASCeXAM/ReASCE Review Course
- Annual Scientific Sessions
- Echo Florida



# ASE Online Learning and Education Products

ASE's education portfolio consists of online products, DVD products, workbooks, and reference materials. Online products can be found on **ASEUniversity.org** and physical products on **ASEMarketPlace.com**. Don't forget to use your ASE member account to take advantage of member pricing.

ASE is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education (CME) for physicians. Participants may earn American Board of Internal Medicine (ABIM) MOC points and/or American Board of Pediatrics (ABP) MOC points equivalent to the amount of CME credits claimed for approved activities.

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 these activities may be eligible for Section 1 credits in the Royal College of Physicians and Surgeons of Canada's Maintenance of Certification (MOC) Program. Participants must log into MAINPORT to claim this activity.

All products with CME credits or MOC points are noted.

## ASEUniversity

ASEUniversity.org is a medical education website featuring online, self-study learning opportunities for physicians, sonographers, and fellows. ASEUniversity maintains a selection of CME activities that are free with an active ASE membership. Available CME activities include a selection of one-hour recorded webinars as well as articles selected from the *Journal of the American Society of Echocardiography* (JASE). ASEUniversity posts at least four new webinars and up to 12 new articles each calendar year, highlighting relevant topics, practice issues, and new guidelines and standards for cardiovascular ultrasound.

These activities are designed for cardiovascular physicians and sonographers with a primary interest and knowledge base in the field of echocardiography. In addition, medical residents, researchers, clinicians, intensivists, cardiac anesthesiologists, critical care physicians, and other medical professionals, with a specific interest in cardiovascular ultrasound, will find these activities beneficial.

## ASEUniversity Guideline-based Live Webinars

Available: ONLINE ONLY on ASEUniversity.org

Live, guideline-based webinars are also available to ASE members and nonmembers. These interactive events allow you to learn from the experts in the privacy of your home or office, while interacting and engaging with your fellow attendees. Webinars also provide the opportunity to ask the presenter questions to be answered during the live broadcast. Each webinar is approximately one hour in length. The majority of live webinars offer CME credits.

**ASE Member:** FREE      **Nonmember:** \$25

## ASE Annual Scientific Sessions Online Library

Available: ONLINE ONLY on ASEUniversity.org

### **Non-CME educational product.**

ASE's online library combines slides, video, and speaker audio to give you the feel of a live meeting anywhere you go.

This always expanding collection contains several core curriculums taught by leading experts in the field of echocardiography. Originally presented at national, scientific conferences, ASE's online library provides you with year-round access to the audio and video materials. With mobile access, learning from the experts while sharing with colleagues and friends is now only a download away.

View all approved ASE Annual Scientific Sessions anywhere your computer or iOS device takes you! The ASE Annual Scientific Sessions Online Library includes: live audio recordings, PowerPoint presentations, and embedded video clips. Unlimited online access is available to all ASE Annual Scientific Sessions from 2009 through the latest conference. Purchase a single or multi-year subscription, full conference, or individual sessions.

Full Conference:

**ASE Member:** \$299      **Nonmember:** \$399

Individual session prices vary by subject matter.



# ASE Online Learning and Education Products

## ASE's Comprehensive Echocardiography

Available: Textbook on ASEMarketPlace.com or Amazon.com

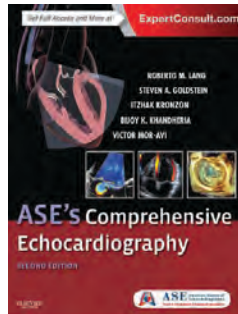
e-Book on ASEMarketPlace.com

**Non-CME educational product.**

Written by world experts from ASE, *Comprehensive Echocardiography* is a unique multimedia resource with text, case studies, and online components covering the latest uses of echocardiography, including the most recent 2D and 3D advances. This 2<sup>nd</sup> edition, with its new title, has over 200 chapters that include essential material in a succinct format. It has everything you need to assess cardiac anatomy and function and obtain clinically useful, noninvasive information for more accurate diagnosis and evaluation of heart disease.

Included with the book is an online version and an outstanding online library of slides and videos of case presentations that correspond to crisp, full-color images, allowing you to view dynamic echocardiographic clips of various cardiac pathologies.

**ASE Member:** \$199      **Nonmember:** \$229



## Clinical Cases in Echocardiography: Focus on Congenital Heart Disease

**Chair: Richard A. Humes, MD, FASE**

Available: ONLINE ONLY on ASEUniversity.org

**Non-CME educational product.**

This activity provides online cases reviewing the role of echocardiography in diagnosis and follow-up of a wide variety of different congenital heart diseases and defects.

**Topics include, but are not limited to:**

- Atria and Ventricular Septal Defects
- Coarctation of the Aorta
- Ebstein's Anomaly
- Patent Foramen Ovale
- Patent Ductus
- Arteriosus Valve Defects
- Pulmonary Artery Stenosis
- Tetralogy of Fallot
- Transposition of the Great Arteries

Cases include symptomatic and asymptomatic diagnosis and treatment, as well as adult patients with repaired or palliated CHD.

**ASE Member:** \$75      **Nonmember:** \$95

## Best of ASE Series **NEW**

Available: DVD on ASEMarketPlace.com or Amazon.com  
ONLINE on ASEUniversity.org

**Non-CME educational product.**

Enhance your understanding of echocardiography with this compilation of lectures from ASE courses.

**Broken down into multiple volumes, the current series includes:**

- Volume 1: Introduction to Diastology *2nd Edition*
- Volume 2: Basics of Strain *2nd Edition*
- Volume 3: A Practical Guide to 3D Echocardiography *2nd Edition*
- Volume 4: Basic Physics of Ultrasound, Knobology, and Echocardiographic Artifacts
- Volume 5: Contrast Echocardiography
- Volume 6: Echocardiographic Imaging of Native and Prosthetic Valves
- Volume 7: Stress Echocardiography
- Volume 8: Transesophageal Echocardiography
- Volume 9: Perioperative Echocardiography
- Volume 10: Vascular Ultrasound

**Price per volume: ASE Member:** \$75      **Nonmember:** \$95

**Bundle Pricing (includes all DVDs)**

**Member:** \$525      **Nonmember:** \$625

## Case-based Learning: Focus on Patient Safety

**Chair: James D. Thomas, MD, FASE**

Available: ONLINE ONLY on ASEUniversity.org

**Non-CME educational product.**

Focus on Patient Safety is an entirely online, case-based program covering both clinical and safety issues.

**Topics include, but are not limited to:**

- Antibiotic Prophylaxis
- Stress Echocardiography
- Bioeffects of Ultrasound
- TAVR
- Contrast
- TEE

**ASE Member:** \$75      **Nonmember:** \$95

# ASE Online Learning and Education Products

## Contrast-Enhanced Echocardiography Lecture Series

**Chair: Jonathan R. Lindner, MD, FASE**

Available: ONLINE on ASEUniversity.org

**Designated by ASE for 6 AMA PRA Category 1 Credits™.**

**Accepted by ABIM for 6 MOC points towards Medical Knowledge Self-assessment requirements.**

This series contains lectures by ASE subject matter experts. Each lecture includes both didactic and case-based teaching methods. The lectures are ordered to build upon the concepts from the previous lectures. Participants are provided with questions testing knowledge between lectures. This activity is designed for all cardiovascular physicians, cardiac sonographers, and nurses with a primary interest and knowledge base in the field of echocardiography and a specific interest in contrast echocardiography

**The following topic areas are included in this series:**

- Contrast Basics
- Policy and Procedures of Contrast
- Ventricular Cavity Opacification
- Myocardial Contrast Perfusion
- Improving Diagnostic Value
- Knobology

*This series is made possible through an unrestricted educational grant from GE Healthcare.*

**ASE Member:** Free      **Nonmember:** Free

## Essentials for Proficiency in Basic Cardiovascular Ultrasound

**Chair: Susan E. Wieggers, MD, FASE**

Available: DVD with Workbook on ASEMarketPlace.com or Amazon.com  
ONLINE with Downloadable Workbook on ASEUniversity.org

**Designated by ASE for 13.5 AMA PRA Category 1 Credits™.**

**Accepted by ABIM for 13.5 MOC points towards Medical Knowledge Self-assessment requirements.**

Designed by top physicians and professors of cardiovascular medicine, this comprehensive review of basic echocardiography has been created as a teaching tool for echocardiography fellows and others interested in learning about the use of cardiovascular ultrasound in clinical practice. This set includes 15 lectures on a variety of topics, beginning with the normal TTE and TEE examinations, and then covering the mitral and aortic valves in-depth, left and right heart function, physics, prosthetic valves, and more. Each lecture has been carefully crafted to include a thorough review of practical concepts, references to ASE's Guidelines and Standards, video examples of normal and abnormal echocardiograms, and case studies designed to provide real-world examples. A workbook correlates with the lectures to provide a guide for each presentation.

**Lectures include:**

- The Normal Transthoracic Echocardiogram
- Transesophageal Echocardiography
- Introduction to Physics of Echocardiography
- Echo Assessment of the Left Ventricle
- Mitral Valve 1: Normal Anatomy & Regurgitation
- Mitral Valve 2: Mitral Stenosis
- Aortic Valve 1: Normal Valve and Aortic Stenosis
- Aortic Valve 2: Regurgitation, Endocarditis
- Cardiomyopathies
- Echocardiography of Endocarditis
- The Right Heart
- Pericardial Disease
- Cardiac Masses and Tumors
- Coronary Artery Disease and Stress Echo
- Echocardiographic Assessment of Prosthetic Valves

**ASE Member:** \$175      **Nonmember:** \$250

# ASE Online Learning and Education Products

## Focused Cardiac Ultrasound: Fundamental Principles of Acquisition & Interpretation

**Chair: Kirk T. Spencer, MD, FASE**

Available: DVD ONLY on ASEMarketPlace.com or Amazon.com

### **Non-CME educational product.**

This state-of-the-art DVD is an instructional video to be used for self-guided learning and professional lectures. The DVD features several interactive sections for flexible presentation, including an easy to navigate DVD menu, overview of relevant cardiac anatomy, presentation of transducer positions, imaging examples of a wide variety of pathologies, case presentations with discussions, and an interpretation practice section designed to gauge levels of familiarity with the materials presented.

### **Topics include:**

#### **Section 1: Heart Anatomy**

- Heart and Ribs
- Axis of the Heart
- Planes of the Heart
- Chambers
- Valves and Annuli
- Blood Flow

#### **Section 2: Focused Cardiac Ultrasound Assessment**

- Left Parasternal Long Axis (PLAX)
- Left Parasternal Short Axis (PSAX)
- Apical
- Subcostal
- Lung

#### **Section 3: Pathologies, featuring 20 different examples, including:**

- Pericardial Effusion
- RV & LV Systolic Dysfunction
- Severely Calcified AV
- Pleural Effusion
- LV Hypertrophy
- Pulmonary Edema
- Dilated Aortic Root
- IVC Collapse

#### **Section 4: Case Studies**

#### **Section 5: Practice Interpretations**

Sections 4 and 5 are TWO BONUS MATERIAL SECTIONS to provide you with opportunities to test your knowledge through a variety of clinical patient scenarios.

**ASE Member: \$150      Nonmember: \$250**

## How to Perform a TTE Study: Transducer Position and Anatomy

**Chair: Roberto M. Lang, MD, FASE**

Available: DVD ONLY on ASEMarketPlace.com or Amazon.com

### **Non-CME educational product.**

This instructional video can be used for professional lectures and offers an interactive section for flexible presentations. The video includes an overview of relevant cardiac anatomy, a step-by-step presentation of all transducer positions, and the sequential transducer movements to acquire standard echo images needed to complete a transthoracic echocardiographic study.

### **This product content consists of two sections as follows:**

#### **Section 1:**

##### **Heart Anatomy**

- 1.1 Heart and Ribs Echocardiography
- 1.2 Axis of the Heart
- 1.3 Planes of the Heart (PLAX)
- 1.4 Chambers
- 1.5 Valves and Annuli (PSAX)
- 1.6 Blood Flow

#### **Section 2:**

##### **Basic Transthoracic**

- 2.1 Left Parasternal Long
- 2.2 Left Parasternal Short
- 2.3 Apical
- 2.4 Subcostal
- 2.5 Suprasternal

**ASE Member: \$99      Nonmember: \$150**

# ASE Online Learning and Education Products

## Pediatric and Congenital Heart Disease Lecture Series

**Chair: Timothy C. Slesnick, MD, FASE**

Available: ONLINE ONLY on ASEUniversity.org

**Designated by ASE for 15.75 AMA PRA Category 1 Credits™.**

**Accepted by the ABP for 20 MOC points towards the Lifelong Learning Self-Assessment requirements.**

A comprehensive lecture series on core types of congenital heart disease. Comprised of 12 lesions, you will gain an in-depth understanding on the use of echocardiography/pathology correlations and echocardiography/surgery correlations.

- Lesion 1: Pulmonary Venous Anomalies
- Lesion 2: Atrial Septal Defects
- Lesion 3: Tricuspid Valve Pathology
- Lesion 4: Common Atrioventricular Canal
- Lesion 5: Tetralogy of Fallot
- Lesion 6: Double Outlet Right Ventricle
- Lesion 7: Congenitally Corrected Transposition of the Great Arteries
- Lesion 8: Hypoplastic Left Heart Syndrome
- Lesion 9: Pulmonary Atresia with Intact Ventricular Septum
- Lesion 10: Aortic Coarctation and Interrupted Aortic Arch
- Lesion 11: Truncus Arteriosus
- Lesion 12: D-Transposition of the Great Arteries

| <b>1 User License</b> | <b>5 User License</b> | <b>10 User License</b> |
|-----------------------|-----------------------|------------------------|
| ASE Member: \$175     | ASE Member: \$375     | ASE Member: \$600      |
| Nonmember: \$250      | Nonmember: \$475      | Nonmember: \$700       |

### **Individual Lesions**

|                  |                 |
|------------------|-----------------|
| ASE Member: \$20 | Nonmember: \$25 |
|------------------|-----------------|

## Proper Echocardiographic Measurements: How and Why, 2nd Edition NEW

**Chair: Andy A. Pellett, PhD, RCS, RDGS, FASE**

Available: DVD on ASEMarketPlace.com or Amazon.com  
ONLINE on ASEUniversity.org

**Designated by ASE for 5 AMA PRA Category 1 Credits™.**

This evidence-based product focused on the methods used to obtain measurements, including explanations describing why such methods are appropriate. This educational tool comprises a combination of didactic lectures and clinical questions. It can be used as a review for experienced sonographers, as well as a training tool for new or early-career sonographers and others who are interested in the practice of cardiovascular ultrasound.

### **Topics include:**

- 2D vs. M-mode
- LV Linear Dimensions
- Basal Cardiac Measurements
- Left Ventricular Volume
- Left Atrial Volume
- Inferior Vena Cava
- Right Heart
- Strain Echocardiography
- 3D Echo: LV Volume
- Spectral Doppler
- Mitral Inflow
- Mitral Annulus (Doppler Tissue Imaging)
- Pulmonary Vein
- Mitral Stenosis
- Mitral Regurgitation
- Tricuspid Regurgitation
- Aortic Valve
- Hypertrophic Obstructive

| <b>1 User License</b> | <b>5 User License</b> | <b>10 User License</b> |
|-----------------------|-----------------------|------------------------|
| ASE Member: \$175     | ASE Member: \$375     | ASE Member: \$600      |
| Nonmember: \$250      | Nonmember: \$475      | Nonmember: \$700       |

## Self-Study Program IV NEW

Available: DVD ONLY on ASEMarketPlace.com or Amazon.com

**Designated by ASE for 16 AMA PRA Category 1 Credits™.**

**Accepted by ABIM for 16 MOC points towards Medical Knowledge Self-assessment requirements.**

This self-study program contains 16 presentations on the latest material on echocardiography that you can move through at your own pace. This program is designed for adult and pediatric cardiologists, cardiovascular surgeons, cardiovascular anesthesiologists, fellows in training, cardiovascular sonographers, cardiovascular nurse specialists, internists, intensivists, and emergency physicians with special interest in clinical cardiology and echocardiography.

### **Topics include:**

- Diastolic Function Assessment
- Chamber Quantification
- Valvular Regurgitation
- Use of Microbubble Contrast Agents
- Structural Heart Disease
- Stress Echocardiography
- Left Ventricular Assist Devices

| <b>1 User License</b> | <b>5 User License</b> | <b>10 User License</b> |
|-----------------------|-----------------------|------------------------|
| ASE Member: \$175     | ASE Member: \$375     | ASE Member: \$600      |
| Nonmember: \$250      | Nonmember: \$475      | Nonmember: \$700       |

# ASE Online Learning and Education Products

## Self-Study Program: Pediatric and Congenital Heart Disease **NEW**

Available: DVD ONLY on ASEMarketPlace.com or Amazon.com

**Designated by ASE for 12 AMA PRA Category 1 Credits™.**

**Accepted by ABIM for 12 MOC points towards Medical Knowledge Self-assessment requirements.**

**Accepted by ABP for 12 MOC points towards Medical Knowledge Self-assessment requirements.**

This DVD provides a comprehensive review of the use of echocardiography in the diagnosis and follow-up of a variety of congenital heart diseases. Imaging from basic to comprehensive echocardiographic assessment of congenital heart disease is discussed. The DVD provides a review of anatomy and physiology including identifying and optimizing echocardiographic views for assessing and characterizing variations of congenital heart disease. Additional practical aspects are covered including common imaging pitfalls, the echocardiographic findings used to determine the need for urgent intervention, multimodality imaging, and 3D echocardiography for pre-surgical planning, as well as imaging for short- and long-term follow up of both repaired and unrepaired lesions. This DVD is suitable for sonographers, fellows, cardiologists, and physicians with limited background in congenital heart disease as well as those with significant congenital cardiac expertise.

### Topics include, but are not limited to:

- 3D Mitral Valve Morphology
- Aortic Stenosis
- Congenital Heart Disease
- Diastology
- Pulmonary Atresia

| <b>1 User License</b>                 | <b>5 User License</b>                 | <b>10 User License</b>                |
|---------------------------------------|---------------------------------------|---------------------------------------|
| ASE Member: \$175<br>Nonmember: \$250 | ASE Member: \$375<br>Nonmember: \$475 | ASE Member: \$600<br>Nonmember: \$700 |

## Transesophageal Echocardiography in Perioperative Care

**Chair: Madhav Swaminathan, MD, FASE**

Available: DVD on ASEMarketPlace.com or Amazon.com  
ONLINE on ASEUniversity.org

**Designated by ASE for 5 AMA PRA Category 1 Credits™.**

**Accepted by ABIM for 5 MOC points towards Medical Knowledge Self-assessment requirements.**

**Accepted by ABA for 5 MOC points towards Medical Knowledge Self-assessment requirements.**

This is a case-based educational tool for anesthesiologists, cardiologists, fellows, surgeons, and other interested individuals currently performing and/or interpreting TEE for intraoperative procedures. Case progression is provided to showcase images before, during, and after the procedure.

### Topics include, but are not limited to:

- LV Function
- RV Function
- Diseases of the Aorta
- Aortic Valve and Root
- LVOT (Including HCM)
- Mitral Valve Stenosis
- Mitral Valve Regurgitation
- Tricuspid Valve
- Atrial Septum
- Other Intraoperative Uses Outside of Monitoring and Emergency Diagnosis

| <b>1 User License</b>                 | <b>5 User License</b>                 | <b>10 User License</b>                |
|---------------------------------------|---------------------------------------|---------------------------------------|
| ASE Member: \$140<br>Nonmember: \$200 | ASE Member: \$300<br>Nonmember: \$380 | ASE Member: \$480<br>Nonmember: \$560 |



# ASE Online Learning and Education Products

## Transesophageal Echocardiography in Structural Heart Disease

**Chair: G. Burkhard Mackensen, MD, PhD, FASE**

Available: DVD on ASEMarketPlace.com or Amazon.com  
ONLINE on ASEUniversity.org

**Designated by ASE for 15 AMA PRA Category 1 Credits™.**

**Accepted by ABIM for 15 MOC points towards Medical Knowledge Self-assessment requirements.**

**Accepted by ABA for 15 MOCA points towards Medical Knowledge Self-assessment requirements.**

This case-based product highlights the specifics of procedural imaging in the structural heart disease area, namely exact procedure-specific guidance, procedural communication using an unambiguous procedure-specific language, familiarity with all relevant echocardiographic modalities, and when to use them most effectively. The product highlights experts in this field showcasing some of their best successes and failures, along with a discussion of best practices and solutions.

### Topics include, but are not limited to:

- TAVR
- Transcatheter Tricuspid Valve Interventions
- Mitral Repair
- LAA Closure
- Paravalvular Leak Closure
- VSD Closure
- Valve-in-Valve
- ASD and PFO Closure
- Adult Congenital Interventions

### 1 User License

ASE Member: \$175  
Nonmember: \$250

### 5 User License

ASE Member: \$375  
Nonmember: \$475

### 10 User License

ASE Member: \$600  
Nonmember: \$700

## Utility of 3D Echocardiography: Promises and Perspectives

**Chair: Roberto M. Lang, MD, FASE**

Available: DVD on ASEMarketPlace.com or Amazon.com  
ONLINE on ASEUniversity.org

**Designated by ASE for 5 AMA PRA Category 1 Credits™.**

**Accepted by ABIM for 5 MOC points towards Medical Knowledge Self-assessment requirements.**

Three-dimensional (3D) echocardiography has multiple advantages for the visualization of cardiac anatomy, chamber quantification, and guidance of transcatheter interventions.

In this DVD, experts in 3D echocardiography address essential topics in a case-based approach with multiple examples. The DVD begins with history of the technology and moves to the basics of image acquisition and display. Subsequent lectures focus on chamber quantification and valvular heart disease. The use of 3D echocardiography to guide transcatheter interventions is also examined in depth. Finally, a vision for the future of 3D echocardiography, including virtual reality, fusion imaging, and holographic display is presented.

This teaching tool has multiple benefits including the capacity to quickly gain knowledge and improve your understanding of the capabilities of this novel imaging technique, the aptitude to visualize dynamic images in our clinical work, and an understanding of the potential future of 3D echocardiography.

### Topics include:

- History of 3D Echocardiography
- 3D Acquisition Strategies and Display Assessment of LV Function
- Assessment of RV and LA Function
- Evaluation of the Mitral Valve and Tricuspid Valve
- Evaluation of the Aortic Valve
- Quantitation Methods in Valvular Heart Disease
- Fusion Imaging in Interventions
- Assessment of Interventions in Structural Heart Disease
- TAVR, Mitral Clip and Perivalvular Leak, and ASD and LAA Appendage Closure
- 3D Printing
- New Display Methods: Augmented Reality and Holography

### 1 User License

ASE Member: \$175  
Nonmember: \$250

### 5 User License

ASE Member: \$375  
Nonmember: \$475

### 10 User License

ASE Member: \$600  
Nonmember: \$700

## Advanced Cardiac Sonographer Registry Review Guide **NEW**

**Chairs: Margaret M. Park, BS, ACS, RDCS, RVT, FASE; Deborah A. Agler, ACS, RDCS, FASE**

Available: DVD with Workbook on ASEMarketPlace.com or Amazon.com  
ONLINE with Downloadable Workbook on ASEUniversity.org

### Non-CME educational product.

Designed by accomplished expert sonographers and ACS imaging specialists, this comprehensive review of basic and advanced echocardiography has been created as a review guide and teaching tool for sonographers preparing to sit for the Advanced Cardiac Sonographer Registry Exam.

This video and workbook set includes 20 modules on a variety of topics from IAC standards and guidelines for adult echocardiography accreditation and quality assurance, to an in-depth review of cardiogenic shock and emergency echo. Other areas include stress echo, congenital disease, chemotherapy echocardiography, left and right heart function, prosthetic valves, research methods and biostatistics, interventional echocardiography, and the latest technological advances. Each lecture has been carefully designed to include a thorough review and clinical application through real video case study presentations.

A question and answer section, in the workbook, correlates with each lecture. The workbook also includes two 180-question mock exams designed to test your overall knowledge and skillset in preparing you to take the ACS Registry Exam with success.

Echocardiography fellows, nurses, researchers, and others interested in an in-depth review of echocardiography and echo lab quality assurance best practices would also find this product valuable.

**ASE Member:** \$150     **Nonmember:** \$250

ASE and Ke Labs have collaborated to co-develop the Echo Test and Teach Application. Designed through the expert guidance of Harvey Feigenbaum, MD, FASE, and founder of ASE, this tool was produced to ensure quality and consistency of cardiac ultrasound image review, as well as to educate users on interesting cases and new techniques.

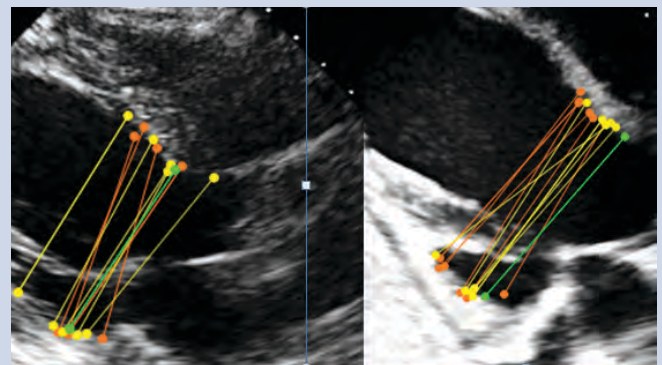
### Benefits and Features

- Enhances patient care by reducing variability
- Facilitates echo lab standards
- Offers a hands-on, real-world training experience without being tied to an imaging devices
- Cloud-based, so users have access anytime and anywhere
- Contains case studies covering multiple areas and new cases are continually added
- Includes analytic tools to enable administrators to analyze both individual and collective results

**Designated by ASE for up to 10 AMA PRA Category 1 Credits™ per year.**

For more information visit:  
[ASEcho.org/echo-test-and-teach](http://ASEcho.org/echo-test-and-teach)

| User | Value | Value Difference | Value % Difference |
|------|-------|------------------|--------------------|
| 1    | 33.2  | 2.73             | 8.97               |
| 2    | 24.5  | -6.02            | -19.77             |
| 3    | 36    | 5.49             | 18.01              |
| 4    | 34.7  | 4.25             | 13.96              |
| 5    | 25.8  | -4.63            | -15.2              |
| 6    | 32.8  | 2.35             | 7.7                |
| 7    | 29.9  | -0.54            | -1.76              |



# Exam Review Products

## Cardiovascular Sonographer Registry Review Guide **NEW** 2<sup>nd</sup> Edition

**Chairs: Kymberly A. Glyde, RDCS, FASE;  
Kim Pace, BS, RDCS, FASE**

Available: DVD with Workbook on ASEMarketPlace.com or Amazon.com  
ONLINE with Downloadable Workbook on ASEUniversity.org

### **Non-CME educational product.**

Designed by top sonographers, the Cardiovascular Sonographer Registry Review Guide provides a comprehensive guide for both the American Registry for Diagnostic Medical Sonography (ARDMS) and the Cardiovascular Credentialing International (CCI) adult cardiovascular ultrasound registry examinations. This two piece, bundled set will provide a thorough review of adult echocardiography and physics to help you pass these examinations. The presentations cover the essentials of topics included on the registry examinations. The workbook correlates with each lecture providing a question and answer section for your review. The final chapter also includes one 100-question mock exam designed to test your overall knowledge and skill set in preparing you to take the registry exam with success. All of the presentations are given by registered cardiovascular sonographers who are the best in their field and are expert educators.

### **Lectures cover the following topics:**

- Cardiac Embryology
- Cardiac Physiology and Electrocardiography
- Anatomy of the Heart and Basic Embryology
- Transesophageal Echocardiography
- Systolic and Diastolic Function
- Valvular Heart Disease
- Pericardial Disease, Cardiac Tumors, and Aortic Dissection
- Ischemic Heart Disease and Cardiomyopathies
- Systemic and Pulmonary Hypertensive Heart Disease
- Adult Congenital Heart Disease
- Contrast and Pharmacology
- Stress Echocardiography
- Surgical and Interventional Echocardiography
- Patient Management, Clinical Medicine, and Emergencies
- Transthoracic Echocardiography: Nomenclature and Standard Views
- General Principles of Echocardiography
- Cardiovascular Sonographer Registry Review Guide Mock Exam

**ASE Member:** \$150      **Nonmember:** \$250

## ASCeXAM/ReASCE Review Course Online Library

Available: ONLINE ONLY on ASEUniversity.org

### **Non-CME educational product.**

These lectures were presented at ASE's ASCeXAM /ReASCE Review Course by expert faculty and cover all aspects of cardiovascular ultrasound essential to the board examinations. The online lecture format features synchronized slides; including embedded videos and the accompanying audio. You will feel like you are sitting in the class. This product is perfect for individuals looking to access the content anytime, anywhere.

More than 28 hours of course content will help you prepare for the NBE exams.

**ASE Member:** \$375      **Nonmember:** \$525

## ASCeXAM/ReASCE Online Practice Exam Simulation

Available: ONLINE ONLY on ASEUniversity.org

### **Non-CME educational product.**

Designed to prepare physicians for the National Board of Echocardiography's ASCeXAM or ReASCE certification examinations, this 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
- M-mode
- Two-Dimensional
- Doppler Echocardiography
- Latest Applications in Echocardiography

In addition to objective-based questions, case studies are included to evaluate your knowledge of the field. To introduce you to the exam format and to ensure that you are comfortable with the method of answering the exam questions, a practice quiz is provided before you begin your attempts at the full exam simulation. You may take this quiz as many times as you wish. The educational content of the quiz is just as important as what is contained in the exam simulation. This product allows you to take two simulated exams of 150 questions and be graded up to six times. You have 18 weeks of access to the simulation exam.

**ASE Member:** \$199      **Nonmember:** \$250

# ASE Guideline Products

## ASE Guideline Reference Binder **NEW**

Available: Binder with inserts on ASEMarketPlace.com or Amazon.com  
e-Book on ASEUniversity.org

### **Non-CME educational product.**

The ASE Guideline Reference Book offers a collection of charts and illustrations derived from ASE's guidelines for cardiovascular ultrasound. Books come in two convenient formats for quick reference.

The three-ring binder is designed to accommodate new inserts as they are published. Each title can be included in the entire book or purchased as an individual insert. Perfect for use in the reading room. This book is a best-seller!

The online e-Book comes in a convenient format for quick reference and immediately includes new inserts as they are published.

### **The Reference Book includes of the following graphic illustrations:**

- Aortic Regurgitation (JASE, April 2017)
- Aortic Valve Stenosis (JASE, April 2017)
- Appropriate Use Criteria for Echocardiography (JASE, March 2011)
- Chamber Quantification of the Left Heart (JASE, January 2015)
- Chamber Quantification of the Right Heart (JASE, January 2015)
- Image Acquisition and Display Using Three-Dimensional Echocardiography (JASE, January 2012)
- Left Ventricular Diastolic Function (JASE, April 2016)
- Mitral Regurgitation (JASE, April 2017)
- Multimodality Cardiovascular Imaging of Patients with Hypertrophic Cardiomyopathy (JASE, May 2011)
- Multimodality Imaging of Pericardial Disease (JASE, September 2013)
- Performing a Comprehensive Transesophageal Echocardiographic Exam (JASE, September 2013)
- Performing Multiplane Transesophageal Echocardiography (JASE, 1999)
- Prosthetic Valves with Echocardiography and Doppler Ultrasound (JASE, September 2009)
- Quantification Methods During the Performance of Pediatric Echocardiography (JASE, May 2010)
- Stress Echocardiography (JASE, September 2007)
- Tricuspid and Pulmonic Regurgitation (JASE, April 2017)
- Ultrasound Enhancing Agents (Contrast) in Echocardiography (JASE, March 2018)

### **Binder with Inserts**

ASE Member: \$285      Nonmember: \$385

### **Individual Inserts**

ASE Member: \$40      Nonmember: \$75

### **Valve Binder Insert Bundle (4 Inserts)**

ASE Member: \$120      Nonmember: \$225

### **Online e-Book**

ASE Member: \$75 annually      Nonmember: \$100 annually

## ASE Guideline Reference Spiral **NEW**

Available: ASEMarketPlace.com or Amazon.com

### **Non-CME educational product.**

Enjoy the same collection of charts and illustrations offered in the ASE Guideline Reference Binder, but in the form of a clean, spiral-bound, laminated book. This version of the Guideline Reference Book is lighter and thinner, making it easier to travel with, but still providing a valuable tool for referencing ASE's guidelines for cardiovascular ultrasound.

**ASE Member:** \$120      **Nonmember:** \$175

## Individual ASE Pocket Guidelines **NEW**

Available: ASEMarketPlace.com or Amazon.com

These pocket-sized flipbooks, of charts from ASE guidelines and standards for cardiovascular ultrasound, were designed to be carried in lab coats and scrub pockets and used as quick reference guides for measurements.

- Aortic Regurgitation (JASE, April 2017)
- Aortic Valve Stenosis (JASE, April 2017)
- Chamber Quantification of the Left Heart (JASE, January 2015)
- Chamber Quantification of the Right Heart (JASE, January 2015)
- Image Acquisition and Display Using Three-Dimensional Echocardiography (JASE, January 2012)
- Left Ventricular Diastolic Function (JASE, April 2016)
- Mitral Regurgitation (JASE, April 2017)
- Prosthetic Valves with Echocardiography and Doppler Ultrasound (JASE, September 2009)
- Tricuspid and Pulmonic Regurgitation (JASE, April 2017)

ASE Member: \$10      Nonmember: \$15

**Bulk Rate:** \$8 each for 100 or more

### **The ASE Pocket Guideline Bundle includes the nine ASE Pocket Guidelines listed above.**

ASE Member: \$65      Nonmember: \$80

**Bulk Rate:** \$63 each for 100 or more

### **Valve Pocket Guideline Bundle**

#### **(All Five Valvular Pocket Guidelines)**

ASE Member: \$35      Nonmember: \$45

### **Non-valvular Pocket Guideline Bundle**

#### **(Four Non-valvular Pocket Guidelines)**

ASE Member: \$30      Nonmember: \$40

# ASE Guideline Products

## Guideline Posters **NEW**

ASE's poster series is a visual representation of the guidelines and standards set by ASE. The designs are pleasing to the eye and suited for display in patient areas and clinics. A great addition to your lab, these 24" x 30" posters will serve as a valuable resource for both physicians and technicians.

### Individual Posters

- **Aortic Regurgitation (JASE, April 2017)**
- **Aortic Valve Stenosis (JASE, April 2017)**
- Chamber Quantification of the Left Heart (JASE, January 2015)
- Chamber Quantification of the Right Heart (JASE, January 2015)
- Consensus Statement on Clinical Applications of Ultrasonic Contrast Agents in Echocardiography (JASE, November 2008)
- Image Acquisition and Display Using Three-Dimensional Echocardiography (JASE, January 2012)
- Left Ventricular Diastolic Function (JASE, April 2016)
- **Mitral Regurgitation (JASE, April 2017)**
- Multimodality Cardiovascular Imaging of Patients with Hypertrophic Cardiomyopathy (JASE, May 2011)
- Multimodality Imaging of Pericardial Disease (JASE, September 2013)
- Noninvasive Vascular Laboratory Testing (JASE, August 2006)
- Pediatric Echocardiography (JASE, December 2006)
- Performing a Comprehensive Transesophageal Echocardiographic Exam (JASE, September 2013)\*
- Performing Multiplane Transesophageal Echocardiography (JASE, 1999)
- Prosthetic Valves with Echocardiography and Doppler Ultrasound (JASE, September 2009)
- Quantification Methods During the Performance of Pediatric Echocardiography (JASE, May 2010)
- Stress Echocardiography (JASE, September 2007)
- **Tricuspid and Pulmonic Regurgitation (JASE, April 2017)**
- **Ultrasound Enhancing Agents (Contrast) in Echocardiography (JASE, March 2018)**

**ASE Member:** \$20    **Nonmember:** \$30

## Guideline Poster Set

Set consisting of 18 full-size ASE Guideline Posters.

ASE Member: \$280    Nonmember: \$380

### Valve Poster Bundle (Four Posters)

ASE Member: \$60    Nonmember: \$90

## Guideline Poster Flip Chart

Tabletop flip chart consisting of 17 ASE Guidelines Posters reduced to 11" x 14-3/4", laminated and presented in a vinyl heat-sealed binder.

\*not included in flip chart

ASE Member: \$250    Nonmember: \$300

### Valve Flip Chart Poster Bundle (Four Flip Chart Posters)

ASE Member: \$60    Nonmember: \$90

### Individual Flip Chart Posters

ASE Member: \$20    Nonmember: \$30

## Guideline Lab Bundle

With ASE's Guideline Lab Bundle, you can stock your lab with excellent products at a substantial savings. Included in the bundle is one Guideline Reference Book, one Guideline Poster Flipchart, and ten complete sets of Pocket Guides. Save over \$250 off individual pricing.

**ASE Member:** \$995    **Nonmember:** \$1,295

## Supplemental Products **NEW**

### Mechanisms of Mitral Regurgitation Poster

ASE Member: \$20    Nonmember: \$30

### Mechanisms of Mitral Regurgitation Pocket Guide

ASE Member: \$15    Nonmember: \$25



# JASE and Online Articles

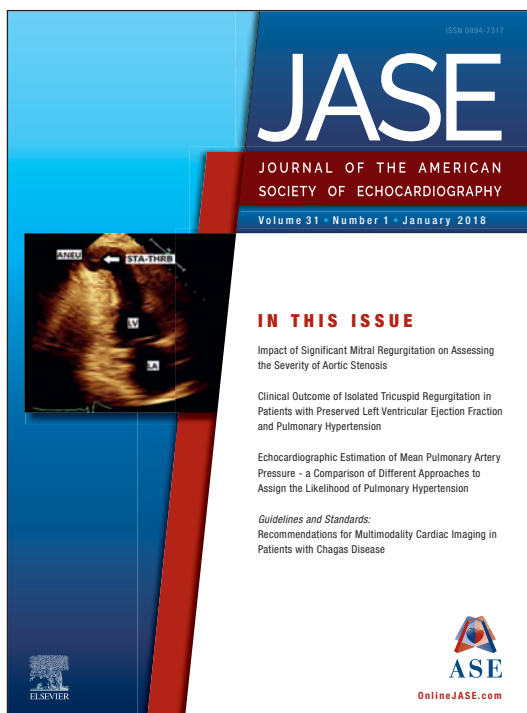
## **Journal of the American Society of Echocardiography** (JASE)

JASE features the very latest clinical, scientific, legal, and economic information regarding the use of cardiac ultrasound. The Journal's original, peer-reviewed articles cover conventional procedures as well as newer clinical techniques, such as transesophageal echocardiography, intraoperative echocardiography, and intravascular ultrasound. The Journal, an official publication of the ASE, has an Impact Factor of 6.852. Your subscription also includes online access to JASE.

**OnlineJASE.com**

**ASE Member:** FREE

**Nonmember:** \$378 per year (U.S.)/\$482 per year (international)



## **CME for JASE Articles**

AVAILABLE: ONLINE ONLY on ASEUniversity.org

New postings are made frequently. Visit the website for all the latest additions.

**CME credits and MOC points will be listed online where appropriate. See specific article for more information.**

### **Title**

Characteristic Morphologies of the Bicuspid Aortic Valve in Patients with Genetic Syndromes

Clinical Applications of Ultrasonic Enhancing Agents in Echocardiography: 2018 American Society of Echocardiography Guidelines Update

Diagnostic Accuracy of Transthoracic Echocardiography for Infective Endocarditis Findings Using Transesophageal Echocardiography as the Reference Standard: A Meta-Analysis

Expert Review on the Prognostic Role of Echocardiography after Acute Myocardial Infarction

Left Atrial Appendage Occlusion/Exclusion: Procedural Image Guidance with TEE

Left Ventricular Global Strain Analysis by Two-Dimensional Speckle-Tracking Echocardiography: The Learning Curve

Interoperative Two- and Three-Dimensional TEE in Combined Myectomy-Mitral Operations for Hypertrophic Cardiomyopathy

Multimodality Noninvasive Imaging in the Monitoring of Pediatric Heart Transplantation

Pediatric Appropriate Use Criteria for Outpatient Echocardiography: Practice Variations among Pediatric Cardiologists, Noncardiologist Subspecialists, and Primary Care Providers

Prognostic Value of Left Ventricular Deformation Parameters in Patients with Severe Aortic Stenosis: A Pilot Study of the Usefulness of Strain Echocardiography

Recommendations for Multimodality Cardiac Imaging in Patients with Chagas Disease: A Report from ASE in Collaboration With the InterAmerican Association of Echocardiography (ECOSIAC) and the Cardiovascular Imaging Department of the Brazilian Society of Cardiology (DIC-SBC)

Role of Two-Dimensional Speckle-Tracking Echocardiography Strain in the Assessment of Right Ventricular Systolic Function and Comparison with Conventional Parameters

Stressing the Cardiopulmonary Vascular System: The Role of Echocardiography

Three-Dimensional Mitral Valve Morphology and Age-Related Trends Children and Young Adults with Structurally Normal Hearts Using Transthoracic Echocardiography

Transcatheter Tricuspid Valve-in-Valve for Degenerative Bioprosthetic Tricuspid Valve Disease

**ASE Member:** FREE

**Nonmember:** \$25

# Live Webinar Recordings

AVAILABLE: ONLINE ONLY on ASEUniversity.org

**CME credit is only available to those who attended the live event. The archived recording offer no CME credit.**

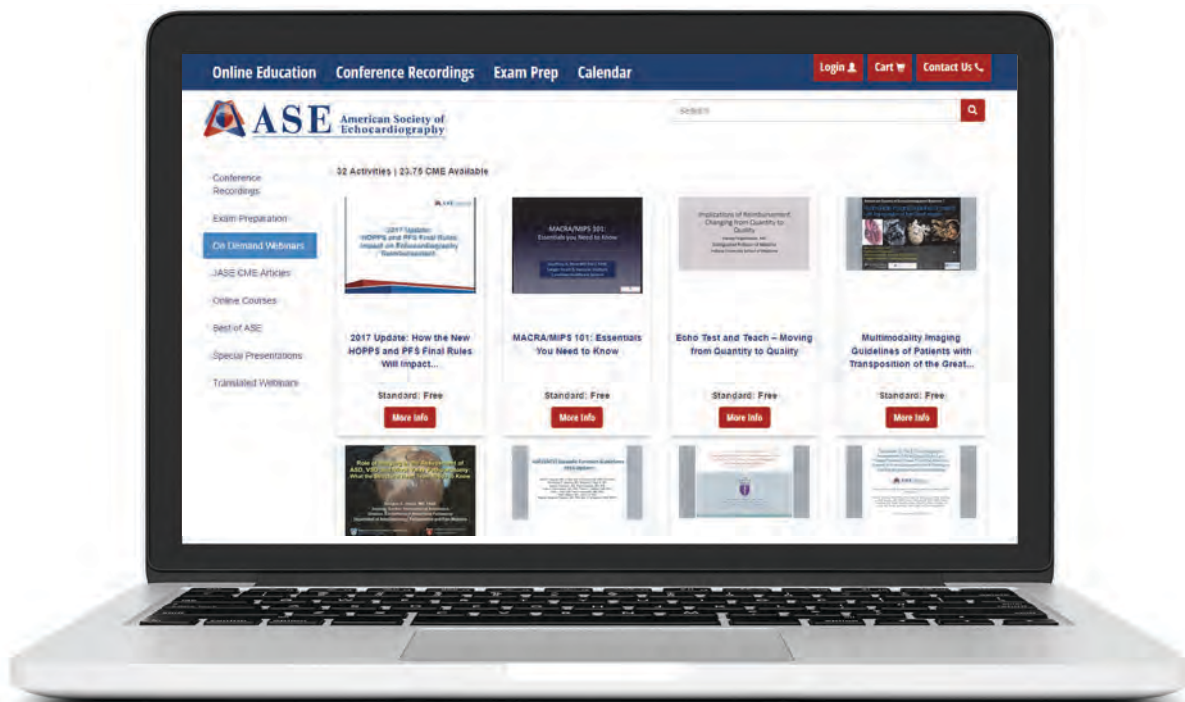
- Left Atrial Appendage Occlusion/ Exclusion: Procedural Image Guidance with TEE – June 2018  
*Muhammed Saric, MD, PhD, FASE*
- Clinical Applications of Ultrasonic Enhancing Agents in Echocardiography – April 2018  
*Thomas R. Porter, MD, FASE*
- Recommendations for Multimodality Cardiac Imaging in Patients with Chagas Disease – January 2018  
*Federico M. Asch, MD, FASE*
- How Collecting Data in ImageGuide will Raise Quality and Save Your Lab Money: A Snapshot from ASE and ASNC – November 2017  
*Joe Reyes and Irene Butler*
- Answers to Your Aortic Valve Stenosis Questions – October 2017  
*Judy W. Hung, MD, FASE*
- Recommendations on the Echocardiographic Assessment of Aortic Valve Stenosis: A Focused Update Published in Collaboration with the European Association of Cardiovascular Imaging and ASE – August 2017  
*Judy W. Hung, MD, FASE*
- Answers to Your LV Diastolic Questions – May 2017  
*Sherif F. Nagueh, MD, FASE and Deborah A. Agler, ACS, RDCS, FASE*
- Recommendation of Non-Invasive Evaluation of Left Ventricular Regurgitation – April 2017  
*William A. Zoghbi, MD, FASE*
- The Clinical Use of Stress Echocardiography in Non-Ischemic Heart Disease – April 2017  
*Patricia A. Pellikka, MD, FASE*
- 3D Echocardiography in Congenital Heart Disease – January 2017  
*Girish S. Shirali, MBBS, FASE*
- 2017 Update: How the New HOPPS and PFS Final Rules Will Impact Echocardiography Reimbursement – December 2016  
*Judy Rosenbloom, RDCS, FASE; Diane Millman, JD*
- Guidelines for the Use of Echocardiography in the Evaluation of a Cardiac Source of Embolism – February 2016  
*Muhammed Saric, MD, PhD, FASE*
- Recommendations for the Evaluation of Left Ventricular Diastolic Function by Echocardiography – May 2016  
*Sherif F. Nagueh, MD, FASE*
- Multimodality Imaging Guidelines of Patients with Transposition of the Great Arteries – September 2016  
*Meryl S. Cohen, MD, FASE*
- MACRA/MIPS 101: Essentials You Need to Know – October 2016  
*Geoffrey A. Rose, MD, FASE*
- Echo Test and Teach – Moving from Quantity to Quality – October 2016  
*Harvey Feigenbaum, MD, FASE*
- Guidelines for the Echocardiographic Assessment of Atrial Septal Defect and Patent Foramen Ovale – September 2015  
*Frank E. Silvestry MD, FASE*

# On Demand Webinars

AVAILABLE: ONLINE ONLY on ASEUniversity.org

**CME credit is available for a majority of on demand webinars. See specific webinar for more information.**

- 3D Guidance of Catheter Based Interventions  
*Joseph F. Maalouf, MD, FASE*
- Assessment of Pulmonary Edema and Ultrasound  
*Vicki Noble, MD*
- Contrast Basics: The Bubbles and How We Image Them  
*Jonathan R. Lindner, MD, FASE*
- Contrast Beyond Endocardial Border Definition - Improving Our Diagnostic Value  
*Sharon L. Mulvagh, MD, FASE*
- Diastolic Function: Dealing with Discrepancies in Data  
*Miguel A. Quiñones, MD, FASE*
- Echo Evaluation for Left Ventricular Assist Devices (LVAD)  
*James N. Kirkpatrick, MD, FASE*
- Emergency Echocardiography for the ICU Setting  
*Colin K. Grissom, MD, FASE*
- How to Approach Echocardiography in Congenital Heart Disease  
*Brandy A. Hattendorf, MD, FASE*
- Knobology - What You Need to Know to Make the Best Pictures  
*G. Monet Strachan, RDCS, FASE*
- Multimodality Imaging Evaluation of Adult Patients During and After Cancer Therapy  
*Juan Carlos Plana, MD, FASE*
- Myocardial Contrast Echo for Perfusion - How and Why?  
*Thomas R. Porter, MD, FASE*
- Pediatric Left Ventricular Noncompaction  
*Meryl S. Cohen, MD, FASE*
- Policy and Procedures for Successful Implementation of Contrast in the Echo Lab  
*Joan J. Olson, BS, RDCS, RVT, FASE*
- Real World Diastolic Conundrums based on Guidelines  
*Hisham Dokainish, MD, FASE*
- Rescue Echocardiography - What Every Exam Should Entail  
*Nicholas W. Markin, MD, FASE*
- Role of Imaging in Assessment of Pathoanatomy of ASD/VSDs and Mitral Valve Disease – July 2016  
*Douglas C. Shook, MD, FASE*
- Stress Echo and Valvular Disease: Use and Protocols  
*Patricia A. Pellikka, MD, FASE*
- Technology for Structural Heart Interventions: The Future  
*Stephen H. Little, MD, FASE*
- The Adult with Undiagnosed Congenital Heart Disease: Echocardiographic Evaluation  
*Sabrina D. Phillips, MD, FASE*
- The Impact of Contrast for Ventricular Cavity Opacification  
*Kevin Wei, MD, FASE*



# Guideline Reviews

AVAILABLE: ONLINE ONLY on ASEUniversity.org

**CME credit is available for a majority of on demand webinars. See specific webinar for more information.**

- 3D Echocardiography in Congenital Heart Disease  
*Girish S. Shirali, MBBS, FASE*
- ASE Guidelines for the Cardiac Sonographer in the Performance of Contrast Echocardiography  
*Thomas R. Porter, MD, FASE; Theodore F. Hubbard, MD*
- ASE Guideline in Review: Multimodality Imaging Guidelines for Patients with Repaired Tetralogy of Fallot  
*Anne Marie Valente, MD, FASE; Tal Geva, MD, FASE*
- Guidelines for the Echocardiographic Assessment of Atrial Septal Defect and Patent Foramen Ovale  
*Frank E. Silvestry MD, FASE*
- Guidelines for the Use of Echocardiography in the Evaluation of a Cardiac Source of Embolism  
*Muhammed Saric, MD, PhD, FASE*
- Multimodality Imaging Guidelines of Patients with Transposition of the Great Arteries  
*Meryl S. Cohen, MD, FASE*
- Recommendations for Cardiac Chamber Quantification by Echocardiography in Adults  
*Roberto M. Lang, MD, FASE*
- Recommendations for Multimodality Cardiac Imaging in Patients with Chagas Disease  
*Federico M. Asch, MD, FASE*
- Recommendations for Noninvasive Evaluation of Native Valvular Regurgitation: A Report from the ASE Developed in Collaboration with the Society for Cardiovascular Magnetic Resonance  
*William A. Zoghbi, MD, FASE*
- Recommendations for the Evaluation of Left Ventricular Diastolic Function by Echocardiography  
*Sherif F. Nagueh, MD, FASE*
- Recommendations on the Echocardiographic Assessment of Aortic Valve Stenosis: A Focused Update Published in Collaboration with the European Association of Cardiovascular Imaging and ASE  
*Judy W. Hung, MD, FASE*
- The Clinical Use of Stress Echocardiography in Non-Ischemic Heart Disease  
*Patricia A. Pellikka, MD, FASE*

# ASE Programs

## Connect@ASE – ASE’s Networking Platform

Participate in the global conversation on ASE’s networking platform, Connect@ASE (Connect.ASEcho.org). This members-only site is the host for our active discussion forums, our image library containing hundreds of moving images, and our enhanced member directory to connect with colleagues. Access Connect@ASE on your device by downloading the free app by searching for ‘MemberCentric’ and selecting ASE.

For more information, visit [Connect.ASEcho.org](http://Connect.ASEcho.org)

## ASE Education Co-Sponsorship (without CME)

As an organization dedicated to excellence in cardiovascular ultrasound for patient care, ASE strives to promote and provide opportunities for enhancement of knowledge and skills of members and nonmembers through its educational programming. The purpose of ASE’s educational programs is to improve proficiency in the field of cardiovascular ultrasound, which is an important tool for optimal management of patients with heart disease.

A co-sponsorship agreement without CME is one whereby the submitting organization is an ACCME Accredited Provider responsible for the educational integrity of the program. ASE will endorse the educational activity, but assumes no CME responsibility; the submitting organization is responsible for providing CME and ensuring that the activity is conducted in accordance with all ACCME guidelines and policies. Multiple sponsorship levels are available, each with great marketing benefits to help drive course attendance. ASE accepts applications for co-sponsorship based upon topic, time frame, and target audience.

For full details, pricing, and to download a copy of the application, please visit [ASEcho.org/ASE-sponsorship-opportunity](http://ASEcho.org/ASE-sponsorship-opportunity).

## Hospital CEU Programs

This program is designed for cardiac ultrasound and cardiovascular laboratories that hold monthly, in-house meetings related to echocardiography. Under the guidelines set forth by this program, sonographer attendees will be eligible for up to 12 ASE CEU credits per year from attendance at these meetings. ASE CEU credits are honored by ARDMS and CCI towards registry requirements for sonographers.

For labs up to 10 people: \$250

For labs with 11 – 25 people: \$300

For labs with 26 – 50 people: \$400

For labs with over 50 people: \$500

For more information, visit [ASEcho.org/ceuprograms](http://ASEcho.org/ceuprograms)

## Local Society CEU Program

ASE partners with local echocardiography societies to provide CEU to cardiovascular sonographers attending their meeting. Local echocardiography societies will be approved to offer up to 12 ASE CEU credits to attendees per year. ASE CEU credits are honored by ARDMS and CCI towards registry requirements for sonographers.

**Application Fee:** \$300

For more information, visit [ASEcho.org/ceuprograms](http://ASEcho.org/ceuprograms)

# How to Order Products

### ASE Members

1. Login to your member portal by selecting the “Login” button at the top of ASEcho.org.
2. Select “ASE Marketplace” on the left side.
3. Select the category for your product and locate it in the displayed list.
4. Select “Learn More” to see a detailed product description and to add the product to your cart.

### Nonmembers

1. Navigate a web browser to Amazon.com/shops/ASE.
2. Locate the search bar near the top of the screen, and enter the product name.
3. Click the “Go” button to the right of the search bar to display the list of products.



## Product Price Guide

| Product  | Availability   | Credits        | Member           | Nonmember         | Page  |
|--|--|----------------|------------------|-------------------|-------|
| <b>GENERAL EDUCATION PRODUCTS</b>  |  |                |                  |                   |       |
| ASE Annual Scientific Sessions Online Library                              | Online   |                | \$299            | \$399             | 8     |
| ASE's Comprehensive Echocardiography                                       | Textbook; e-Book                                     |                | \$199            | \$229             | 9     |
| Best of ASE Per Volume Bundle  | Online; DVD  |                | \$75<br>\$475    | \$95<br>\$575     | 9     |
| Case-based Learning: Focus on Patient Safety*                              | Online ONLY  | CME, MOC       | \$175            | \$250             | 9     |
| Clinical Cases in Echocardiography: Focus on Congenital Heart Disease*     | Online ONLY  |                | \$75             | \$95              | 9     |
| Contrast-enhanced Echocardiography Lecture Series                          | Online ONLY  | CME, MOC       | Free             | Free              | 10    |
| Echo Test and Teach*   | Online Software                                      | CME            | Call             | Call              | 15    |
| Essentials for Proficiency in Basic Cardiovascular Ultrasound              | Online with e-Book; DVD with workbook                | CME, MOC       | \$175            | \$250             | 10    |
| Focused Cardiac Ultrasound: Fundamentals of Acquisition and Interpretation | DVD ONLY   |                | \$150            | \$250             | 11    |
| How to Perform a Transthoracic Echocardiographic Study                     | DVD ONLY   |                | \$99             | \$150             | 11    |
| Pediatric and Congenital Heart Disease Lecture Series*                     | Online ONLY  | CME, MOC       | \$175            | \$250             | 12    |
| Proper Echocardiographic Measurements: How and Why*, 2nd Edition           | Online; DVD  | CME            | \$175            | \$250             | 12    |
| Self-Study Program IV*   | DVD ONLY   | CME, MOC       | \$175            | \$250             | 13    |
| Self-Study Program - Pediatric and Congenital Heart Disease                | DVD ONLY   | CME, MOC       | \$175            | \$250             | 13    |
| Transesophageal Echocardiography in Perioperative Care*                    | Online; DVD  | CME, MOC, MOCA | \$140            | \$200             | 14    |
| Transesophageal Echocardiography in Structural Heart Disease*              | Online; DVD  | CME, MOC, MOCA | \$175            | \$250             | 14    |
| Utility of 3D Echocardiography: Promises and Perspectives                  | Online; DVD  | CME, MOC, MOCA | \$175            | \$250             | 14    |
| <b>Exam Review Products</b>  |  |                |                  |                   |       |
| Advanced Cardiac Sonographer Registry Review                               | Online ONLY  |                | \$150            | \$250             | 15    |
| ASCeXAM/ReASCE Review Course Online Library                                | Online ONLY  |                | \$375            | \$525             | 16    |
| ASCeXAM/ReASCE Online Practice Exam Simulation*                            | Online ONLY  |                | \$199            | \$250             | 16    |
| Cardiovascular Sonographer Registry Review Guide                           | Online with downloadable workbook; DVD with workbook |                | \$150            | \$250             | 16    |
| <b>Guideline Products</b>  |  |                |                  |                   |       |
| ASE Guidelines Reference Binder  | Binder with Inserts                                  |                | \$285            | \$385             | 17    |
| ASE Guidelines Reference Binder Inserts                                    |  |                | \$40             | \$175             | 17    |
| ASE Guidelines Reference Spiral  |  |                | \$120            | \$75              | 17    |
| ASE Guidelines Reference e-Book  | e-Book   |                | \$75<br>Annually | \$100<br>Annually | 17    |
| Pocket Guidelines Individual Bundle  |  |                | \$10<br>\$65     | \$15<br>\$80      | 17    |
| Guideline Posters Individuals Poster Set                                   |  |                | \$20<br>\$280    | \$30<br>\$380     | 18    |
| Guideline Posters Flip Chart Individuals Flip Chart Set                    |  |                | \$50<br>\$250    | \$30<br>\$300     | 18    |
| Guideline Lab Bundle   |  |                | \$995            | \$1,295           | 18    |
| <b>JASE, Online Articles, and Webinars</b>                                 |  |                |                  |                   |       |
| <i>Journal of the American Society of Echocardiography (JASE)</i>          |  |                | Free             | \$352/yr US       | 19    |
| Articles   | Online ONLY  | CME, MOC       | Free             | \$25              | 19    |
| Live Webinar Recordings, On Demand Webinars, and Guideline Reviews         | Online ONLY  | CME as noted   | Free             | \$25              | 20-22 |

\*Multi user license pricing available

# Membership in ASE

As the largest global organization for cardiovascular ultrasound imaging, ASE is the leader and advocate, setting practice standards and guidelines. Comprised of over 17,000 physicians, sonographers, nurses, and scientists, ASE is a strong voice providing guidance, expertise, and education to its members with a commitment to improving the practice of ultrasound and imaging of the heart and cardiovascular system for better patient outcomes.

Anyone with an interest in cardiovascular ultrasound is welcome to become a member of ASE! Thousands of leaders in the field of echocardiography already receive ASE's many benefits.

## ASE Membership Benefits

### Valuable Education, Products, and Career Resources

**ASE Guidelines** – With over 60 published recommendations, these documents not only provide the foundation for the daily clinical practice of echocardiography worldwide, they are the core of ASE. Many guidelines have been translated into languages other than English.

**Free ASE Guideline webinars to ASE Members** – Presentations by the lead authors with dedicated question and answer time to understand how to implement the guideline in your practice for better patient care.

**Journal of the American Society of Echocardiography (JASE)** – A monthly subscription to learn and stay current in the field of echocardiography through original, peer-reviewed articles.

**CASE** – ASE's online, open-access, cardiovascular imaging case reports journal. ASE members enjoy significantly discounted publication fees for this journal.

**The Echo** – A weekly eNewsletter to help keep you informed about changes in your industry, ASE news, educational opportunities and upcoming events.

**Discounted Live Educational Courses** – Learn from the experts and network with colleagues.

**Online Continuing Education at ASEUniversity** – Currently over 30 free CME credits are included with ASE memberships.

**CME/MOC/CEU Reporting** – ASE regularly reports approved ASE CME credits earned to the American Board of Internal Medicine (ABIM), American Board of Pediatrics (ABP), American Board of Anesthesiology (ABA), American Registry for Diagnostic Medical Sonography (ARDMS), and Cardiovascular Credentialing International (CCI).

**Product Discounts** – Receive an average of 30% off most ASE educational products including textbooks and DVD's.

**Peer-to-Peer Networking** – Connect@ASE allows members to network with like-minded echo enthusiasts through private online forums, interactive member directory, blogs, communities, and more.

**Digital Image Library** – Members can share echo images for educational purposes.

**Fellow of the American Society of Echocardiography (FASE)** – The FASE credential recognizes the dedicated ASE member with an extraordinary commitment to the field of cardiovascular ultrasound. This designation is a peer-review process.

**Special Interest Councils** – Councils are open to all ASE members regardless of their area of practice. Councils include: Cardiovascular Sonography, Pediatric and Congenital Heart Disease, Perioperative Echocardiography, and Vascular Ultrasound.

**ASE Advocacy Efforts** – ASE represents our members, while advocating to create an environment for excellence in the quality and practice of cardiovascular ultrasound. ASE's role as the voice of echocardiography on Capitol Hill, to federal agencies, and among private payers is unquestionably of great, and ever-increasing, importance.

**Reimbursement and Coding Assistance** – ASE's provides an annual coding newsletter and reimbursement updates. Members also have access to ASE's coding expert for specific questions about reimbursement.

**ASE Endorsed Professional Liability Insurance** – Available for sonographers.

**Research and Travel Grants** – Council and ASE Foundation grants for physicians, sonographers, and student members only.

**Service on ASE Committees and Boards** – ASE members are encouraged to apply for open positions to increase their involvement in the Society, influence the creation of guidelines and standards, educational courses, products, and much more.

## ASE's Mission

ASE is committed to excellence in cardiovascular ultrasound and its application to patient care through education, advocacy, research, innovation, and service to our members and the public. Our members are heart and circulation ultrasound specialists dedicated to improving their patients' health and quality of life. They use ultrasound to provide an exceptional view of the cardiovascular system to enhance patient care.

**Learn more at [ASEcho.org](http://ASEcho.org)**

# Join ASE today at [ASEcho.org/Join](http://ASEcho.org/Join)

ASE strives to maintain low membership fees while offering an extremely wide range of benefits to the cardiovascular imaging professional. International dues are available to anyone who resides outside the United States.

| Membership Type  | United States           | International ** (online JASE only) |
|--|-------------------------|-------------------------------------|
| Physician/Scientist                                    | \$305                   | \$100                               |
| Sonographer/Allied Health*                             | \$160                   | \$100                               |
| Rising Star (completed training within last two years) | \$150                   | \$85                                |
| Fellow, Student, Sonographer/Allied Health Student **  | \$75 (online JASE only) | \$75                                |
| Professional Industry Affiliate**                      | \$305                   | \$305                               |

A print subscription to the *Journal of the American Society of Echocardiography* (JASE) is included in the dues rates, unless noted above with++. All fees are in US dollars.

\* The Allied Health category includes sonographers, nurses, and physician assistants.

\*\* Individuals with an interest in cardiovascular ultrasound that are not professional healthcare practitioners, such as Hospital Administrators, Industry Professionals and Media.

++ A print subscription can be added to these membership types for an additional \$90 USD.

**Nidhish Tiwari, MD, FASE**  
Associate Director  
North Central Bronx Hospital  
Bronx, NY



**Cindy Laliberte, RDCS, FASE**  
Supervisor, Echo Lab  
Akron Children's Hospital  
Akron, OH



**Yvette Carvallo, RDCS, RVS, FASE**  
Lead Cardiovascular  
Sonographer  
Overlook Medical Center  
Summit, NJ



**Massimiliano Meineri, MD, FASE**  
Staff Anesthesiologist,  
Director Perioperative TEE  
Toronto General Hospital  
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**Melissa Tracy, MD, FASE**  
Associate Professor  
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**Joshua D. Quick, MD, FASE**  
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West Haven, CT



**Alison White, BSc, MSc, DMU (cardiac), AMS, SFHEA, FASE**  
Program Director and  
Senior Lecturer  
Griffith University  
Brisbane, Queensland,  
Australia



Experts in the field hold the designation of

# FASE

Want to achieve a FASE designation? A variety of specialists, in addition to cardiologists, can now meet application criteria. Apply at [ASEcho.org/FASE](http://ASEcho.org/FASE).

# Critical Care ECHOCARDIOGRAPHY Review Course

**November 6-8, 2018**

**Loews Chicago O'Hare Hotel**

**Rosemont, Illinois, USA**

**CE/CME AVAILABLE**

**MOC AVAILABLE**

**Ideal for intensivists,  
advanced practice  
providers, cardiologists,  
fellows in training,  
sonographers, and  
hospitalists**

The new Critical Care Echocardiography Review Course is a live two-and-a-half-day course held in partnership between the Society of Critical Care Medicine and the American Society of Echocardiography. This course will educate attendees in all aspects of echocardiography in critically ill patients and help attendees prepare for the critical care echocardiography board examination offered by the National Board of Echocardiography.

Course benefits include:

- Preparation for the new critical care echocardiography board examination
- Review by highly skilled faculty, including intensivists, cardiologists, critical care anesthesiologists, pulmonologists, surgeons, emergency medicine physicians, and cardiac sonographers
- Valuable information for staying up to date on the latest in ultrasound and echocardiography education, as well as team-based care to keep skills relevant
- Incorporation of clinical practice acumen with available published guidelines, expert consensus, and evidence-based recommendations

**For more information and to register, visit [sccm.org/echoreview](http://sccm.org/echoreview).**



# ASE

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