

State-of-the-Art ECHOCARDIOGRAPHY™

35th ANNUAL



ADVANCE PROGRAM

February 18–20, 2023

Optional Preconference Learning Lab

February 17–18, 2023

**The Westin Kierland Resort & Spa
Scottsdale, AZ**

Course Director

William A. Zoghbi, MD, FASE

Past President, ASE
Houston Methodist Hospital
Houston, TX

Course Co-Director

Sunil V. Mankad, MD, FASE

Mayo Clinic
Rochester, MN

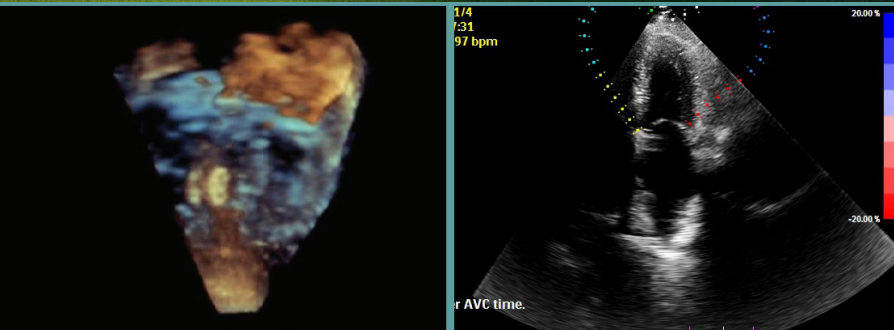
Learning Lab Co-Directors

Roberto M. Lang, MD, FASE

Past President, ASE
University of Chicago Medical Center
Chicago, IL

Matt M. Umland, ACS, RDCS, FASE

Aurora Health Care
Milwaukee, WI



Program Information

Overview of State-of-the-Art Echocardiography

The 2023 program follows the themes of structural heart disease, myocardial and pericardial disease, coronary artery disease, and interventional echocardiography. During the course, presentations will highlight what echo brings to each theme, help clinicians recognize and avoid common errors and pitfalls, and learn how to apply the guidelines in a practical manner.

The faculty consists of recognized leaders in the field of echocardiography acclaimed for their teaching abilities. Participants will have the opportunity to interact with the faculty one-on-one in the preconference, computer-based Learning Lab, and during the question and answer sessions.

NEW in 2023!

- **Expanded Learning Lab:** New topics include advanced hemodynamics, myocardial strain, and structural heart disease. Participants will perform 3D cropping, measurements such as left ventricular and right ventricular strain, left atrial strain, critical measurements for TAVR, TMVR, TEER, and left atrial appendage occluder.
- **Case-based Learning:** The course will include a special focus on hemodynamics, structural heart disease, interventional echocardiography, and advanced diastolic.
- **Glimpse of the Future:** Learn about the impact of artificial intelligence and machine learning in the field of echocardiography.

Learning Lab Sessions *(Additional Fee Required)*

A learning lab will be offered for a full day on Friday, February 17, and a half day on Saturday, February 18, 2023. Separate registration is required, and this session is included in the total hours of educational content offered at the course.

Limited to 75 registrants, this intimate workshop allows easy access to faculty members. Computer workstations are provided to teach each participant how to quantitate fundamental aspects of clinical echocardiography. Expert faculty will demonstrate advanced hemodynamics, 3D, and myocardial strain imaging. Each participant will have plenty of case studies to practice demonstrated techniques. The small group environment allows the opportunity for nearly private instruction from top practitioners in the field.

Who Should Attend

ASE's State-of-the-Art Echocardiography 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.

Learning Objectives

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

- 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, transcatheter edge-to-edge repair, and left atrial appendage closure
- Perform a 3D acquisition and measurement of biventricular size and function
- Explain the new diastolic function guidelines
- Assess right and left ventricular function with state-of-the-art echocardiographic technology including strain imaging

Course Registration

Registration fees include breakfast, lunch, breaks, and CME/MOC credit. ASE members may take advantage of reduced registration fees as a benefit of membership. Register online at ASEcho.org/SOTA.

Accreditation and Designation

ASE is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide accredited continuing education for physicians.

ASE designates this live course for a maximum of **31.75 AMA PRA Category 1 Credits™**. To claim all 31.75 CME credits, you must register for both the pre-conference Learning Lab and main conference. The main conference will offer a total of 16.75 CME credits.

In addition to offering CME credits, this activity has been developed and registered with ACCME to provide MOC and MOCA 2.0 credits in alignment with *AMA PRA Category 1 Credit™*.

Successful completion of this CME activity enables the participant to earn up to 31.75 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program, the American Board of Pediatrics (ABP) MOC program, and/or the American Board of Anesthesiology's (ABA) Maintenance of Certification in Anesthesiology Program® or MOCA 2.0®. It is ASE's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM and ABP MOC points and/or ABA MOCA 2.0®.

Participants should claim only the credit commensurate with the extent of their participation in the activity. Physicians will earn MOC and/or MOCA 2.0 points equivalent to the amount of CME credits claimed for the activity.

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

This activity has been reviewed by the AAPA Review Panel and is compliant with AAPA CME Criteria. This activity is designated for 31.75 AAPA Category 1 CME credits. PAs should only claim credit commensurate with the extent of their participation. Approval is valid from 2/17/2023 to 2/20/2023. AAPA reference number: CME-207859.



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®.

Location and Hotel Accommodations

Scottsdale, Arizona

Scottsdale enjoys 330 days of sunshine every year allowing for plenty of outdoor playtime. Spring begins February 16 in Scottsdale and the average high temperature is 79 degrees Fahrenheit. You will want to make time to stretch your legs on a wildflower hike and possibly catch a spring training baseball game. The nearby McDowell Sonoran Preserve is an other-worldly landscape of rugged mountains, towering saguaros, and whimsically shaped cacti. By day, this lush landscape is ideal for sunrise hikes, hot air ballooning, and other desert adventures. After dark, the desert continues to delight with stargazing excursions and technicolor sunsets.

Old Town Scottsdale is full of public art installations, galleries, boutiques, spas, and restaurants. It also boasts award-winning craft breweries and wine-tasting rooms, as well as two of the city's most popular museums, the Western Spirit: Scottsdale's Museum of the West and the Scottsdale Museum of Contemporary Art.

Other sights you won't want to miss are Taliesin West, architect Frank Lloyd Wright's former home and studio, and a stroll among thousands of colorful species at Butterfly Wonderland. You will not go hungry in Scottsdale as it is home to more than 800 restaurants citywide.

The Westin Kierland Resort & Spa

Immerse yourself in luxury at The Westin Kierland Resort & Spa. Located in the stunning Sonoran Desert of Scottsdale, the resort offers an ideal getaway, just steps from upscale shopping, dining, and entertainment in Kierland Commons.

The resort features three golf courses at Kierland Golf Club. Enjoy a relaxing massage at Agave, The Arizona Spa, that offers treatments inspired by traditional practices handed down through many of Arizona's native cultures as well as therapies infused with healing traditions from the best practices all over

the world. Reenergize in the WestinWORKOUT® Fitness Studio, that is open 24 hours with room card access and includes a hot tub, steam room, and sauna.

One of the resort's biggest attractions is the Adventure Water Park, which offers the iconic Kierland FlowRider flow-board simulator for surfing in the desert, a lazy river, a 110-foot-long waterslide, and more! Rent a family-friendly poolside cabana to relax in shaded luxury or enjoy your very own Tommy Bahama Relaxation Reef private island. The Aguamiel pool is the heated adult pool and is a quiet retreat that features lap lanes for fitness swimming, a hot tub, and private cabanas.

Hotel Accommodations

ASE has secured a block of rooms at The Westin Kierland Resort & Spa at the discounted rate of \$315 per night. **An additional discounted daily resort fee of \$20 per room per night will automatically be added to your total bill.** This fee will cover several amenities, including: unlimited resort-wide premium WiFi, access to Agave, The Arizona Spa facilities, run concierge, boot camp, yoga, wellness walk classes, expanded shuttle service to Kierland Commons and Scottsdale Quarter shopping and dining, complimentary two-hour bike rental per day, and tennis, pickleball, and basketball court privileges.

We ask that you register for the conference before booking a room reservation. Reservations without an accompanying conference registration are subject to being released. You may secure your reservation by calling Westin Kierland reservations directly at 800-354-5892 or visit ASEcho.org/SOTA/Accommodations to book online. When calling, please specify you are with "American Society of Echocardiography" to secure the discounted rate. The hotel room block is scheduled to be held until Monday, January 16, 2023, but may be sold out before this date. Therefore, we advise registering for the program and reserving your hotel room as soon as possible. Visit whattoexpect.marriott.com/phxws to review hotel COVID-19 updates and what to expect during your stay.

Faculty

Course Director

William A. Zoghbi, MD, FASE
Past President, ASE
Houston Methodist Hospital
Houston, TX

Course Co-Director

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

Learning Lab Co-Directors

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

Matt M. Umland, ACS, RDCS, FASE
Aurora Health Care
Milwaukee, WI

Faculty

Cara Bergeron, RDCS, RVT, FASE
Houston Methodist Hospital
Houston, TX

Jennifer L. Betz, BS, RDCS, FASE
Mayo Clinic
Rochester, MN

Marissa Christensen, RDCS
Houston Methodist Hospital
Houston, TX

Nadeen Faza, MD, FASE
Houston Methodist Hospital
Houston, TX

Denise Ignatowski, BS, RDCS, FASE
Aurora Health Care
Milwaukee, WI

Renuka Jain, MD, FASE
Aurora Health Care
Milwaukee, WI

Abigail E. Kaminski, BS, RDCS, RVT, FASE
Aurora Health Care
Milwaukee, WI

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

Eric Kruse, BS, ACS, RDCS, RVT, FASE
University of Chicago Medical Center
Chicago, IL

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

Stephen H. Little, MD, FASE
ASE President
Houston Methodist Hospital
Houston, TX

G. Burkhard Mackensen, MD, PhD, FASE
University of Washington
Seattle, WA

Maan Malahfji, MD
Houston Methodist Hospital
Houston, TX

Monica Mukherjee, MD, MPH, FASE
Johns Hopkins University
Baltimore, MD

Jae Oh, MD, FASE
Mayo Clinic
Rochester, MN

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

Jennifer A. Warmsbecker, RDCS, BS, FASE
Mayo Clinic
Rochester, MN

Megan Yamat, RDCS, RCS, ACS, FASE
University of Chicago Medical Center
Chicago, IL

Schedule of Events

FRIDAY, FEBRUARY 17, 2023

LEARNING LAB: DAY 1 (additional fee required)

7:00 AM	Registration and Breakfast
7:45 AM	Welcome, Objectives, and Introductions <i>R. Lang, W. Zoghbi</i>
8:00 AM	Introduction to Computers and Software <i>M. Umland</i>
8:15 AM	Basic and Advanced Hemodynamics <i>C. Bergeron, M. Christensen, W. Zoghbi</i>
9:15 AM	Basic 3D <i>E. Kruse, R. Lang, M. Yamat</i>
10:15 AM	Basic Strain Imaging <i>D. Ignatowski, B. Khandheria, A. Kaminski</i>
11:15 AM	Refreshment Break
11:30 AM	Basic Diastolic Function, Constriction, Restriction <i>A. Kaminski, B. Khandheria, M. Umland</i>
12:30 PM	Unknown Cases in Diastology: Questions and Answers <i>All Faculty</i>
1:00 PM	Lunch Break
2:00 PM	Assessment of Global and Regional Left Ventricular Function: Use of Contrast and Strain <i>C. Bergeron, M. Christensen, W. Zoghbi</i>
3:00 PM	Assessment of Right Ventricular Function: Conventional and Strain Measurements <i>J. Betz, S. Mankad, J. Warmsbecker</i>
3:30 PM	Refreshment Break
3:45 PM	3D Crop and Measure <i>E. Kruse, R. Lang, M. Yamat</i>
4:45 PM	Case Studies: Unknown Cases <i>All Faculty</i>
6:00 PM	Adjourn

SATURDAY, FEBRUARY 18, 2023

LEARNING LAB: DAY 2 (additional fee required)

7:00 AM	Registration, Breakfast, and Visit Exhibits
7:30 AM	Aortic Stenosis, Measurements for Native and Prosthetic Valves <i>J. Betz, S. Mankad, J. Warmsbecker</i>
8:30 AM	Aortic Regurgitation: Practical Measurements <i>E. Kruse, R. Lang, M. Yamat</i>
9:00 AM	Mitral Regurgitation, TAVR, Quantification <i>C. Bergeron, M. Christensen, W. Zoghbi</i>
10:00 AM	Tricuspid Regurgitation, Edge to Edge Repair, Quantification <i>D. Ignatowski, B. Khandheria, M. Umland</i>
10:30 AM	Refreshment Break and Visit Exhibits
10:45 AM	Mitral Stenosis Measurements <i>E. Kruse, R. Lang, M. Yamat</i>
11:15 AM	Measurements for TAVR, TMVR, Mitraclip, and Left Atrial Appendage Occluder <i>D. Ignatowski, A. Kaminski, B. Khandheria</i>
12:00 PM	Lunch and Visit Exhibits

1:00 PM	Hypertrophic Cardiomyopathy, Left Ventricular Noncompaction, Amyloid, and Infiltrative Diseases <i>J. Betz, S. Mankad, J. Warmsbecker</i>
2:00 PM	Case Studies in Valvular Disease and Myocardial Disease <i>All Faculty</i>
3:00 PM	Refreshment Break and Visit Exhibits

MAIN CONFERENCE

NEW TECHNOLOGY & CORONARY ARTERY DISEASE

Chairs: *S. Mankad, W. Zoghbi*

4:00 PM	Welcome and Course Introduction <i>S. Mankad, W. Zoghbi</i>
4:15 PM	Presidential Address: State of ASE <i>S. Little</i>
4:30 PM	Artificial Intelligence and Echocardiography: Impact on Sonographers and Echocardiographers <i>S. Lester</i>
4:45 PM	Quantitation of Ventricular Function: How to Complement 2D with 3D in Your Laboratory <i>R. Lang</i>
5:00 PM	Contrast Echocardiography: Impact on Diagnosis and Outcome <i>J. Oh</i>
5:15 PM	Complications of Myocardial Infarction, Right Ventricle, Myocardial Rupture, and Pap Muscle Rupture <i>R. Jain</i>
5:30 PM	Stress Echocardiography Is Still Alive: Caveats for Improved Accuracy <i>W. Zoghbi</i>
5:45 PM	Question and Answer <i>All Presenters</i>
6:00 PM	Adjourn

SUNDAY, FEBRUARY 19, 2023

STRUCTURAL HEART DISEASE: PART I

Chairs: *R. Jain, M. Yamat*

7:00 AM	Registration, Breakfast, and Visit Exhibits
8:00 AM	Cases to Illustrate When Aortic Stenosis Gradient and Area Do Not Match: What Should I Do? <i>M. Saric</i>
8:15 AM	What Should a Successful TAVR Look Like for Echocardiographers <i>R. Jain</i>
8:30 AM	Examples of TAVR Complications Seen by Echocardiographers <i>S. Mankad</i>
8:45 AM	Degenerated Bioprosthesis Valve-in-Valve: What Echocardiographers Should Look For <i>N. Faza</i>
9:00 AM	Question and Answer <i>All Presenters</i>

STRUCTURAL HEART DISEASE: PART II

Chairs: A. Kaminski, W. Zoghbi

9:15 AM	Mitral Regurgitation, Etiology, and Quantification <i>W. Zoghbi</i>
9:30 AM	Mitral Clip Measurements: It Worked and It Did Not Work <i>N. Faza</i>
9:45 AM	Measurements for TMVR, Sapiens in Degenerated Mitral Valve <i>M. Saric</i>
10:00 AM	Pathologies of Mitral Valve: Rheumatic, Eosinophilia, Degenerative <i>S. Mankad</i>
10:15 AM	Question and Answer <i>All Presenters</i>
10:30 AM	Refreshment Break and Visit Exhibits

STRUCTURAL HEART DISEASE: PART III

Chairs: N. Faza, J. Warmsbecker

11:00 AM	Pathologies of Tricuspid Valve (Carcinoid, Flail, Vegetation) <i>S. Mankad</i>
11:15 AM	Tricuspid Valve Repair: The New Frontier <i>N. Faza</i>
11:30 AM	Left Atrial Appendage Occluder Device, Measurement <i>M. Saric</i>
11:45 AM	Measuring Normal Function of Prosthetic Valves <i>W. Zoghbi</i>
12:00 PM	Prosthetic Valve Endocarditis <i>B. Khandheria</i>
12:15 PM	Question and Answer <i>All Presenters</i>
12:30 PM	Lunch and Visit Exhibits

AORTIC REGURGITATION

Chairs: G. Mackensen, M. Umland

1:30 PM	Aortic Regurgitation Illustrative Cases: What Is The Mechanism? <i>M. Malahfji</i>
1:45 PM	Echo: Pathologic Correlation in Aortic Valve Disease, View from Anesthesia <i>G. Mackensen</i>
2:00 PM	Case Examples of Quadricuspid, Bicuspid, Unicuspid Aortic Valve <i>M. Umland</i>
2:15 PM	Question and Answer <i>All Presenters</i>

DIASTOLOGY

Chairs: C. Bergeron, J. Oh

2:30 PM	Learn Clinical Diastology with Cases <i>J. Oh</i>
2:45 PM	When It Does Not Fit: Examples in Clinical Practice <i>S. Lester</i>
3:00 PM	Amyloid and Constriction <i>J. Oh</i>
3:15 PM	Question and Answer <i>All Presenters</i>
3:30 PM	Refreshment Break and Visit Exhibits

CARDIOMYOPATHY

Chairs: J. Betz, S. Lester

4:00 PM	Cases: Variants of Hypertrophic Cardiomyopathy <i>J. Oh</i>
4:15 PM	Stress Cardiomyopathy: Variants as Seen on Echo <i>M. Malahfji</i>
4:30 PM	Systemic Illness and the Heart (Eosinophilia, Hemochromatosis, Hyperoxalosis) <i>S. Lester</i>
4:45 PM	Rapid Fire Cases: Pickelhaube, Duchenne, Pericardial Fat, Pericardial Effusion, Contrast Enhanced Imaging <i>N. Faza, B. Khandheria, S. Mankad</i>
5:15 PM	Question and Answer <i>All Presenters</i>
5:30 PM	Adjourn

MONDAY, FEBRUARY 20, 2023

RIGHT HEART, PULMONARY HYPERTENSION

Chairs: E. Kruse, M. Mukherjee

7:00 AM	Registration, Breakfast, and Visit Exhibits
8:00 AM	Evaluation of Right Ventricle: Learn by Cases <i>R. Lang</i>
8:15 AM	Pulmonary Hypertension: Optimal Evaluation <i>M. Mukherjee</i>
8:30 AM	Right Ventricular Strain: Cases to Illustrate How <i>S. Lester</i>
8:45 AM	Question and Answer <i>All Presenters</i>

MYOCARDIAL MECHANICS

Chairs: D. Ignatowski, S. Mankad

9:00 AM	Basic Myocardial Strain Imaging <i>B. Khandheria</i>
9:15 AM	Clinical Examples of Utility of Global Longitudinal Strain <i>S. Mankad</i>
9:30 AM	Where Strain Falls Apart <i>S. Lester</i>
9:45 AM	Question and Answer <i>All Presenters</i>
10:00 AM	Refreshment Break and Visit Exhibits

LEFT ATRIAL STRAIN

Chairs: C. Bergeron, B. Khandheria

10:30 AM	Left Atrial Strain: How to Obtain This <i>J. Oh</i>
10:45 AM	Utility of Left Atrial Strain: Case Examples <i>M. Mukherjee</i>
11:00 AM	Left Atrial Volume Should Replace Left Atrial Size: Examples of Why <i>R. Lang</i>
11:15 AM	Question and Answer <i>All Presenters</i>

Schedule of Events

MISCELLANEOUS TOPICS: PART I

Chairs: *M. Malahfji, M. Umland*

11:30 AM	Cardio Oncology: Case Examples <i>M. Malahfji</i>
11:45 AM	Diabetes and the Heart <i>R. Jain</i>
12:00 PM	Cases: Hypertension and Echocardiography <i>M. Umland</i>
12:15 PM	Question and Answer <i>All Presenters</i>
12:30 PM	Lunch and Final Chance to Visit Exhibits

MISCELLANEOUS TOPICS: PART II

Chairs: *M. Christensen, M. Saric*

1:30 PM	Emboic Events and the Heart <i>M. Saric</i>
1:45 PM	Masses in the Left Heart <i>C. Bergeron</i>
2:00 PM	Masses in the Right Heart <i>R. Jain</i>
2:15 PM	Normal and Abnormal Left Ventricular Assist Device Cases <i>M. Christensen</i>

2:30 PM	Question and Answer <i>All Presenters</i>
2:45 PM	Refreshment Break
3:00 PM	Atrial Septal Defect: Secundum, Sinus Venosus, Anomalous Pulmonary Veins <i>M. Saric</i>
3:15 PM	Abnormal Prosthetic Valve in Mitral Position <i>J. Betz</i>
3:30 PM	Abnormal Prosthetic Valve in Aortic Position <i>M. Malahfji</i>
3:45 PM	Fusion Imaging <i>R. Jain</i>
4:00 PM	Pulmonary Embolism and Right Ventricular Strain <i>M. Mukherjee</i>
4:15 PM	Patent Foramen Ovale and Pulmonary Arteriovenous Shunting: Saline Contrast Diagnosis and Nuances <i>M. Malahfji</i>
4:30 PM	Question and Answer <i>All Presenters</i>
4:45 PM	Closing Remarks <i>S. Mankad, W. Zoghbi</i>
5:00 PM	Adjourn



Register Online at ASEcho.org/SOTA

35th Annual State-of-the-Art Echocardiography™

February 18–20, 2023 *Optional Preconference Learning Lab: February 17–18, 2023*

The Westin Kierland Resort & Spa, Scottsdale, AZ

Your State-of-the-Art Echocardiography registration fee includes breakfast, breaks, lunch, and CME/MOC credit.

Name: _____

Credential: MD DO PhD RN RCS RDCS Other

Institution: _____

Email Address: _____
(ALL CORRESPONDENCE REGARDING YOUR REGISTRATION INCLUDING YOUR CONFIRMATION WILL BE SENT TO THIS EMAIL ADDRESS.)

Street Address: _____

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

Telephone: _____ Fax: _____

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

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

Optional Preconference Learning Lab Fee			
Attendees must register for this workshop in advance in order to attend due to limited seating available.			
Learning Lab: February 17–18, 2023			\$825
Registration Fees	THROUGH JANUARY 17, 2023	AFTER JANUARY 17, 2023	ON-SITE (STARTING FEBRUARY 17, 2023)
ASE Physician Member	\$1,030	\$1,130	\$1,255
Physician Nonmember	\$1,405	\$1,505	\$1,630
ASE Sonographer/Allied Health Member	\$760	\$860	\$985
Sonographer/Allied Health Nonmember	\$960	\$1,060	\$1,185
Fellow Member	\$760	\$860	\$985
Fellow Nonmember	\$960	\$1,060	\$1,185

Code of Conduct and COVID-19 Statement

ASE is committed to providing a safe, productive, and welcoming environment for everyone attending State-of-the-Art Echocardiography and as such has created the Code of Conduct Policy. Also for the State-of-the-Art Echocardiography course, ASE has developed a COVID-19 Statement, in partnership with Westin Kierland and based on Centers for Disease and Control (CDC) guidance, outlining safety procedures that will be in place during this conference. Please take a moment to review this information online at: [ASEcho.org/live-course-statement](https://www.asecho.org/live-course-statement) and check the box below to finalize your registration.

I have reviewed and agree to ASE's Code of Conduct and COVID-19 Statement.

Payment Information

 Payment must accompany this form.

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

Credit Card: Visa MasterCard American Express

Cardholder's Name: _____

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

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

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

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

Phone: 919-861-5574 • Fax: 919-882-9900 • Email: Registrar@ASEcho.org • Website: ASEcho.org/SOTA



ASE Foundation

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

State-of-the-Art ECHOCARDIOGRAPHY™

The Westin Kierland Resort & Spa
Scottsdale, AZ

February 18– 20, 2023

*Optional Preconference Learning Lab Session
February 17–18, 2023*



Course Director

William A. Zoghbi, MD, FASE
Past President, ASE
Houston Methodist Hospital
Houston, TX



Course Co-Director

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

Register now at ASEcho.org/SOTA