

ECHO HAWAII™

32nd ANNUAL



ADVANCE PROGRAM

January 16–20, 2023

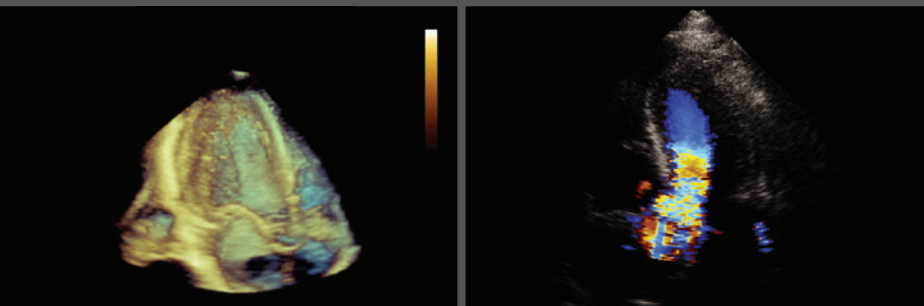
The Westin Hapuna Beach Resort
Kohala Coast, Big Island, HI

Course Director

James D. Thomas, MD, FASE
Past President, ASE
Northwestern Medicine
Chicago, IL

Co-Director

Jonathan R. Lindner, MD, FASE
Past President, ASE
University of Virginia Medical Center
Charlottesville, VA



Register Online at ASEcho.org/EchoHawaii



Jointly provided by ASE and the ASE Foundation, and held in cooperation with the Canadian Society of Echocardiography.

Program Information

Overview of Echo Hawaii

Echo Hawaii is one of ASE's premier educational programs. Attendees receive in-depth, case-based learning on established and emerging cardiovascular ultrasound technologies in a beautiful and relaxed environment. Particular focus is placed on the application of advanced cardiovascular imaging technologies in the clinical setting. The program is structured to allow attendees to closely interact on a personal level with internationally recognized leaders in echocardiography, including special sessions on clinical dilemmas and technology-based workshops.

Program content includes state-of-the-art methods for evaluating ventricular systolic and diastolic function, valve function, pericardial disease, ischemic heart disease, critical care echo, and use of TEE. Content also includes cutting edge information on the assessment and guidance of cardiac devices, integration of echo in patients with cardiomyopathies, contrast ultrasound for cavity opacification and perfusion, strain echocardiography, and 3D imaging.

Learning Objectives

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

- Integrate echocardiographic information in clinical decision making.
- Assess ventricular and valvular function using Doppler hemodynamics.
- Describe Doppler assessment of diastolic function/dysfunction.
- Explain new advances in the echocardiographic assessment of left and right ventricular function.
- Integrate echocardiographic assessment of cardiomyopathies and systemic diseases in patient management.
- Define clinical uses of TEE and 3D echocardiography.
- Recognize how echocardiography is used to help manage patients with ischemic heart disease.
- Recognize the role of echo contrast and be able to incorporate its use in the echo laboratory.
- Integrate echo information in the management of complex valvular heart disease.
- Explain the role of echocardiography in the perioperative and critical care environment.
- Explain the principles of artificial intelligence and how they are being applied to echocardiography.

“I had a wonderful experience at Echo Hawaii. All the speakers were excellent. The lectures were great and relevant to my day to day to practice.” *2022 Echo Hawaii Attendee*

Who Should Attend

This course is designed for adult cardiologists, critical care specialists, cardiovascular surgeons, cardiovascular anesthesiologists, fellows in training, cardiovascular sonographers, internists, and intensive care specialists with a special interest in echocardiography.

Course Registration

Registration fees include breakfasts, refreshment breaks, welcome reception, poster reception, and CME/MOC credit. ASE members may take advantage of reduced registration fees as a benefit of membership. Register online at ASEcho.org/EchoHawaii.

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 **32.0 AMA PRA Category 1 Credits™**. To claim all 32.0 CME credits, you must attend all afternoon workshops and the Original Science in the Sun Poster Reception.

In addition to offering CME credits, this activity has been developed and registered with ACCME to provide MOC, MOC Part 2, 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 32.0 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 program is not yet approved for AAPA CME credits. ASE plans to apply for 32.0 AAPA Category 1 CME credits from the AAPA Review Panel. The total number of approved credits is yet to be determined.



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®.

Kohala Coast, Big Island

The sun-drenched Kohala Coast only receives about nine inches of rain a year. The average high temperature in January is 81 degrees Fahrenheit which is a full 10 degrees warmer than most other Hawaiian islands at this time of year. This pretty much guarantees perfect weather during your time at ASE's Echo Hawaii. The Kohala Coast is known for its world-class shoreline, as well as for cultural and archaeological gems nestled between centuries-old lava fields. This location offers everything you desire like dependable sunshine, superb sandy beaches, warm turquoise fish-filled waters, swaying coconut palms, and pristine rain forests. A few Big Island attractions include Volcanoes National Park, Parker Ranch, Mauna Kea Observatory, Waipio Valley, Akaka Falls, and Hapuna Beach State Park. So, be prepared to unplug, unwind, and explore the land and sea with family and friends.

Accommodations and Lodging

Nestled amidst the bluffs above the white sands of the sunny Kohala Coast on the Big Island, The Westin Hapuna Beach Resort is the location of the Echo Hawaii course. The resort's contemporary style contrasts with lush, manicured gardens and the endless blues of the sky and the ocean. Four dining venues are inspired by the island's bounty. The award-winning 18-hole Hapuna Golf Course was designed by Arnold Palmer. Two swimming pools, a 6,800-square-foot freeform family pool and an adult-exclusive infinity pool, overlook Hapuna Beach. A Westin Workout Center and Crossfit Studio are complemented by the Hapuna Spa for rejuvenation and relaxation.

ASE has secured discounted rates and a block of rooms at the Westin Hapuna Beach Resort and sister property Mauna Kea Beach Hotel. Both hotels are in Kamuela and are located approximately 30 minutes from the Kona International Airport. These upscale golf resort hotels are 11 miles from downtown Waimea and 13 miles from Lapakahi State Historical Park. Airy rooms come with ocean views, balconies, and free WiFi, as well as minifridges and coffeemakers. ASE attendees also receive free access to the fitness center and discounts on greens fees at the two resort golf courses. For more information on booking your hotel, please visit ASEcho.org/EchoHawaii/Accommodations.

The hotel room blocks are scheduled to be held until Monday, December 24, 2022, but may be sold out before this date. Therefore, we advise registering for the program and reserving your hotel room as soon as possible. Please be sure to ask about any additional hotel fees, early departure fees, or cancellation penalties. Check-in time is 3:00 PM.

Poster Presentations

You are invited to submit your abstract of original basic or clinical research to be considered for poster presentation. On Wednesday evening, January 18, 2023, posters will be displayed during a beautiful sunset reception, and members of the faculty will review your work. This allows you an opportunity to briefly present the key findings of your work to both faculty and attendees. Abstract submission will open Thursday, September 1, 2022, and close Wednesday, November 16, 2022. Accepted abstract presenters will receive a \$100 discount on their registration. Visit ASEcho.org/EchoHawaii/Call-for-Abstracts for more details.



Course Director



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Jonathan R. Lindner, MD, FASE
Past President, ASE
University of Virginia Medical Center
Charlottesville, VA

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Prince Charles Hospital
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Wendy Tsang, MD
University of Toronto
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SUNDAY, JANUARY 15, 2023

4:00 – 6:00 PM **Registration**

MONDAY, JANUARY 16, 2023

6:30 AM **Registration, Breakfast, and Visit Exhibits**

Moderator: J. Thomas

7:00 AM **Welcome and Course Orientation**
J. Lindner, J. Thomas

7:20 AM **Welcome from ASE President**
S. Little

7:30 AM **Physiology of Systole: What Are We Really Trying to Measure?**
J. Lindner

7:45 AM **Assessment of Systolic Function: When to Use Contrast or 3D?**
S. Mulvagh

8:00 AM **Introduction to Strain Imaging: How Does Global Longitudinal Strain Add to Ejection Fraction?**
S. De

8:15 AM **When Do We Need Contrast? How Can It Be Implemented?**
V. Rigolin

8:30 AM **A Primer on Adult Congenital Echoes: Fear Not!**
A. de Freitas

8:45 AM **Cases in Systolic Function: Assessing the Subtleties**
Moderator: J. Thomas
S. De, A. de Freitas, J. Lindner, S. Mulvagh, V. Rigolin

9:00 AM **Question & Answer Using the App**
Moderator: J. Thomas
S. De, A. de Freitas, J. Lindner, S. Mulvagh, V. Rigolin

9:15 AM **Refreshment Break and Visit Exhibits**

9:30 AM **Physiology of Diastole: What Are We Trying to Measure?**
G. Scalia

9:45 AM **Diastolic Guidelines: Are They Helpful?**
A. DeMaria

10:00 AM **Assessing the Right Ventricle: Role of Strain and 3D**
M. Saric

10:15 AM **Evolving Role of Echo in Bedside Critical Care: COVID and Beyond**
S. McCartney

10:30 AM **Strain in the Assessment of Cardiomyopathies**
J. Oh

10:45 AM **The Future of Echocardiography: Artificial Intelligence and Machine Learning**
J. Thomas

11:00 AM **My Biggest Mistakes: Lessons Learned**
L. Gillam

11:15 AM **Puzzling Cases in Cardiac Function: Read with the Experts**
Moderator: J. Thomas
A. DeMaria, L. Gillam, S. McCartney, J. Oh, M. Saric, G. Scalia

Schedule of Events



11:30 AM	Question & Answer Using the App <i>Moderator: J. Thomas</i> <i>A. DeMaria, L. Gillam, S. McCartney, J. Oh, M. Saric, G. Scalia</i>
4:30 – 6:30 PM	Workshop in Echo Quantitation: Practical Approaches to Use in Your Lab <i>Moderator: J. Oh</i> <i>W. Armstrong, J. Hodovan, M. Jankowski, T. Ryan, W. Tsang</i>
6:30 – 7:30 PM	Welcome Reception

TUESDAY, JANUARY 17, 2023

6:30 AM	Registration, Breakfast, and Visit Exhibits <i>Moderator: J. Lindner</i>
7:00 AM	A Potpourri of Fascinating Cases to Learn From <i>Moderator: T. Ryan</i> <i>J. Lindner, S. McCartney, J. Oh</i>
8:00 AM	Stress Echo: Improving Your Batting Average with Contrast and Other Tips <i>T. Ryan</i>
8:15 AM	Chest Pain in the Emergency Room: Which Test for Which Patient? <i>J. Lindner</i>
8:30 AM	Complications of Myocardial Infarction: Echo has the Answer! <i>S. McCartney</i>
8:45 AM	The Future of Echocardiography: Advanced Applications of Contrast: Perfusion and Therapeutics <i>J. Lindner</i>
9:00 AM	Strategies to Make Your Lab Excellent <i>M. Jankowski</i>
9:15 AM	Cases in Coronary Artery Disease: Tips from the Experts <i>Moderator: J. Lindner</i> <i>M. Jankowski, S. McCartney, T. Ryan</i>
9:30 AM	Question & Answer Using the App <i>Moderator: J. Lindner</i> <i>M. Jankowski, S. McCartney, T. Ryan</i>
9:45 AM	Refreshment Break and Visit Exhibits
10:00 AM	Assessment of Atrial Function: What is the Role of Strain? <i>G. Scalia</i>
10:15 AM	Echo to Phenotype and Guide Therapy of HFpEF: Role of Diastolic Stress Testing <i>J. Oh</i>
10:30 AM	Top Five Situations Where I Find Strain is Helpful <i>V. Rigolin</i>
10:45 AM	Septal Defects You Do Not Want to Close <i>A. de Freitas</i>
10:55 AM	Valvular Heart Disease: A Decade of Progress <i>L. Gillam</i>

11:10 AM	Cases You'll Never Forget <i>Moderator: G. Scalia</i> <i>A. de Freitas, L. Gillam, J. Oh, V. Rigolin</i>
11:30 AM	Question & Answer Using the App <i>Moderator: G. Scalia</i> <i>A. de Freitas, L. Gillam, J. Oh, V. Rigolin</i>
4:00 – 6:30 PM	Contrast Workshop: Yes, You Can Do Myocardial Perfusion <i>Moderator: J. Lindner</i> <i>A. DeMaria, J. Hodovan, M. Jankowski, S. Mulvagh</i>

WEDNESDAY, JANUARY 18, 2023

6:30 AM	Registration, Breakfast, and Visit Exhibits <i>Moderator: M. Saric</i>
7:00 AM	A Potpourri of Fascinating Cases to Learn From <i>Moderator: M. Saric</i> <i>W. Armstrong, A. DeMaria, S. Little</i>
8:00 AM	Quantification of Stenosis: Avoid These Pitfalls <i>W. Armstrong</i>
8:15 AM	TAVR 2022: Who Should Get it? Who Still Needs Surgery? <i>M. Saric</i>
8:30 AM	Valvular Regurgitation: How Can We Be More Accurate? <i>A. DeMaria</i>
8:45 AM	Starting an Interventional Echo Program: Training, Technique, and Economics <i>S. Little</i>
9:00 AM	3D Assessment of The Cardiac Valves: Learn the Views and the Anatomy <i>G. Scalia</i>
9:15 AM	Sitting in With the Heart Valve Team: Cases to Learn From <i>Moderator: M. Saric</i> <i>W. Armstrong, A. DeMaria, S. Little, G. Scalia</i>
9:30 AM	Question & Answer Using the App <i>Moderator: M. Saric</i> <i>W. Armstrong, A. DeMaria, S. Little, G. Scalia</i>
9:45 AM	Refreshment Break and Visit Exhibits
10:00 AM	Interventions for MR in Heart Failure: Fifty Years of Progress <i>G. Scalia</i>
10:15 AM	MitraClip: Who Is It For? How Is It Guided? <i>M. Saric</i>
10:30 AM	Crazy Things in the Cath Lab: Plugs, Valve in Valve, Occluders <i>W. Tsang</i>
10:45 AM	The Future of Echocardiography: The Brave New World of Percutaneous Treatment of the Tricuspid Valve <i>S. Little</i>

Schedule of Events

11:00 AM	Eisenmenger's Echo in The Middle of The Night: The Basics <i>A. de Freitas</i>
11:10 AM	Sitting in with the Heart Valve Team: Mitral and Tricuspid Cases <i>Moderator: M. Saric</i> <i>A. de Freitas, S. Little, W. Tsang</i>
11:30 AM	Question & Answer Using the App <i>Moderator: M. Saric</i> <i>A. de Freitas, S. Little, W. Tsang</i>

4:00 – 5:00 PM	Tricks and Tips for 3D Visualization: A Practical Approach to Use in Your Lab <i>Moderator: V. Rigolin</i> <i>J. Hodovan, M. Jankowski, S. Little, S. McCartney</i>
5:00 – 6:00 PM	Poster Presentations: Original Science in The Sun <i>All Faculty</i>

THURSDAY, JANUARY 19, 2023

6:30 AM	Registration, Breakfast, and Visit Exhibits <i>Moderator: L. Gillam</i>
7:00 AM	A Potpourri of Fascinating Cases to Learn From <i>Moderator: J. Thomas</i> <i>L. Gillam, S. Mulvagh, T. Ryan</i>
8:00 AM	A Systematic Approach to Multi-Valve Disease <i>J. Thomas</i>
8:15 AM	A Practical Approach to Prosthetic Valves <i>S. McCartney</i>
8:30 AM	Exercise Echo and Strain to Time Intervention in Valvular Heart Disease <i>V. Rigolin</i>
8:45 AM	Use of Echo to Manage Endocarditis <i>T. Ryan</i>
9:00 AM	Improving Source of Embolus Exams: The Science of Saline Contrast <i>W. Armstrong</i>
9:15 AM	Sitting in with the Heart Valve Team: One Last Hurrah <i>Moderator: L. Gillam</i> <i>S. McCartney, V. Rigolin, T. Ryan, J. Thomas</i>
9:30 AM	Question & Answer Using the App <i>Moderator: L. Gillam</i> <i>S. McCartney, V. Rigolin, T. Ryan, J. Thomas</i>
9:45 AM	Refreshment Break and Visit Exhibits
10:00 AM	My Top 5 Points to Remember from the Guidelines <i>W. Tsang</i>
10:15 AM	TEE in Emergent Situations <i>S. McCartney</i>
10:30 AM	Athlete's Heart: How to Separate Abnormal from Supraphysiologic <i>L. Gillam</i>
10:45 AM	Use of Echo in Pulmonary Hypertension <i>G. Scalia</i>
11:00 AM	Handheld Echo: How Far Can it Go <i>S. Mulvagh</i>

11:15 AM	Puzzling Cases to Learn From: Read with the Experts <i>Moderator: L. Gillam</i> <i>S. McCartney, S. Mulvagh, G. Scalia, W. Tsang</i>
11:30 AM	Question & Answer Using the App <i>Moderator: L. Gillam</i> <i>S. McCartney, S. Mulvagh, G. Scalia, W. Tsang</i>
4:00 – 6:00 PM	Strain from A to Z: Technique, Analysis, and Application <i>Moderator: J. Thomas</i> <i>S. De, J. Hodovan, M. Jankowski, G. Scalia</i>

FRIDAY, JANUARY 20, 2023

6:30 AM	Registration, Breakfast, and Visit Exhibits <i>Moderator: J. Oh</i>
7:00 AM	A Potpourri of Fascinating Cases to Learn From <i>Moderator: V. Rigolin</i> <i>S. De, A. de Freitas, J. Humphries</i>
8:00 AM	Cardio-Oncology: An Integrative Approach <i>L. Gillam</i>
8:15 AM	Multimodality Assessment of Cardiac Masses <i>V. Rigolin</i>
8:30 AM	Amyloidosis: Diagnosis and (Finally) Treatment <i>G. Scalia</i>
8:45 AM	Diseases of the Aorta: How to Deal with Different Multi-Modality Measurements <i>J. Humphries</i>
9:00 AM	Puzzling Cases to Learn From: Read with the Experts <i>Moderator: J. Oh</i> <i>L. Gillam, J. Humphries, V. Rigolin, G. Scalia</i>
9:15 AM	Question & Answer Using the App <i>Moderator: J. Oh</i> <i>L. Gillam, J. Humphries, V. Rigolin, G. Scalia</i>
9:00 AM	Refreshment Break and Visit Exhibits
9:45 AM	Extracorporeal Membrane Oxygenation, Ventricular Assist Device and Transplant: How is Echo Used? <i>S. De</i>
10:00 AM	Carcinoid and Other Valvulopathies <i>W. Tsang</i>
10:15 AM	Pericardial Disease: Never Miss Constriction Again <i>J. Oh</i>
10:30 AM	Think Quick: Make the Diagnosis with Just One Clip <i>W. Armstrong</i>
10:45 AM	Single Ventricle Echo in the Middle of the Night: The Basics <i>A. de Freitas</i>
10:55 AM	Question & Answer Using the App <i>Moderator: J. Oh</i> <i>W. Armstrong, S. De, A. de Freitas, W. Tsang</i>
11:15 AM	Mai Tai Finale and Aloha Until 2024 <i>J. Lindner, J. Thomas</i>

Your Echo Hawaii registration fee includes breakfasts, refreshment breaks, welcome reception, poster reception, and 34.5 CME credits and MOC and/or MOCA points.

Name: _____

FIRST NAME

MIDDLE INITIAL

LAST NAME

Credential: MD DO PhD RN RCS RDCS Other

Institution: _____

Email Address: _____

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

Street Address: _____

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

Telephone: _____ Fax: _____

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

Registration Fees	THROUGH DECEMBER 16, 2022	DECEMBER 17, 2022 TO JANUARY 14, 2023	ON-SITE (JANUARY 16, 2023)
ASE/CSE Physician Member	\$995	\$1,095	\$1,220
Physician Nonmember	\$1,390	\$1,490	\$1,615
ASE/CSE Sonographer Member	\$835	\$935	\$1,060
Sonographer Nonmember	\$1,020	\$1,120	\$1,245
ASE/CSE Fellows in Training Member	\$705	\$805	\$930
Fellows in Training Nonmember	\$835	\$935	\$1,060

IMPORTANT NOTE FOR ABSTRACT PRESENTERS: If you are submitting an abstract for Echo Hawaii 2023 and wish to receive the discounted rate for abstract presenters (\$100 off the posted rates), please do not register prior to receiving an acceptance notification on November 16, 2022. No refunds will be given for registrations made prior to notification. Visit ASEcho.org/EchoHawaii for details.

Members of the Canadian Society of Echocardiography are eligible to register at the ASE Member rate.

Code of Conduct and COVID-19 Statement

ASE is committed to providing a safe, productive, and welcoming environment for everyone attending Echo Hawaii and as such has created the Code of Conduct Policy. ASE has also developed a COVID-19 Statement 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 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/EchoHawaii.