

State-of-the-Art ECHOCARDIOGRAPHY: ECHO SOUTHWEST

29th ANNUAL

ADVANCE PROGRAM

February 13-16, 2016

Preconference Optional Sessions

February 12-13, 2016 *(additional fee required)*

**Hilton Tucson El Conquistador Golf
& Tennis Resort, Tucson, AZ**

Course Director

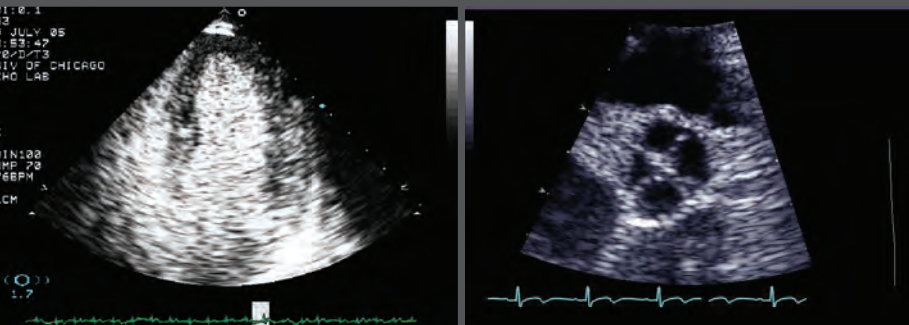
Steven J. Lester, MD, FASE
Mayo Clinic
Scottsdale, AZ

Learning Lab Director

Bijoy K. Khandheria, MD, FASE
Past President, ASE
Aurora Healthcare
Milwaukee, WI

Learning Lab Co-Director

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



Register now at asecho.org/SOTA



Jointly Provided by ASE and the ASE Foundation

Program Information

Overview of State-of-the-Art Echocardiography

The 29th Annual State-of-the-Art Echocardiography: Echo Southwest is not only in a fantastic new location for 2016, but the content has also been revitalized to focus on new technologies and techniques. The faculty will provide expertise on strain imaging, 3D echocardiography, valve disease, and intervention. Live imaging will allow attendees to watch experts perform these new imaging techniques. Particular attention will be paid to knobology and how to incorporate these techniques into practice.

This course will allow participants to spend time viewing a recorded case and reviewing complications. As patients become more familiar with valve disease and intervention and more centers are performing these complicated procedures, it is important for practitioners to become more comfortable with diagnosis, intervention, and monitoring.

All attendees should have a practical knowledge of echocardiography to fully benefit from this program. The setting is ideal for participants to bring their families and take advantage of some vacation time.

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

Preconferences

Learning Lab *(additional fee required)*

A learning lab will be offered a full day on Friday, February 12 and a half day on Saturday, February 13, 2016. This workshop requires separate registration and is a part of the total hours of educational content offered at the course.

This intimate workshop features easy access to faculty members. Individual computer workstations are provided for an interactive learning experience. Participants will get hands on experience manipulating images and learning how to quantitate fundamental aspects of clinical echocardiography. The small group environment allows the opportunity for nearly private instruction from top practitioners in the field. This program is intended for those with a basic knowledge of echocardiography, not beginners.

Topics to be covered include:

- Basic Hemodynamics
- Advanced Hemodynamics
- ASE Guidelines on 2D
- ASE Guidelines on Valvular Regurgitation, Valvular Stenosis. *Cases on which to do measurements with the instructors. Learn the potential sources of errors and, how to avoid them.*
- The Right Ventricle
- Cardio-Oncology
- Diastolic Function
- Basic and Advanced 3D Imaging
- Myocardial Mechanics with Speckle Tracking
- Measurements for TAVR, MitraClip
- Cases to Interpret with the Faculty
- Simulation of Being in a Reading Room - Sonographer Physician Team

Maintenance of Certification *(additional fee required)*

Maintenance of Certification (MOC): Focus on Congenital Heart Disease will be a half day session on Saturday, February 13, 2016. An additional fee is required for this session.

It will provide cases reviewing the role of echocardiography in diagnosis and follow-up of a wide variety of different congenital heart diseases and defects, including, but not limited to: valve defects, atrial and ventricular septal defects, patent foramen ovale, patent ductus arteriosus, coarctation of the aorta, Ebstein's anomaly, pulmonary artery stenosis, tetralogy of Fallot, transposition of the great arteries, etc. Cases will include symptomatic and asymptomatic diagnosis and treatment, as well as adult patients with repaired or palliated CHD. Upon finishing this session registrants will be given access to an online module to complete to be awarded 11 MOC points towards ABIM's Medical Knowledge Self-Assessment requirements and 10 MOC points towards ABP's Lifelong Learning Self-Assessment requirements. Registration for this session includes access to the ASE Online MOC Module.

Who Should Attend

State-of-the-Art Echocardiography: Echo Southwest's program is designed for adult and pediatric cardiologists, cardiovascular surgeons, anesthesiologists, radiologists, nurses, sonographers, and fellows in training. Participants should have a practical knowledge of echocardiography.

ASE Membership

Non-member registrants for the 29th Annual State-of-the-Art Echocardiography: Echo Southwest course will receive a complimentary American Society of Echocardiography membership through December 31, 2016 with their registration. Non-member registration is only available to new ASE members. ASE serves its members in numerous ways by providing education, advocacy, research, practice guidelines, and a community for their profession. ASE membership includes over \$600 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)*, 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.

Learning Objectives

- Incorporate state-of-the art clinical applications of echocardiography and Doppler ultrasound into clinical decision-making
- Utilize echocardiography in valvular heart disease
- Evaluate patients prior to, during, and following various structural heart disease procedures such as TAVR, mitral clip, and perivalvular leak closure
- Perform a 3D acquisition and measurement of biventricular size and function; and have a better understanding of the "knobology"
- Assess left ventricular function with state-of-the-art echocardiographic technology including strain imaging

Accreditation and Designation

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



The American Society of Echocardiography designates this live activity for a maximum of **38.75 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ASE designates the State-of-the-Art Echocardiography Learning Lab for a maximum of 13 hours, the Maintenance of Certification session for 3.75 hours, and a maximum of 25.75 hours for the Main Conference. Attendees must be registered for the Learning Lab and MOC to claim full credit. The total amount of hours for attending both the Main Conference and Learning Lab is 38.75 hours and 29.5 for attending both the Main Conference and Maintenance of Certification session.

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

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

Tucson

Tucson is surrounded by five mountain ranges, and the resort rests in the shadow of the Santa Catalina Mountains under the warm southwestern sun. What makes the city so special is that despite being a growing metropolis, it still retains its friendly, typically Arizonan, western charm. Discover 19th century architecture, or visit local Tucson attractions like Tohono Chul Park, Catalina State Park, or Biosphere 2.

Delve into the wonder of the natural world at Arizona-Sonora Desert Museum, enjoy a narrated tram ride through the Sabino Canyon, or hike one of the many trails at Saguaro National Park. And don't forget, however you choose to spend your visit, the concierge team will be delighted to assist and ensure your stay is unforgettable.

Lodging

To secure your room at the Hilton Tucson El Conquistador Golf & Tennis Resort, please call 800-325-7832 and state that you will be attending the 29th Annual State-of-the-Art Echocardiography program. The room rate is \$169 single/double a night. A deposit of one night's stay plus tax will be held at the time of reservation. Deposit will be forfeited for any cancellations occurring within 72 hours of arrival.

The room block is scheduled to be held until Wednesday, January 13, 2016, but may be sold out before this date. Therefore, we advise you to register for the program, and reserve your lodging as soon as possible. A resort fee of \$20 per room per day is included in your room rate. This fee includes Internet in the guest rooms and public areas for up to two devices, any local and 1-800

access guest room calls, two complimentary bottles of water upon arrival, 15% off massage treatments at Elements Spa, daily use of fitness facilities and fitness classes, one hour use of putting green per day, one hour use of driving range per room per day, one hour of tennis court usage per room per day, two hours of mountain bike usage per room per day, and shuttle service to Oro Valley Marketplace shopping and dining district as well as the Country Club facilities. When you make your reservation, please be sure to ask about any additional fees, early departure fees, or cancellation penalties.

Celebrating the Southwest Member Reception

Join us for drinks and hors d'oeuvres on Sunday evening, February 14 from 5:30–6:30 pm, while enjoying this wonderful location in the Southwest.

Networking Reception

ASE cordially invites you and your guests to the 29th Annual State-of-the-Art Echocardiography: Echo Southwest Attendee Reception on Monday evening, February 15 from 5:45–6:45 pm. This casual reception offers you the perfect opportunity to meet faculty, and visit with exhibitors, friends, and colleagues.

Transportation

The Tucson International Airport is located 23 miles from the Hilton Tucson El Conquistador Golf & Tennis Resort.

Cancellations

If you wish to cancel your participation in this course, your registration fee, less a \$100 administrative fee, will be refunded when written notification is received before Wednesday, January 13, 2016. No refunds will be made after Wednesday, January 13, 2016. No refund will be given for no-shows.

Registration for any ASE course is non-transferable to another participant or another course. In the event that an individual is unable to attend the conference due to inclement weather or chooses not to attend due to a health epidemic, ASE is unable to refund the conference fee. In the unlikely event the meeting/course is cancelled, ASE is responsible only for refund of the registration fee (minus any processing fee) and not for transportation, hotel accommodations, or any miscellaneous expenses incurred by the participant.

“This is one of the best echo conferences in the world due to its comprehensive content, excellent faculty, and outstanding presentations.”

2014 State-of-the-Art Echocardiography Attendee

Course Director

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

Learning Lab Director

Bijoy K. Khandheria, MD, FASE
 Past President, American Society of Echocardiography
 Aurora Healthcare
 Milwaukee, WI

Learning Lab Co-Director

Roberto M. Lang, MD, FASE
 Past President, American Society of Echocardiography
 University of Chicago
 Chicago, IL

Faculty

Robert Bonow, MD
 Northwestern University
 Chicago, IL

Keith A. Collins, MS, RDCS
 University of Chicago Medical Center
 Chicago, IL

William K. Freeman, MD, FASE
 Mayo Clinic
 Rochester, MN

Christopher J. Kramer, BA, RDCS, FASE
 Aurora Healthcare
 Milwaukee, WI

Sunil Mankad, MD, FASE
 Mayo Clinic
 Rochester, MN

Patrick McCarthy, MD
 Northwestern University
 Chicago, IL

Vera H. Rigolin, MD, FASE
 Northwestern University
 Chicago, IL

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

Partho P. Sengupta, MD, DM, FASE
 Mount Sinai Medical Center
 New York, NY

Sanjiv J. Shah, MD
 Northwestern University
 Chicago, IL

Matt M. Umland, RDCS, FASE
 Aurora Healthcare
 Milwaukee, WI

Susan Wilansky, MD, FASE
 Mayo Clinic
 Scottsdale, AZ

FRIDAY, FEBRUARY 12, 2016

6:00 am **Registration**
 6:30 am **Breakfast**

LEARNING LAB *(additional fee required)*

7:00 am **Learning Lab**
 12:15 pm **Lunch**
 1:30 pm **Learning Lab**
 5:00 pm **Adjourn**

SATURDAY, FEBRUARY 13, 2016

6:30 am **Registration**
 6:30 am **Breakfast**

LEARNING LAB *(additional fee required)*

7:00 am **Learning Lab**
 12:00 pm **Adjourn**

MAINTENANCE OF CERTIFICATION *(additional fee required)*

8:00 am **Focus on Congenital Heart Disease Part 1**
S. Shah, M. Saric, V. Rigolin
 10:00 am **Refreshment Break**
 10:15 am **Maintenance Session: Focus on Congenital Heart Disease Part 2**
S. Shah, M. Saric, V. Rigolin
 12:00 pm **Adjourn**

MAIN CONFERENCE

1:00 pm **Welcome**
S. Lester

MITRAL REGURGITATION

1:05 pm **Echocardiographic Evaluation of Degenerative Mitral Regurgitation**
S. Lester
 1:30 pm **Get with the Guidelines: When Should I Refer to a Surgeon?**
R. Bonow
 1:55 pm **Surgery for Degenerative Mitral Valve Disease: What Should Be Done? What Can Robots Do?**
P. McCarthy



2:20 pm	Classic Debate: Chronic Primary Mitral Regurgitation Early Surgical Intervention vs. Watchful Waiting Early Intervention, <i>W. Freeman</i> Watchful Waiting, <i>R. Bonow</i>
2:50 pm	Case-based Review of Secondary Mitral Regurgitation: How Do I Define the Severity? When Should I Refer for an Intervention? <i>V. Rigolin, R. Bonow, P. McCarthy</i>
3:40 pm	Refreshment Break and Visit Exhibits
4:00 pm	The Mitral Clip: For Whom and What Do I as an Echocardiographer Need to Do to Support the Decision? <i>B. Khandheria</i>
4:25 pm	Case: Mitral Valve Repair Intervention: Why Was the Clip Procedure Chosen? I Have Never Seen a MitraClip Procedure, Show Me What Happens and What is the Echocardiographer's Role? <i>P. Sengupta, S. Mankad</i>
5:00 pm	What Do I as an Echocardiographer Need to Do Post MitraClip? How Do I Quantitate the Severity of Residual Regurgitation? <i>V. Rigolin</i>
5:20 pm	Cases: Why is the Valve Leaking and What Should I Do: Surgery, Clip, or Watchful Waiting? <i>S. Mankad, B. Khandheria, V. Rigolin</i>
6:00 pm	Adjourn

SUNDAY, FEBRUARY 14, 2016

6:30 am	Registration
6:30 am	Breakfast and Visit Exhibits

SUNRISE SESSION: ECHO IN SYSTEMIC DISEASE

7:00 am	Carcinoid <i>M. Saric</i>
7:15 am	Sarcoid <i>V. Rigolin</i>
7:30 am	Amyloidosis <i>S. Shah</i>
7:45 am	Mystery <i>V. Rigolin</i>
8:00 am	Adjourn

AORTIC VALVE DISEASE

8:00 am	Echocardiographic Evaluation of Aortic Stenosis <i>S. Lester</i>
8:25 am	What You Should Know: When Should We Refer for Valve Replacement? <i>R. Bonow</i>
8:55 am	Aortic Stenosis: Area Gradient Mismatch <i>S. Lester</i>
9:20 am	Echocardiographic Evaluation of Aortic Regurgitation <i>W. Freeman</i>

9:45 am	What You Should Know: When Should I Refer to a Surgeon? <i>R. Bonow</i>
10:10 am	Surgical Considerations for Aortic Valve Disease: What is the Best Operation? <i>P. McCarthy</i>
10:40 am	Refreshment Break and Visit Exhibits
11:00 am	How Do I Evaluate a Patient Being Considered for TAVR? <i>M. Saric</i>
11:25 am	I Have Never Seen a TAVR Being Done: Show Me What Happens and What is the Echocardiographer's Role? <i>S. Mankad</i>
11:50 am	Post TAVR: What Do I Need to Do for Long-Term Follow-up? How Do I Assess the Severity of Residual Regurgitation if Any? <i>P. Sengupta</i>
12:15 pm	Cases: TAVR Complications, What Should I Be Looking for? <i>M. Saric</i>
12:30 pm	Lunch and Visit Exhibits

PROSTHETIC VALVES

1:30 pm	Echocardiographic Evaluation of an Aortic Valve Prosthesis <i>S. Wilansky</i>
1:50 pm	Echocardiographic Evaluation of a Mitral Valve Prosthesis <i>M. Saric</i>
2:10 pm	Prosthesis Patient Mismatch: How to Detect? Can it Be Avoided? <i>V. Rigolin</i>
2:35 pm	The Evaluation of Mitral Periprosthetic Regurgitation: When to Intervene? What Does the Echocardiographer Need to Do to Determine if it Can Be Repaired Percutaneously? <i>S. Mankad</i>
3:00 pm	I Have Never Seen a Percutaneous Repair of a Periprosthetic Leak, Show Me How They Do This, Show Me What Happens and What is the Echocardiographer's Role? <i>P. Sengupta</i>
3:20 pm	Refreshment Break and Visit Exhibits
3:45 pm	Cases of Abnormal Prosthetic Valves <i>S. Mankad, P. Sengupta, S. Wilansky</i>
4:30 pm	Endocarditis: You Wrote the Chapter in Branuwald. Tell Us What We Need to Know? <i>W. Freeman</i>
5:00 pm	Question and Answer <i>All faculty</i>
5:20 pm	Adjourn
5:30 pm	Celebrating the Southwest Member Reception

MONDAY, FEBRUARY 15, 2016

6:30 am **Registration**

6:30 am **Breakfast and Visit Exhibits**

SUNRISE SESSION: CONTRAST ECHOCARDIOGRAPHY

7:00 am **What Echocardiographic Contrast Agents Are There?**
C. Kramer

7:15 am **How Should it Be Administered and How Do I Optimize My Machine Settings?**
K. Collins

7:30 am **I Hear Contrast is Not Safe, Is That True?**
R. Lang

7:40 am **How Should I Set Up My Lab So That Contrast Can Be Used Efficiently?**
M. Umland

7:55 am **Adjourn**

LEFT AND RIGHT VENTRICLE WITH LIVE SCANNING

8:00 am **The Left Ventricle: What and How Should We Quantify its Size and Function?**
R. Lang

8:25 am **Myocardial Imaging: Strain in the Assessment of Left Ventricular Function**
S. Lester

9:00 am **Strain Imaging: Show Me How You Do it; Live Scanning with Step by Step Approach**
M. Umland, P. Sengupta

9:40 am **Cases: How Did Advanced Echocardiographic Imaging (Strain) Help in the Diagnosis and/or Management of This Patient**
P. Sengupta, B. Khandheria

10:05 am **3D Imaging of the LV: Show Me How You Do it; Live Scanning with Step by Step Approach**
R. Lang, C. Kramer

10:45 am **Refreshment Break and Visit Exhibits**

11:00 am **How Should I Evaluate Right Ventricular Size and Function?**
R. Lang

11:25 am **Echocardiography: A PA Catheter in a Box**
S. Lester

11:50 am **3D Imaging of the Right Ventricle: Show Me How You Do it; Live Scanning with Step by Step Approach**
K. Collins, R. Lang

12:30 pm **Lunch and Visit Exhibits**

1:30 pm **Tricuspid Valve: Why is it Leaking and How Much?**
B. Khandheria

1:55 pm **3D Imaging of the Tricuspid Valve: Does it Really Help Me?**
R. Lang

2:20 pm **3D Imaging of the Tricuspid Valve: Show Me How You Do It; Live Scanning with Step by Step Approach**
R. Lang, K. Collins

3:00 pm **Live Scanning Questions: What Would You Like To See Again**
R. Lang, B. Khandheria, K. Collins

3:30 pm **Refreshment Break and Visit Exhibits**

3:50 pm **The Echocardiographic Evaluation of Left Ventricular Diastolic Function**
S. Wilansky

4:15 pm **Heart Failure with a Preserved Ejection Fraction: A Clinician's Perspective**
S. Shah

4:40 pm **Diastolic Function: Case Studies**
S. Shah, S. Wilansky

5:30 pm **Adjourn**

5:30 pm **Networking Reception**

TUESDAY, FEBRUARY 16, 2016

6:30 am **Registration**

7:30 am **Breakfast and Visit Exhibits**

8:00 am **The Watchman Device: For Whom and What Images Will the Interventionalist Ask Me For?**
B. Khandheria

8:25 am **I Have Never Seen A Watchman Device Implanted, Show Me How They Do This, Show Me What Happens and What is the Echocardiographer's Role?**
P. Sengupta

SPECIAL TOPICS IN ECHOCARDIOGRAPHY

8:50 am **Acute Aortic Syndromes**
W. Freeman

9:15 am **The Role of Stress Testing in Valvular Heart Disease**
S. Wilansky

9:40 am **Mitral Stenosis: Evaluation and Management; I Am Interested In Knowing How You Manage Stenosis When it is Secondary to Annular Calcification?**
S. Mankad

10:05 am **Pericardial Disease: Tamponade and Constriction**
S. Shah

10:30 am **Refreshment Break and Visit Exhibits**

10:45 am **Cardio-Oncology: What is the Role of the Echo Lab, and How Does the Echo Help in Management Decisions**
B. Khandheria

11:10 am **A Clinician's Perspective on Pulmonary Hypertension**
S. Shah

11:35 am **Hypertrophic Cardiomyopathy: Evaluation and Differential Diagnosis**
W. Freeman

12:00 pm **Questions and Summary**
All Faculty

12:15 pm **Adjourn**



Register Online at asecho.org/SOTA

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Hilton Tucson El Conquistador Golf & Tennis Resort, Tucson, AZ

Your State-of-the-Art Echocardiography registration fee includes breakfasts, refreshment breaks, lunches, two receptions, a memory stick containing course materials, and 25.75 hours of CME credit.

Name: _____

First Name

Middle Initial

Last Name

Credential: MD DO PhD RN RCS RDCS Other

Institution: _____

Email Address: _____

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

Which is your preferred mailing address? Work/Business Home

Street Address: _____

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

Telephone: _____ Fax: _____

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

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

Special Dietary Needs: _____

Registration Fees: Please circle the registration type you would like to purchase

	Prior to January 13, 2016	After January 13, 2016
ASE Physician Member	\$725	\$825
Physician Non-Member*	\$899	\$999
ASE Sonographer/Allied Health Member/Fellow Member	\$550	\$650
Sonographer/Allied Health Non-Member/Fellow Non-Member*	\$650	\$750
One-day Rate: (only one day can be selected) Sunday, Monday, Tuesday, Wednesday)	\$250	
Preconference Optional Session Fees Attendees must register for this workshop in advance in order to attend due to limited seating available.	ASE Member	Non-Member
Learning Lab February 12-13, 2016	\$450	\$550
Maintenance of Certification February 13, 2016	\$350	\$450

* This registration fee includes ASE membership through December 31, 2016. Non-member registration is only available to new ASE members.

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: _____

Credit Card Billing Address: _____



ASE Foundation

American Society of Echocardiography
2100 Gateway Centre Boulevard
Suite 310
Morrisville, NC 27560

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