

American Society of Echocardiography

# ASE2022

H Y B R I D

## SOUND WAVES IN SEATTLE: CONNECTING THE WORLD

June 10-13,  
2022  
Seattle, WA

33<sup>rd</sup> Annual Scientific Sessions  
Seattle Convention Center

#ASE2022 • [ASEScientificSessions.org](https://www.asescientificsessions.org)

## FINAL PROGRAM



# DEFINITY<sup>®</sup>

VIAL  
FOR (Perflutren Lipid Microsphere)  
INJECTABLE SUSPENSION

## INDICATIONS

Activated DEFINITY<sup>®</sup> (Perflutren Lipid Microsphere) Injectable Suspension is indicated for use in patients with suboptimal echocardiograms to opacify the left ventricular chamber and to improve the delineation of the left ventricular endocardial border.

## CONTRAINDICATIONS

Do not administer DEFINITY<sup>®</sup> to patients with known or suspected hypersensitivity to perflutren lipid microsphere or its components, such as polyethylene glycol (PEG).

## IMPORTANT SAFETY INFORMATION

### WARNING: SERIOUS CARDIOPULMONARY REACTIONS

Serious cardiopulmonary reactions, including fatalities, have occurred uncommonly during or following perflutren-containing microsphere administration [see *Warnings and Precautions* (5.1)]. Most serious reactions occur within 30 minutes of administration.

- Assess all patients for the presence of any condition that precludes DEFINITY<sup>®</sup> administration [see *Contraindications* (4)].
- Always have resuscitation equipment and trained personnel readily available.

In postmarketing use, rare but serious cardiopulmonary or hypersensitivity reactions have been reported during or shortly following perflutren and PEG-containing microsphere administration [see *Adverse Reactions* (6)]. The risk for these reactions may be increased among patients with unstable cardiopulmonary conditions and/or with pre-existing PEG hypersensitivity [see *Adverse Reactions* (6.2)]. It is not always possible to reliably establish a causal relationship to drug exposure due to the presence of underlying conditions.

Please see brief summary of Prescribing Information, including boxed **WARNING** on subsequent pages.

Please see full Prescribing Information at [www.DEFINITYimaging.com](http://www.DEFINITYimaging.com)

IN THE US

4 out of 5

contrast-enhanced  
echoes are performed  
with DEFINITY<sup>®</sup><sup>3</sup>

INCLUDED IN OVER

2200

peer-reviewed  
publications<sup>4</sup>

MORE THAN

18 million

studies performed<sup>5</sup>

#### REFERENCES:

1. Kurt M et al. J Am Coll Cardiol. 2009;53(9):802-810. 2. Becher H, et al. Heidelberg, NY: Springer-Verlag; 2000:2-44 3. ©2021 Millennium Research Group, Inc. All rights reserved. Reproduction, distribution, transmission or publication is prohibited. Reprinted with permission. 4. Embase and Medline Search, May 2018 5. Data on file, Lantheus Medical Imaging, Inc.



# See in High DEF(INITY)<sup>TM</sup>

A clearer echo. A better treatment plan.

Your decisions have real-life consequences. High DEF(INITY)<sup>TM</sup>, high-resolution echocardiograms help answer clinical questions and improve patient management.<sup>1</sup>



DEFINITY<sup>®</sup> provides prolonged enhancement at a low dose so your patients get the accurate echoes and diagnoses they deserve.<sup>1,2</sup>





# DEFINITY<sup>®</sup>

VIAL  
FOR (Perflutren Lipid Microsphere)  
INJECTABLE SUSPENSION

FOR INTRAVENOUS USE

## BRIEF SUMMARY

Please see Full Prescribing Information available at [www.DEFINITYimaging.com](http://www.DEFINITYimaging.com) for additional information.

### WARNING: SERIOUS CARDIOPULMONARY REACTIONS

See full prescribing information for complete boxed warning

Serious cardiopulmonary reactions, including fatalities, have occurred uncommonly during or following perflutren-containing microsphere administration (5.1). Most serious reactions occur within 30 minutes of administration.

- Assess all patients for the presence of any condition that precludes DEFINITY administration (4).
- Always have resuscitation equipment and trained personnel readily available.

## INDICATIONS AND USAGE

Activated DEFINITY (Perflutren Lipid Microsphere) Injectable Suspension is indicated for use in patients with suboptimal echocardiograms to opacify the left ventricular chamber and to improve the delineation of the left ventricular endocardial border.

## DOSAGE AND ADMINISTRATION

### Important Administration Instructions

- DEFINITY is intended for administration only after activation in the VIALMIX or VIALMIX RFID apparatus. Before injection, this product must be activated and prepared according to the instructions outlined below. The VIALMIX or VIALMIX RFID apparatus should be ordered from Lantheus Medical Imaging, 331 Treble Cove Road, North Billerica, MA, 01862. For customer orders call 1-800-299-3431
- DEFINITY may be injected by either an intravenous (IV) bolus or infusion. Do not administer DEFINITY by intra-arterial injection [see Warnings and Precautions].
- The maximum dose is either two bolus doses or one single intravenous infusion. The safety of bolus and infusion dosing in combination or in sequence, has not been studied.

### Dosage

#### Bolus

The recommended bolus dose for activated DEFINITY is 10 microliters (microL)/kg of the activated product by intravenous bolus injection within 30 to 60 seconds, followed by a 10 mL saline flush. If necessary, a second 10 microliters (microL)/kg dose followed by a second 10 mL saline flush may be administered 30 minutes after the first injection to prolong contrast enhancement.

#### Infusion

The recommended infusion dose for activated DEFINITY is via an IV infusion of 1.3 mL added to 50 mL of preservative-free saline. The rate of infusion should be initiated at 4 mL/minute, but titrated as necessary to achieve optimal image enhancement, not to exceed 10 mL/minute.

## CONTRAINDICATIONS

Do not administer DEFINITY to patients with known or suspected:

- Hypersensitivity to perflutren lipid microsphere or its components, such as polyethylene glycol (PEG) [see Warnings and Precautions].

## WARNINGS AND PRECAUTIONS

### Serious Cardiopulmonary Reactions

Serious cardiopulmonary reactions including fatalities have occurred uncommonly during or shortly following perflutren-containing microsphere administration, typically within 30 minutes of administration. The risk for these reactions may be increased among patients with unstable cardiopulmonary conditions (acute myocardial infarction, acute coronary artery syndromes, worsening or unstable congestive heart failure, or serious ventricular arrhythmias). Always have cardiopulmonary resuscitation personnel and equipment readily available prior to DEFINITY administration and monitor all patients for acute reactions.

The reported reactions include: fatal cardiac or respiratory arrest, shock, syncope, symptomatic arrhythmias (atrial fibrillation, tachycardia, bradycardia, supraventricular tachycardia, ventricular fibrillation, ventricular tachycardia), hypertension, hypotension, dyspnea, hypoxia, chest pain, respiratory distress, stridor, wheezing, loss of consciousness, and convulsions. [see Adverse Reactions].

### Hypersensitivity Reactions

In postmarketing use, serious hypersensitivity reactions were observed during or shortly following perflutren-containing microsphere administration including:

Anaphylaxis, with manifestations that may include death, shock, bronchospasm, throat tightness, angioedema, edema (pharyngeal, palatal, mouth, peripheral, localized), swelling (face, eye, lip, tongue, upper airway), facial hypoesthesia, rash, urticaria, pruritus, flushing, and erythema.

These reactions have occurred in patients with no prior exposure to perflutren-containing microsphere products. DEFINITY contains PEG. There may be increased risk of serious reactions including death in patients with prior hypersensitivity reaction(s) to PEG [see Adverse Reactions (and Description)]. Clinically assess patients for prior hypersensitivity reactions to products containing PEG, such as certain colonoscopy bowel preparations and laxatives. Always have cardiopulmonary resuscitation personnel and equipment readily available prior to DEFINITY administration and monitor all patients for hypersensitivity reactions.

### Systemic Embolization

When administering DEFINITY to patients with a cardiac shunt, the microspheres can bypass filtering by the lung and enter the arterial circulation. Assess patients with shunts for embolic phenomena following DEFINITY administration. DEFINITY is only for intravenous administration; do not administer DEFINITY by intra-arterial injection [see Dosage and Administration].

### Ventricular Arrhythmia Related to High Mechanical Index

High ultrasound mechanical index values may cause microsphere cavitation or rupture and lead to ventricular arrhythmias. Additionally, end-systolic triggering with high mechanical indices has been reported to cause ventricular arrhythmias. DEFINITY is not recommended for use at mechanical indices greater than 0.8 [see Dosage and Administration].

## ADVERSE REACTIONS

The following serious adverse reactions are described elsewhere in the labeling:

- Serious Cardiopulmonary Reactions [see Warnings and Precautions]
- Hypersensitivity Reactions [see Warnings and Precautions]

### Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

A total of 1716 subjects were evaluated in pre-market clinical trials of activated DEFINITY. In this group, 1063 (61.9%) were male and 653 (38.1%) were female, 1328 (77.4%) were White, 258 (15.0%) were Black, 74 (4.3%) were Hispanic, and 56 (3.3%) were classified as other racial or ethnic groups. The mean age was 56.1 years (range 18 to 93). Of these, 144 (8.4%) had at least one adverse reaction (Table 1). There were 26 serious adverse events and 15 (0.9%) subjects discontinued because of an adverse event.

### Serious Adverse Reactions

Among the 1716 study patients, 19 (1.1%) suffered serious cardiopulmonary adverse reactions.

For all adverse reactions, the overall incidence of adverse experiences was similar for the <65 year age group and the > 65 year age group, similar in males and in females, similar among all racial or ethnic groups, and similar for bolus and infusion dosing. Table 1 summarizes the most common adverse reactions.

**Table 1 New-Onset Adverse Reactions Occurring in ≥0.5% of All DEFINITY-Treated Subjects**

	DEFINITY (N=1716)	
Total Number of Adverse Reactions	269	
Total Number of Subjects with an Adverse Reaction	144	(8.4%)
Body system		
Preferred term	n	(%)
Application Site Disorders	11	(0.6)
Injection Site Reactions	11	(0.6)
Body as a Whole	41	(2.4)
Back/renal pain	20	(1.2)
Chest pain	13	(0.8)
Central and peripheral nervous system disorder	54	(3.1)
Headache	40	(2.3)
Dizziness	11	(0.6)
Gastrointestinal system	31	(1.8)
Nausea	17	(1.0)
Vascular (extracardiac) disorders	19	(1.1)
Flushing	19	(1.1)

N=Sample size 1716 subjects who received activated DEFINITY

n=Number of subjects reporting at least one Adverse Reaction

Other adverse reactions that occurred in ≤0.5% of the activated DEFINITY-dosed subjects were:

**Body as a Whole:** Fatigue, fever, hot flushes, pain, rigors, and syncope

**Cardiovascular:** Abnormal ECGs, bradycardia, tachycardia, palpitation, hypertension and hypotension

**Digestive:** Dyspepsia, dry mouth, tongue disorder, toothache, abdominal pain, diarrhea and vomiting

**Hematology:** Granulocytosis, leukocytosis, leukopenia, and eosinophilia

**Musculoskeletal:** Arthralgia

**Nervous System:** Leg cramps, hypertonia, vertigo and paresthesia

**Platelet, Bleeding, and Clotting:** Hematoma

**Respiratory:** Coughing, hypoxia, pharyngitis, rhinitis and dyspnea

**Special Senses:** Decreased hearing, conjunctivitis, abnormal vision and taste perversion

**Skin:** Pruritus, rash, erythematous rash, urticaria, increased sweating, and dry skin

**Urinary:** Albuminuria

### Postmarketing Experience

In a prospective, multicenter, open-label registry of 1053 patients receiving DEFINITY in routine clinical practice, heart rate, respiratory rate, and pulse oximetry were monitored for 30 minutes after DEFINITY administration. No deaths or serious adverse reactions were reported, suggesting that these reactions are unlikely to occur at a rate of more than 0.3% when DEFINITY is used according to recommendations.

The following adverse reactions have been identified during the post-marketing use of perflutren and PEG-containing microsphere products. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

Fatal cardiopulmonary and hypersensitivity reactions and other serious but non-fatal adverse reactions were uncommonly reported. These reactions typically occurred within 30 minutes of DEFINITY administration. These serious reactions may be increased among patients with pre-existing PEG hypersensitivity and/or unstable cardiopulmonary conditions (acute myocardial infarction, acute coronary artery syndromes, worsening or unstable congestive heart failure, or serious ventricular arrhythmias [see Warnings and Precautions]).

Reported reactions included:

#### Cardiopulmonary

Fatal cardiac or respiratory arrest, shock, syncope, symptomatic arrhythmias (atrial fibrillation, tachycardia, bradycardia, supraventricular tachycardia, ventricular fibrillation, ventricular tachycardia), hypertension, hypotension, dyspnea, hypoxia, chest pain, respiratory distress, stridor, wheezing.

#### Hypersensitivity

Anaphylaxis, with manifestations that may include death, shock, bronchospasm, throat tightness, angioedema, edema (pharyngeal, palatal, mouth, peripheral, localized), swelling (face, eye, lip, tongue, upper airway), facial hypoesthesia, rash, urticaria, pruritus, flushing, and erythema.

#### Neurologic

Coma, loss of consciousness, convulsion, seizure, transient ischemic attack, agitation, tremor, vision blurred, dizziness, headache, fatigue.

## PATIENT COUNSELING INFORMATION

Advise patients to inform their healthcare provider if they develop any symptoms of hypersensitivity after DEFINITY administration, including rash, wheezing, or shortness of breath.

Distributed By  
Lantheus Medical Imaging  
331 Treble Cove Road  
N. Billerica, Massachusetts 01862 USA



For ordering, call toll free: 800-299-3431  
All Other Business: 800-362-2668  
(For Massachusetts and International, call: 978-667-9531)  
Patent: <http://www.lantheus.com/patents/index.html>

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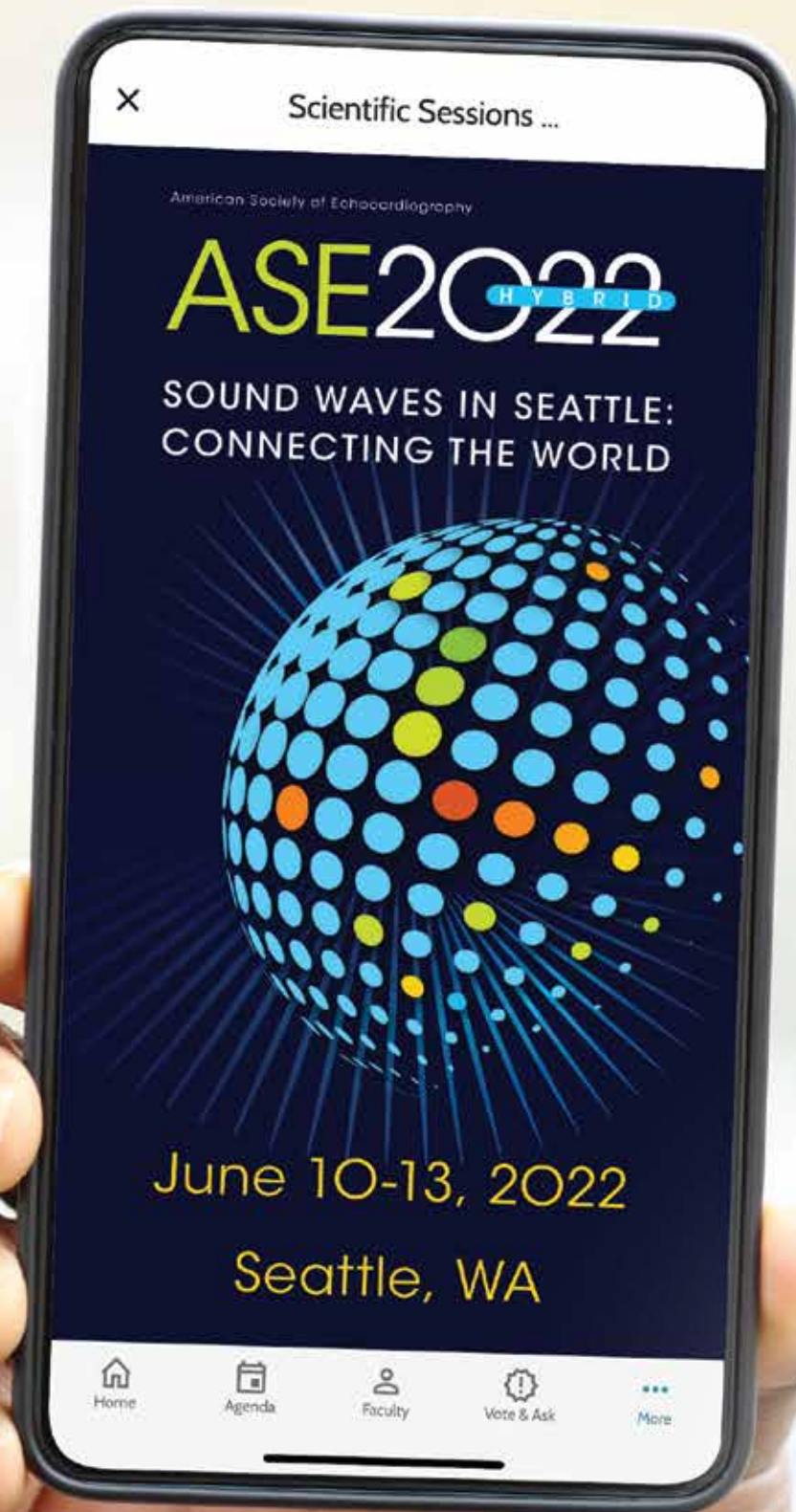
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**ASE**

AMERICAN SOCIETY OF  
ECHOCARDIOGRAPHY

*Sound Saves Lives*



# CONFERENCE OVERVIEW

	FRIDAY, JUNE 10	SATURDAY, JUNE 11	SUNDAY, JUNE 12	MONDAY, JUNE 13	
6:30 AM »					« 6:30 AM
7:00 AM »					« 7:00 AM
7:30 AM »					« 7:30 AM
8:00 AM »		33 <sup>rd</sup> Annual Edler Lecture & Awards Presentation	Sessions	23 <sup>rd</sup> Annual Feigenbaum Lecture & Weyman YIA Competition	« 8:00 AM
8:30 AM »					« 8:30 AM
9:00 AM »			Break		« 9:00 AM
9:30 AM »		Break	S & T Theaters Theater 1: Abbott Theater 2: Pfizer		« 9:30 AM
10:00 AM »				Break	« 10:00 AM
10:30 AM »		Sessions	Sessions		« 10:30 AM
11:00 AM »					« 11:00 AM
11:30 AM »			S & T Theaters Theater 1: GE Healthcare Theater 2: Philips	Sessions	« 11:30 AM
12:00 PM »		LUNCH ON OWN	LUNCH		« 12:00 PM
12:30 PM »					« 12:30 PM
1:00 PM »				S & T Theaters Theater 1: Bracco Diagnostics Inc. Theater 2: Lantheus	« 1:00 PM
1:30 PM »		Sessions	Sessions		« 1:30 PM
2:00 PM »			Break		« 2:00 PM
2:30 PM »	Sessions	Break	S & T Theater Theater 1: Ultromics	Sessions	« 2:30 PM
3:00 PM »					« 3:00 PM
3:30 PM »	Break	Sessions		Break	« 3:30 PM
4:00 PM »			Sessions		« 4:00 PM
4:30 PM »	Council Networking Sessions	EXHIBITS OPEN		Sessions	« 4:30 PM
5:00 PM »		S & T Theater Bristol Myers Squibb	President's Reception in the Echo Expo		« 5:00 PM
5:30 PM »					« 5:30 PM
6:00 PM »	Welcome Reception Featuring ASE's Specialty Interest Groups				« 6:00 PM
6:30 PM »					« 6:30 PM
7:00 PM »					« 7:00 PM
7:30 PM »			ASE Foundation 13 <sup>th</sup> Annual Research Awards Gala 7:00-11:00 PM (Ticketed Event)		« 7:30 PM
8:00 PM »					« 8:00 PM
8:30 PM »					« 8:30 PM



# ASE2022

HYBRID

## SOUND WAVES IN SEATTLE: CONNECTING THE WORLD

### THANK YOU ASE TWITTER CHAMPIONS • #ASE2022

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## “Sound Waves in Seattle: Connecting the World.”

It gives us immense pleasure to welcome you to the 33<sup>rd</sup> Annual ASE Scientific Sessions in Seattle, WA, June 10-13, 2022! We are finally together again in this beautiful “Emerald City.” While it is true that the world has changed in so many ways since our last in-person Scientific Sessions in Portland, Oregon in 2019, ASE continues to prevail by offering the premier cardiovascular ultrasound educational event of the year, in a first-ever hybrid format! Presentations from the main plenary room will be live-streamed for global access, while the remaining in-person live sessions will be additionally available remotely within a week after the meeting concludes. Extending beyond our live content, your registration includes 44 additional on-demand sessions to further enhance virtual connections with our members, echo enthusiasts, and multidisciplinary partners throughout the world.

Individual educational tracks will address both foundational concepts and evolving practice in the areas of circulation ultrasound; essentials of echocardiography including ischemic heart disease, stress, cardiomyopathy, and cardio-oncology; pediatric, congenital, and fetal echocardiography including the impact of COVID; structural heart disease, interventional and perioperative imaging; and innovation and technology, including artificial intelligence. You can see all the educational tracks outlined on page 11.

Our international partners, the European Association of Cardiovascular Imaging (EACVI) and the Japanese Society of Echocardiography (JSE), co-host joint sessions on Women in Echo, Global Artificial Intelligence, and Advances in Echo in Assessment of Congenital Heart Disease.

In recognition of our global interconnectedness and the climate crisis, our Gardin Lecture keynote speaker this year is Suzanne Simard, PhD, Professor of Forest Ecology at the University of British Columbia and author of *Finding the Mother Tree: Discovering the Wisdom of the Forest* (soon to be made into a Hollywood movie supported by Jake Gyllenhaal and Amy Adams!). Don't miss the book signing by Dr. Simard right outside Ballroom 6E during the break following her session.

Please avail yourself of the multiple social and networking opportunities throughout the meeting to meet new colleagues, broaden your interdisciplinary connections, and touch base with established friends and collaborators. For those of you who bought tickets, we look forward to seeing you at the ASE Foundation's Annual Research Awards Gala on Sunday evening, where we celebrate, recognize, and honor our esteemed colleagues!

We also sincerely hope that you, your colleagues, friends, and family will find some time to explore and enjoy the beautiful Seattle area, where you can participate in one-of-a-kind experiences from museum explorations to hiking to fine dining and wine tasting.

Here's to all that the 2022 Scientific Sessions has to offer as we reconnect, recharge, and re-energize!

Cheers,  
Sharon and Carol



*Sharon Mulvagh*  
**Sharon Mulvagh, MD, FRCPC, FASE, FACC, FAHA**  
ASE 2022 Chair  
Dalhousie University  
Halifax, NS Canada



*Carol Mitchell*  
**Carol Mitchell, PhD, ACS, RDMS, RDGS, RVT, RTR, FASE, FSDMS**  
ASE 2022 Co-Chair  
University of Wisconsin-Madison  
Madison, WI USA

### NEW THIS YEAR

- On-site interactive “Do-it-Yourself (DIY)” hands-on scanning sessions.
- Council Networking Events and a Specialty Interest Group Welcome Reception on Friday afternoon.
- Special Sessions on World Alliance Societies of Echocardiography (WASE) Research in Depth and Top Echo Research of the Year: Innovations Today for Tomorrow's Practice.
- Speaker's Corner – Where conversations can continue beyond the formal sessions.
- ShowCASE – Interactive CASE competition.

### RETURNING FAVORITES

- Great Debates featuring critical care, vascular, perioperative echo, and early career topics.
- Computer Learning Labs
- Research Presentations and Posters
- Chalk Talks
- Educator and Value Summits
- Veterinary Echo
- Pediatric Echo Jeopardy Game Show
- Feigenbaum, Edler, Gardin, Kerber, and Kalmanson Lectures
- Arthur E. Weyman Young Investigator and Brian Haluska Sonographer Research Award Competitions
- Science & Technology Theaters
- Dynamic Networking and Social Events
- ASE Foundation Annual Research Awards Gala



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FASE, FRCP(C), FACC  
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*POC Track  
Representative*



Christina Fanola,  
MD, MSC  
*Circulation Track  
Chair*



Benjamin Freed,  
MD, FASE  
*Member at Large*



Allison Hays,  
MD, FASE  
*Member at Large*



Kimberly  
Howard-Quijano,  
MD, MS, FASE  
*Perioperative Track  
Chair*



Renuka Jain,  
MD, FASE  
*Member at Large*



Madeline  
Jankowski, BS,  
RDCS, ACS, FASE  
*Member at Large*



Kristie Jo  
Johnson, RDCS,  
RRT, RCP, FASE  
*Member at Large*



James  
Kirkpatrick, MD,  
FASE  
*Abstract Chair*



Stephen Little,  
MD, FASE  
*President-Elect*



Jennifer Liu,  
MD, FASE  
*Member at Large*



G. Burkhard  
Mackensen, MD,  
PhD, FASE  
*Local Liaison*



Praveen  
Mehrotra, MD,  
FASE  
*Member at Large*



Nova  
Panebianco, MD,  
MPH  
*POC Track  
Representative*



Matthew Parker,  
MD, FASE  
*Member at Large*



David Parra, MD,  
FASE  
*Pediatric/  
Congenital Track  
Chair*



Raymond  
Stainback,  
MD, FASE  
**President**



Jeremy Thaden,  
MD, FASE  
*Perioperative Track  
Co-Chair*



Triston  
Thompson, BS,  
ACS, RDCS, RVT  
*Learning Lab*



Matt Umland,  
ACS, RDCS,  
FASE  
*Learning Lab*



Matthew  
Vorsanger, MD,  
RPVI, FASE  
*Circulation Track  
Co-Chair*



Cathy West, MSc,  
AMS, FASE  
*Member at Large*



Timothy Woods,  
MD, FASE  
*Member at Large*



Luciana Young,  
MD, FASE  
*Pediatric/  
Congenital Track  
Co-Chair*



## ADULT CONGENITAL HEART DISEASE (A)

In line with the ASE's PCHD Council, the ACHD track addresses the adult-specific congenital cardiovascular diseases. The esteemed faculty will be presenting relevant topics that cover a wide spectrum of ACHD. These highly educational ACHD sessions offer an enriching practical learning opportunity for sonographers, physicians, and ACHD specialists.

## CIRCULATION (C)

ASE's Council on Circulation & Vascular Ultrasound has selected relevant topics and valuable presentations that cover a broad-spectrum of arterial and venous diseases. The program is focused on advancing knowledge and clinical practice in vascular conditions.

## EARLY CAREER (EC)

The Early Career sessions this year was created by ASE's Emerging Echo Enthusiasts (E3) Specialty Interest Group. Career development sessions for sonographers and physicians, as well as knowledge translation across generations, debates, and a special faculty networking event have all been designed for early career physicians and sonographers.

## IMAGING FUNDAMENTALS (F)

This track, designed by lead sonographer practitioners, focuses on basic to advanced echocardiographic concepts and practices for today's cardiac sonographer. These sessions will help to enhance and expand your practical and theoretical knowledge of echocardiography in the assessment of various cardiac diseases. This includes strain imaging and 3D echo. The Brian Haluska Sonographer Research Award Competition will showcase four of the best sonographer research abstracts for 2022.

## INNOVATION/TECHNOLOGY (IT)

The Innovation/Technology Track has been designed to communicate recent advances that improve quality. Topics include clinically-relevant innovations that improve diagnostic accuracy, quantification, workflow, and breakthrough cutting-edge technologies that will be used for treating the patients of tomorrow.

## ISCHEMIA (I)

The Ischemia Track covers a diverse spectrum inclusive of obstructive and non-obstructive coronary diseases and stress echocardiography. Sessions will address physiology, pathophysiology, diagnosis, and clinical management using echocardiography and multimodality imaging.

## MYOCARDIUM/FUNCTION (M)

The Myocardium/Function Track addresses the core and advanced competencies of pathologies involving the myocardium and provides an update about standards of care. Included in this track are sessions on cardio-oncology and non-ischemic cardiomyopathies.

## PEDIATRIC/CONGENITAL (PC)

The ASE Council on Pediatric and Congenital Heart Disease (PCHD) has designed a program that will highlight echocardiography and advanced imaging modalities from fetus through adult. Established and upcoming experts in the field will come together to present sessions that will showcase global initiatives including COVID-19 after the pandemic, a fetal symposium, and the always popular Pediatric Echo Jeopardy.

## PERIOPERATIVE (P)

The Perioperative Track, designed by ASE's Council on Perioperative Echocardiography, brings together cardiac anesthesiologists, sonographers, cardiologists, and surgeons with the goal of sharing knowledge in cardiovascular care and perioperative/periprocedural echocardiography.

## POINT OF CARE (POC)

The Point of Care track focuses a wide spectrum of cardiovascular ultrasound applications by practitioners from diverse training backgrounds, and is inclusive of basic point of care ultrasound (POCUS) through advanced critical care echocardiography. Skillful acquisition, interpretation, and integration of POC findings assist in the rapid bedside diagnosis of important cardiovascular pathology.

## RESEARCH (R)

Investigators will present the latest advances in cardiovascular ultrasound throughout the conference and in a new Top Echo Research of the Year: Innovations Today for Tomorrow's Practice session. Don't miss two special competitions designed to acknowledge exceptional research—the Brian Haluska Sonographer Research Award Competition and the prestigious Arthur E. Weyman Young Investigator's Award Competition, where the four best abstracts submitted compete in front of a panel of luminaries for international recognition. Also, meet the investigators during dedicated poster viewing times in the Echo Expo.

## SPECIAL SESSIONS (S)

The 2022 Program Committee has designed the Special Sessions Track to highlight outstanding educational content. Join us for the special session ShowCASE for an exciting new case competition on Sunday afternoon. Other special sessions include Global Artificial Intelligence, Women in Echo, the Value Summit, and more.

## VALVES & STRUCTURAL HEART DISEASE (V)

This track has been designed to integrate expertise from all members of the Structural Heart Team (including sonographers, cardiologists, cardiac anesthesiologists). Transcatheter interventions will be reviewed, providing case-based examples for learning. Sessions will highlight the success, challenges, and emerging tools of interventional echocardiography.

## VETERINARY

ASE has become the professional home to many veterinarians who are interested in cardiovascular ultrasound. The ASE Veterinary Task Force has identified sessions marked with this symbol as topics of particular interest to our veterinary colleagues.



# REGISTRATION INFORMATION

## ATTENDEE REGISTRATION

The ASE Registration Desk is located in the Atrium Lobby Level 4 of the Seattle Convention Center. Attendees may pick up their conference materials and name badge at this location.

## REGISTRATION HOURS

Friday, June 10 .....	12:00 PM – 6:30 PM
Saturday, June 11 .....	6:00 AM – 6:15 PM
Sunday, June 12 .....	6:30 AM – 5:00 PM
Monday, June 13 .....	7:30 AM – 5:30 PM

## COVID-19 VACCINATION REQUIREMENT

All participants (including attendees, faculty, and vendors) are required to be fully vaccinated to receive a name badge for the meeting. Participants will be asked to show proof of full vaccination at the Health & Safety Check Point before proceeding to the Registration Desk in the Atrium Lobby. Please review the ASE COVID-19 Live Course Statement ([ASEcho.org/Live-Course-Statement/](https://asecho.org/Live-Course-Statement/)) for acceptable forms of providing proof of vaccination. Face masks are highly recommended when inside for all participants.

## NAME BADGES

Admission to the educational sessions, Echo Expo, and Science & Technology Theaters is by badge only. Please wear your name badge at all times when in the convention center. We recommend, for your safety, that you do not wear your name badge outside of the convention center. ASE exhibitors may scan your badge in the Echo Expo or Science & Technology Theaters. Your name badge is used for lead retrieval and provides exhibitors with your name, institution (where applicable), address, business telephone number, and email address.

ASE will not release email addresses of attendees who declined the lead retrieval option on their registration form. Family members with guest badges will be admitted to the Echo Expo and may sit in on educational sessions as space allows, but they are not eligible for a conference bag or to claim CME/MOC/CEU credit. Guests must be at least 12 years old. You may purchase guest badges for family members at the ASE Registration Desk. ASE reserves the right to revoke or deny attendance to any participant, speaker, exhibitor, news media reporter, or photographer at presentations or activities during the 33<sup>rd</sup> Annual ASE Scientific Sessions.

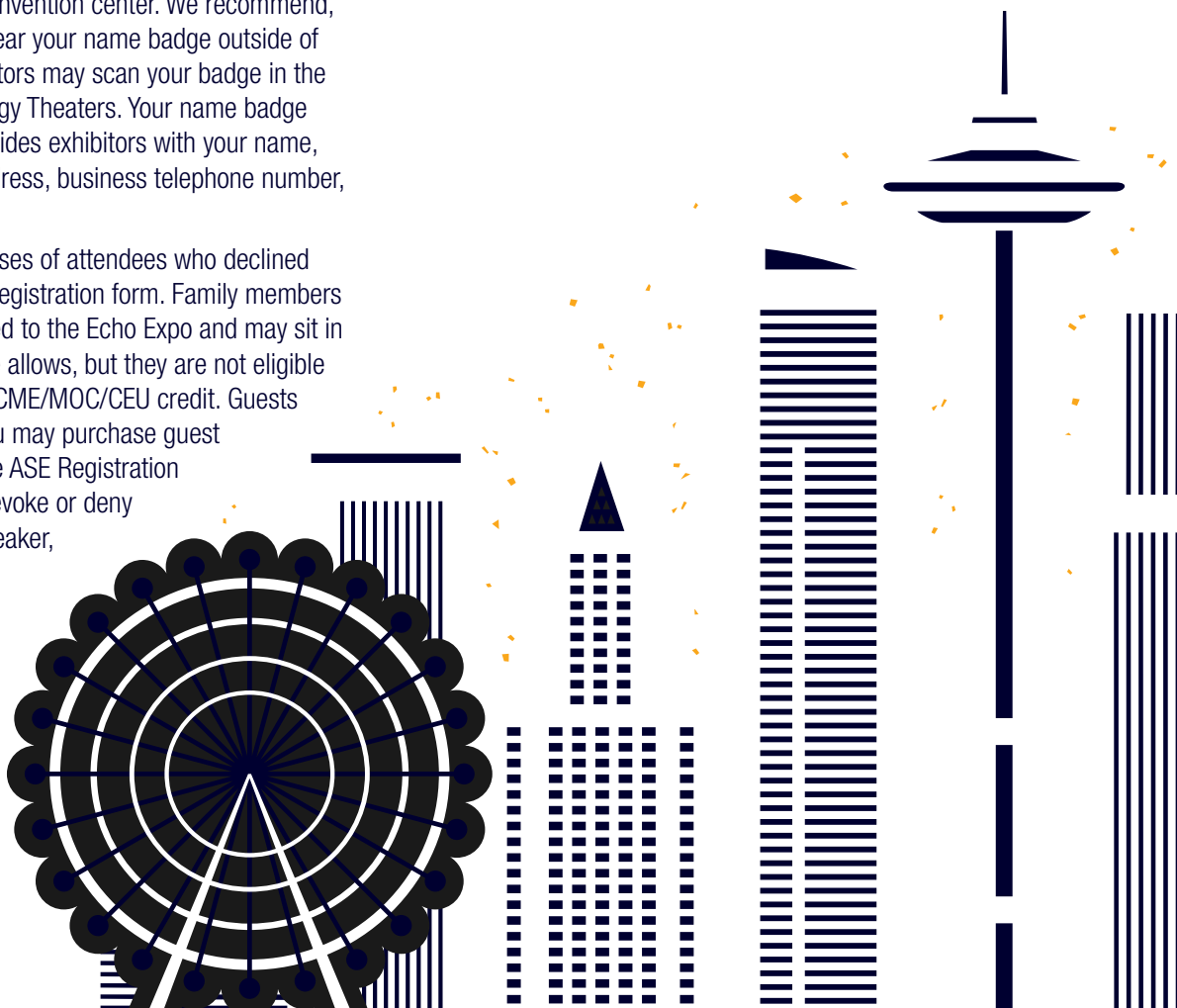
## SPEAKER READY ROOM

Faculty name badges are available at the ASE Registration Desk during registration hours. Faculty will have to provide proof of vaccination before entering the Atrium Lobby and prior to picking up their name badge. The Speaker Ready Room is located in room 618-619 on Level 6 and staffed with technicians to assist faculty with uploading and previewing presentations. It is open during the following times:

Friday, June 10.....	12:00 PM – 5:00 PM
Saturday, June 11.....	6:00 AM – 4:30 PM
Sunday, June 12 .....	6:30 AM – 4:30 PM
Monday, June 13.....	7:30 AM – 4:30 PM

## NEWS MEDIA

For information regarding news releases, news conferences, and interviews, please visit the ASE Registration Desk located in the Atrium Lobby Level 4 of the Seattle Convention Center. Copies of all news releases are also available on [ASEcho.org](https://asecho.org) under “News.” Media representatives must be registered and display their official ASE badge to enter conference areas. Please conform to our Photography and Audio/Visual Recording policy. Use #ASE2022 and follow @ASE360 for ASE’s breaking news.





The Seattle Convention Center's physical address is:

**705 Pike Street  
Seattle, WA 98101**

Located in the heart of Seattle, the Seattle Convention Center and ASE's headquarters hotels are within walking distance of world-class restaurants, entertainment, and attractions including Pike Place Market and the waterfront.

## GETTING AROUND SEATTLE DURING ASE 2022

### Seattle Center Monorail

Seattle Center Monorail provides a fun, quick, and convenient link between downtown Seattle and Seattle Center—home to the Space Needle, Pacific Science Center, Museum of Pop Culture, The Children's Museum, and a host of other venues. There is only one stop so you won't get lost! It takes about two minutes to get from one platform to the other.

Seattle Center Monorail departs approximately every 10 minutes from two stations:

- Westlake Center Station, at 5<sup>th</sup> Avenue and Pine Street (three-minute walk from Grand Hyatt Seattle, four-minute walk from Sheraton Grand Seattle)
- Seattle Center Station, adjacent to the Space Needle

Hours:

Monday-Friday: 7:30 AM – 9:00 PM

Saturday-Sunday: 8:30 AM – 9:00 PM

Ticket prices (one way):

- \$3.00 Adult (age 19-64)
- \$1.50 Youth (age 6-18)
- \$1.50 Reduced Rate (Seniors 65+, disabled, persons with Medicare cards, U.S. military with ID, ORCA LIFT cards accepted)
- Children age 5 and under ride free

Payment: Credit/debit cards and ORCA cards (cash is not accepted at this time).

### Sound Transit Link Light Rail

Travels between Sea-Tac Airport and Westlake Center Mall (with stops along the way) to get to downtown. To get from Sea-Tac Airport to Westlake Center (the closest station to the ASE room block hotels), look for signs in the airport for Sound Transit Link Light Rail. Catch the light rail from Sea-Tac Airport and get off at Westlake Station. It is then a three-minute walk to the Grand Hyatt Seattle hotel, or a four-minute walk to the Sheraton Grand Seattle hotel. The Sound Transit Link Light Rail also travels from the Sea-Tac Airport to Seattle Center, home of the Space Needle and more!

## FIRST AID

An emergency medical professional will be available during the hours of the ASE 2022 meeting, as well as during setup and break down of the entire event. In the event of a medical emergency, please find a staff member or security guard to call the medic on duty. The medic is located in the Atrium Lobby Level 4.

## LOST & FOUND

Questions regarding lost or found items can be directed to the ASE Registration Desk located in the Atrium Lobby Level 4 of the convention center.

## LUGGAGE STORAGE

Luggage storage will be available at the Seattle Convention Center Friday-Monday near the Registration Desk in the Atrium Lobby Level 4 in the Waterfall Suite.

## PRINTING AND SHIPPING SERVICES

The Seattle Convention Center features a full-service FedEx Office business center, located on Level 1, which offers you virtually everything you need to meet your convention needs — from packing and shipping to signage, copying, and last-minute office supplies. The FedEx Office is open Monday – Friday - 9:00 AM to 4:00 PM, closed Saturday – Sunday. For business services needed on Saturday, two nearby FedEx offices are open 10:00 AM – 5:00 PM. 910 Lenora Street, Suite 172, is a 10-minute walk from the Seattle Convention Center and 816 3<sup>rd</sup> Avenue, is a 13-minute walk from the Seattle Convention Center.

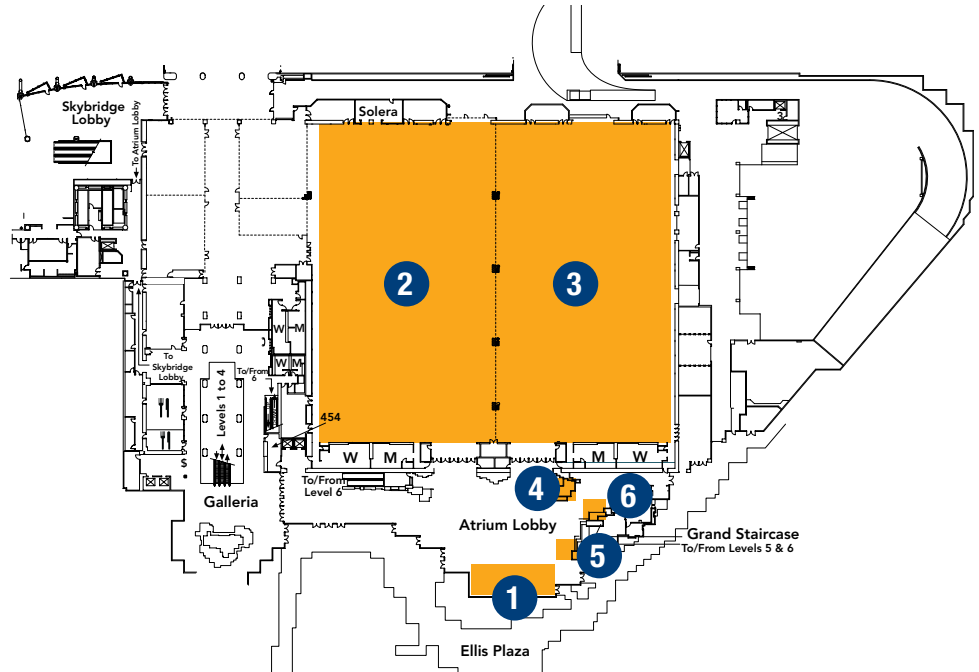




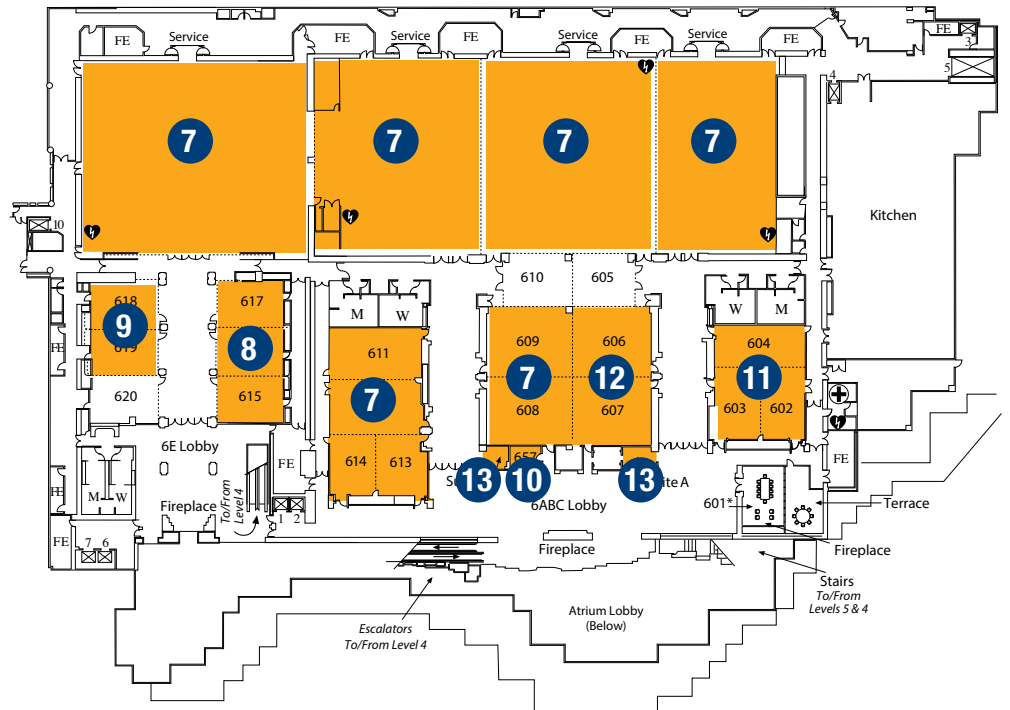
# FACILITY MAP

- 1 Registration
- 2 Echo Expo
- 3 S & T Theaters
- 4 ASE Foundation
- 5 Speaker's Corner
- 6 Luggage Storage
- 7 Session Rooms
- 8 FASE Lounge
- 9 Speaker Ready Room
- 10 Product/Info Booth
- 11 Learning Lab
- 12 DIY Acquisition Room
- 13 Lactation Suites

## LEVEL 4



## LEVEL 6





## FOOD FUNCTIONS

ASE will provide continental breakfast in the Lobby on Level 6, from 6:30 – 7:30 AM on Saturday and Sunday, and 7:30 – 8:30 AM on Monday. Morning and afternoon coffee breaks are available for registered attendees in the Echo Expo on Sunday, June 12, and Monday, June 13, and on Level 6, on Friday, June 10, and Saturday, June 11. Please refer to the Schedule at a Glance pages for the times of the daily morning, afternoon, and lunch breaks.

ASE will provide lunch on a first-come, first-served basis (max. 300 participants) for attendees of the Science & Technology Theaters, located in the Echo Expo on Level 4. See page 75 of this program for a detailed Science & Technology Theater schedule.

## INTERNET ACCESS

Complimentary WiFi is available in the Seattle Convention Center.

Please use the following log-in information:

**Network:** ASE2022  
**Password:** echofirst

## SAFETY

Audience seating is on a first-come, first-served basis. According to fire code, a session must be closed if the room fills to capacity. ASE reserves the right to close session rooms as needed, without compensation to attendees. Inappropriate behavior or undesirable conduct, including, but not limited to, verbal or physical abuse, whether threatened or performed, will not be permitted or tolerated. You must wear your name badge at all times in the convention center. Be sure to remove your badge when you leave the convention center.

## MOBILE DEVICE USE AND ASE COURSES APP

We encourage you to use your mobile device to download the ASE Courses app. After you have downloaded the app, you will have access to the entire meeting program at your fingertips. You can also use the app to ask questions during most of the sessions you attend. Please remember to turn your mobile device to silent or vibrate mode when in the sessions.

## AUDIO/VIDEO/PHOTOGRAPHY/SOCIAL MEDIA POLICIES

Please be aware that during the ASE Scientific Sessions, attendees, vendors, guests, and exhibitors may be photographed or videotaped by ASE staff and contractors capturing the event. Some of these photographs or videos may be displayed by ASE in future publications or other materials. By virtue of your attendance, you agree to allow ASE to use photographs of you in its promotional materials.

Much of the information being presented at the ASE Scientific Sessions is proprietary and may include unpublished data. It is the responsibility of the presenter to notify the attendees that they

do not want their research captured. This can be done by verbal announcement from the podium or with a notice on a poster presentation. Please be respectful of these wishes and DO NOT capture or share details of unpublished data. The following policies must be followed. Attendees who violate these policies may be asked to leave the educational session, and are at risk of losing their conference badge and privileges.

## AUDIO/VIDEO RECORDING POLICY

Audio/video recording of any portion of the meeting room slides or poster presentations at ASE 2022 Scientific Sessions is prohibited. ASE reserves the rights to all recordings or reproductions at ASE meetings. Audio/video recording by individuals for personal use and for social media use is allowed only at social events and in public spaces throughout the meeting.

## PHOTOGRAPHY POLICY

ASE 2022 attendees may take photographs during social and educational sessions provided the photographs are strictly for personal and noncommercial use. Please do not use flash photography, block audience members, or in any way be disruptive when taking photos.

## SOCIAL MEDIA POLICY

The use of social media at the ASE Scientific Sessions is welcomed, including live tweeting. Sharing photographs, including a single slide from a presentation, on social media is permitted. Please identify the presenter by name and tag in the post. ASE has printed Twitter handles on name badges to encourage engagement. Some presenters may request that photographs of their presentation not be shared. It is the responsibility of the attendee to respect the presenter's request. Use #ASE2022 when posting on social media, and be sure to tag @ASE360.

## CHILD CARE

Working parents are an integral part of the ASE community. To accommodate families attending with children, ASE is pleased to offer professionally managed and staffed on-site child care services, for newborn to age 12, during the main conference days and hours for the 2022 Scientific Sessions. Please visit the ASE Registration Desk in the Atrium Lobby Level 4 if you need child care and have not already made a reservation. For their safety, children must be accompanied by an adult at all times when they are outside the child care room provided by ASE.

## LACTATION ROOM

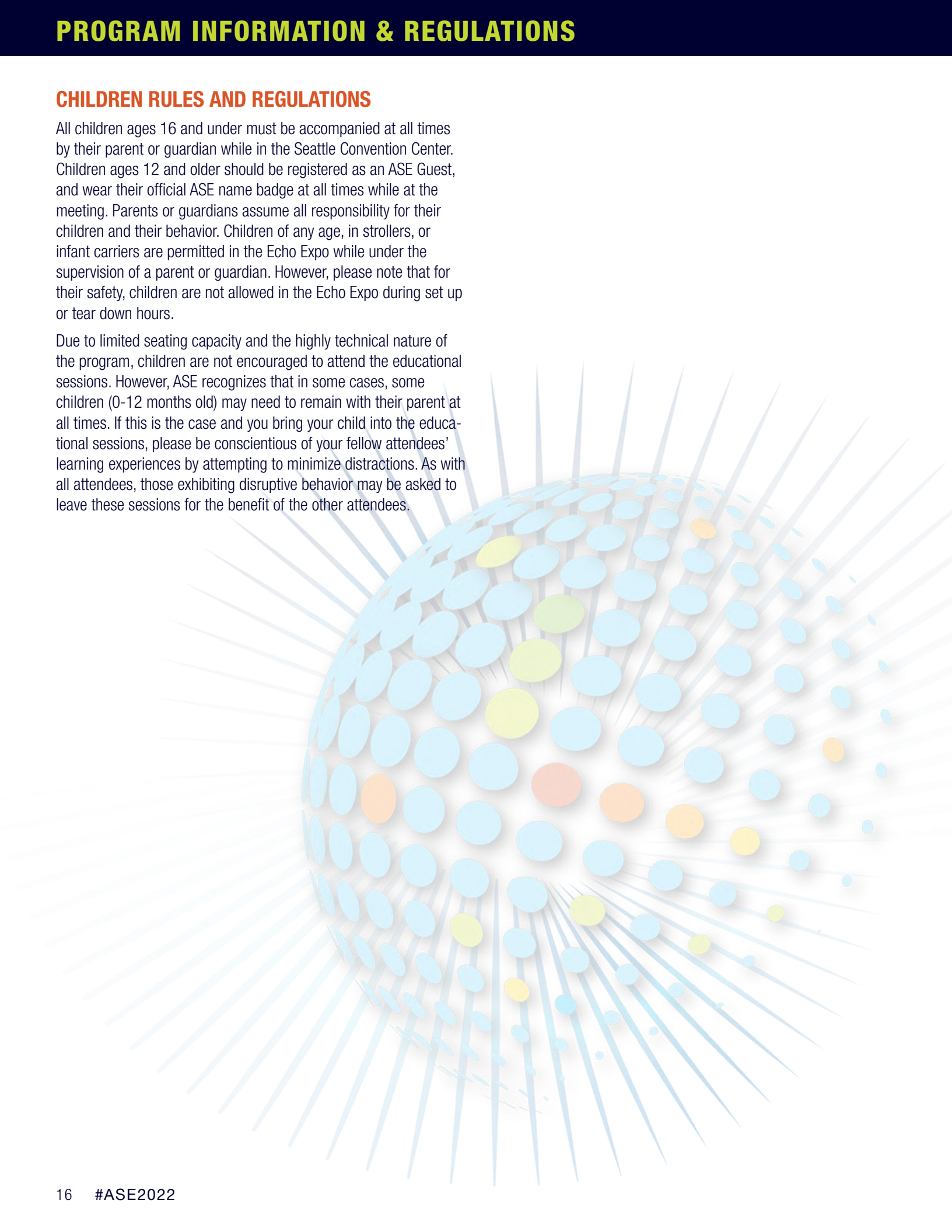
Suite A and Suite C on Level 6 of the Seattle Convention Center are designated as lactation rooms. These rooms are locked, but a key is available at the nearby ASE Products Booth on Level 6. The rooms will have standard AC power outlets. Access to a refrigerator is in the child care room.



## CHILDREN RULES AND REGULATIONS

All children ages 16 and under must be accompanied at all times by their parent or guardian while in the Seattle Convention Center. Children ages 12 and older should be registered as an ASE Guest, and wear their official ASE name badge at all times while at the meeting. Parents or guardians assume all responsibility for their children and their behavior. Children of any age, in strollers, or infant carriers are permitted in the Echo Expo while under the supervision of a parent or guardian. However, please note that for their safety, children are not allowed in the Echo Expo during set up or tear down hours.

Due to limited seating capacity and the highly technical nature of the program, children are not encouraged to attend the educational sessions. However, ASE recognizes that in some cases, some children (0-12 months old) may need to remain with their parent at all times. If this is the case and you bring your child into the educational sessions, please be conscientious of your fellow attendees' learning experiences by attempting to minimize distractions. As with all attendees, those exhibiting disruptive behavior may be asked to leave these sessions for the benefit of the other attendees.





## CLAIMING CME CREDIT

To claim your CME/MOC/CEU credit for the 33<sup>rd</sup> Annual ASE Scientific Sessions, please visit [ASEScientificSessions.org/CME](https://ASEScientificSessions.org/CME) for instructions.

### ASE 2022 In-Person CME

Registration includes up to 23 CME/MOC credits (see the breakdown of daily, in-person hours below), 44 additional on-demand sessions for up to an additional 52 CME/MOC credits, and access for 90 days from Monday, July 11, 2022 to Sunday, October 9, 2022.

Friday – 1.5  
Saturday – 7.5  
Sunday – 8  
Monday – 6

Total In-Person – **23 CME hours**  
Total for 44 On-Demand sessions – **52 CME Hours**  
**TOTAL CME/MOC CREDITS AVAILABLE FOR BOTH LIVE AND ON-DEMAND: 75**

The CME evaluation for in-person will be available June 13, 2022. Attendees must claim credit for the in-person event by July 13, 2022.

### ASE 2022 Virtual CME

Registration includes live streaming from the main plenary room, up to 20 CME/MOC credits (see the breakdown of daily, live streaming hours below), 44 additional on-demand sessions for up to an additional 52 CME/MOC credits, and access for 90 days from Monday, July 11, 2022 to Sunday, October 9, 2022.

Saturday – 6.5  
Sunday – 7  
Monday – 6.5

Total Live Streaming Sessions – **20 CME hours**  
Total for 44 On-Demand sessions – **52 CME Hours**  
**TOTAL CME/MOC CREDITS AVAILABLE FOR BOTH LIVE AND ON-DEMAND: 72**

The CME evaluation for the live streamed sessions will be available June 13, 2022. Attendees must claim credit for the live streamed sessions by July 13, 2022.

**The deadline to claim credit for the on-demand sessions is November 9, 2022.**

## TARGET AUDIENCE

The ASE 2022 Scientific Sessions Virtual Experience will benefit all healthcare providers interested in the application of cardiovascular ultrasound imaging in the care of patients and in research. ASE's membership is open to all echo enthusiasts, so this conference is designed to engage a diverse audience. Participants with a wide variety of interests and expertise in cardiovascular imaging will find sessions that meet their needs and help improve their practice. High quality lectures, debates, case-based presentations, and research poster presentations offer a broad spectrum of educational opportunities. The curriculum is intended to enhance knowledge and performance for adult and pediatric cardiologists, cardiothoracic and vascular surgeons, cardiac anesthesiologists, cardiac sonographers, and emergency and critical care physicians, as well as hospitalists, veterinarians, radiologists, research scientists, primary care practitioners, residents and fellows in training, students, and nurses. Attendees are encouraged to interact with available faculty using the chat feature in the platform, at the Speaker's Corner, and also to take advantage of the opportunity to gain new expertise.

## INTERACTIVE SESSIONS: ASK QUESTIONS

The ASE Courses app contains detailed information on each of ASE's live courses. You will find faculty, agendas, exhibitors, networking events, and more. Use the app on-site to create your own event schedule and receive notifications of special activities. You can download the app by going to the appropriate link below or by searching for ASE Courses in the Apple or Google Play store.

iOS: <http://apple.co/2oQyl3z>

Android: <http://bit.ly/2pfaIJD>

Once you have downloaded the app, you can use the app to ask questions during most sessions.

1. Open the ASE 2022 Scientific Sessions Event
2. Select "Vote and Ask" on the main screen to access the sessions.
3. Select the Session you are attending.
4. Select the Interactive Tab
5. Select "Ask."
6. Enter your question and tap the red symbol in the bottom right corner of the screen.





## DISCLAIMER

The information provided during this CME activity is for continuing education purposes only, and is not meant to substitute for the independent medical judgment of a healthcare provider relative to the diagnosis and treatment options of a specific patient's condition.

## COMMERCIAL SUPPORT DISCLOSURE STATEMENT

### Educational Grants

The Adult Congenital Heart Disease track is supported in part by an unrestricted educational grant provided by Medtronic.

The Valves and Structural Heart Disease track is supported in part by an unrestricted educational grant provided by Medtronic.

### In-Kind Donations

This activity is supported in part by in-kind donations from: FUJIFILM Healthcare Americas Corporation, GE Healthcare, Philips, and Siemens Healthineers.

## CONFERENCE OBJECTIVES

This program has been designed to allow attendees to access a broad overview of topics, or delve deeply into one or two topics. In addition, particular care has been taken to incorporate ASE guide- lines into talks to demonstrate how and why they should be applied in your daily practice. Upon completion of this course, participants should be better able to:

1. Recognize the role of multimodality imaging of cardiomyopathy associated with systemic or metabolic disorders.
2. Demonstrate understanding of a comprehensive echo in a variety of settings and patient presentations.
3. Approach common and uncommon vascular patients with vascular ultrasound and echocardiogram.
4. Approach the use of POCUS for unstable patients or those in critical care.
5. Understand echocardiographic predictors of outcomes in patients with congenital heart disease and cardiomyopathies.
6. Examine emerging and innovative technologies in the care of children and adults in relation to care involving echocardiography scanning.
7. Gain insights into the future of imaging of children with heart disease, innovations in technology, neonatal echocardiography, and more.

# UP TO \$1.1M GRANT FUNDING OPPORTUNITY

NOW ACCEPTING APPLICATIONS



### Application Deadline: August 31, 2022, 5:00 PM ET

ASE, through its Foundation and with the support of Edwards Lifesciences, invites eligible organizations and institutions to apply for a new funding opportunity related to newly diagnosed severe valvular heart disease patients.

This grant, worth up to \$1.1 million, is intended to support research examining the impact of embedded echocardiography report interventions on referral patterns and outcomes in patients newly diagnosed by echocardiography with severe aortic stenosis.

Learn More and Apply at [ASEFoundation.org/Impact-of-Echo-SVD](https://ASEFoundation.org/Impact-of-Echo-SVD)



## 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 (ACCME) through the joint providership of the American Society of Echocardiography and the ASE Foundation.

ASE is accredited by the ACCME to provide continuing medical education (CME) for physicians. ASE designates the 33<sup>rd</sup> Annual ASE Scientific Sessions for a maximum of 75 *AMA PRA Category 1 Credits™* for attending the entire conference.

Attendees should claim only the credit commensurate with the extent of their participation in the activity.

Successful completion of this CME activity enables the participant to earn up to 75 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is ASE's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

Successful completion of this CME activity, which includes participation in the activity, with individual assessments of the participant and feedback to the participant, enables the participant to earn up to 15.75 MOC points in the American Board of Pediatrics' (ABP) Maintenance of Certification (MOC) program. Sessions in the PC Track and identified by this symbol ❖ count toward the 15.75 MOC points. It is ASE's responsibility to submit participant completion information to ACCME for the purpose of granting ABP MOC credit.

Successful completion of this CME activity enables the participant to earn up to 75 MOCA® points in The American Board of Anesthesiology® (ABA) Maintenance of Certification in Anesthesiology Program® or MOCA®. It is ASE's responsibility to submit participant completion information to ACCME for the purpose of granting ABA MOCA® credit.

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 has been reviewed by the AAPA Review Panel and is compliant with AAPA CME Criteria. This activity is designated for 52 AAPA Category 1 CME credits. PAs should only claim credit commensurate with the extent of their participation. Approval is valid from 6/10/2022 to 6/13/2022. AAPA reference number: CME-206066.

The ACCME and the European Board of Accreditation in Cardiology (EBAC) recognize each other's accreditation systems as substantially equivalent. To obtain EBAC credit for participation in this activity, submit evidence of participation directly to EBAC ([ebac-cme.org](http://ebac-cme.org)).

The European Union of Medical Specialists (UEMS)-European Accreditation Council for Continuing Medical Education (EACCME)

has an agreement of mutual recognition of CME credit with the American Medical Association (AMA). European physicians interested in converting *AMA PRA Category 1 Credit™* into European CME credit (ECMEC) should contact the UEMS ([uems.eu](http://uems.eu)).

The National Board of Echocardiography™ (NBE) requires 15 hours of echocardiography specific CME for both ReASCE® and RePTE® recertification. This activity contains 70 *AMA PRA Category 1 Credits™* that can be used toward recertification requirements.

All or a portion of this educational activity may meet the CME requirement for Intersocietal Accreditation Commission (IAC) Echocardiography accreditation. Per IAC standards, at least 15 hours of CME relevant to echocardiography are required over a period of three years. 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.

## DISCLOSURE

ASE is committed to ensuring that its educational mission and all 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 the program. While a monetary or professional affiliation with a corporation does not necessarily influence a speaker's presentation, the Essential Areas and policies of the ACCME require that any relationships that could possibly conflict with the educational value of the program be resolved prior to the educational session and disclosed to the audience. In accordance with these policies, ASE implemented mechanisms prior to the planning and implementation of this CME activity to identify and resolve conflicts of interest for all individuals in a position to control content. Disclosure information is referenced and can be found beginning on page 20 of this program.



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®.



# ASE 2022 SPEAKER DISCLOSURES

ASE is committed to ensuring that its educational mission, and all accredited continuing educational programs provide a protected space to learn, teach, and engage in scientific discourse free from influence from organizations that may have an incentive to insert commercial bias into education.

It is the policy of ASE to ensure balance, independence, objectivity, and scientific rigor in all its educational activities. All speakers at the 33<sup>rd</sup> Annual Scientific Sessions have agreed to the following:

- ✦ Present recommendations for patient care that are based on current science, evidence, and clinical reasoning, while giving a fair and balanced view of diagnostic and therapeutic options.
- ✦ Refer, report, or use in accredited education scientific research in support or justification of a patient care recommendation that conforms to the generally accepted standards of experimental design, data collection, analysis, and interpretation.
- ✦ Not present content that advocates for unscientific approaches to diagnosis or therapy, or if the education promotes recommendations, treatment, or manners of practicing healthcare that are determined to have risks or dangers that outweigh the benefits or are known to be ineffective in the treatment of patients.
- ✦ Provide content material that is balanced information on all available options for pharmaceutical identification, trade name of drugs and devices to avoid the appearance of commercial bias.
- ✦ Disclose to the program audience when products/services are not labeled for the use under discussion or when the products are still under investigation.
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4. RESEARCH FUNDING (INCLUDES PRINCIPAL OR NAMED INVESTIGATOR EVEN IF MANAGED BY INSTITUTION)
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Adams, D.	Caption Health (2); ESP Registry Review (1); Caption Health (3)
Aday, A.	OptumCare (2)
Altman, C.	UpToDate (6)
Armstrong, A.	Abbott, Edwards Lifesciences, Medtronic (2)
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Shah, A.	Janssen (2); Philips Ultrasound (2, 4)
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# SCHEDULE AT A GLANCE

## FRIDAY, JUNE 10

All times are Pacific time.

REGISTRATION OPEN 12:00 – 6:30 PM				
ROOM	BALLROOM 6B	BALLROOM 6C	ROOM 611-612	ROOM 608-609
2:00 – 3:30 PM	  Echo Path Session	 What's to Gain from Strain	 IAC Echocardiography Boot Camp	 From POCUS/Critical Care Echocardiography Specialty Interest Group to Critical Care Echocardiography Council: A Transformative Intersocietal Collaboration
3:30 – 3:45 PM	REFRESHMENT BREAK			
3:45 – 5:30 PM	COUNCIL ON CARDIOVASCULAR SONOGRAPHY NETWORKING EVENT	 COUNCIL ON PEDIATRIC AND CONGENITAL HEART DISEASE NETWORKING EVENT AND NOMENCLATURE FEST	COUNCIL ON PERIOPERATIVE ECHOCARDIOGRAPHY NETWORKING EVENT	COUNCIL ON CIRCULATION AND VASCULAR ULTRASOUND NETWORKING EVENT
5:30 – 6:30 PM	WELCOME RECEPTION FEATURING ASE'S SPECIALTY INTEREST GROUPS – Ellis Plaza (outdoors) and Atrium Lobby 			

ACHD (A) CIRCULATION (C) EARLY CAREER (EC) IMAGING FUNDAMENTALS (F) INNOVATION/TECHNOLOGY (IT) ISCHEMIA (I) MYOCARDIUM/FUNCTION (M)  
PEDIATRIC/CONGENITAL (PC) PERIOPERATIVE (P) POINT OF CARE (POC) RESEARCH (R) SPECIAL SESSIONS (S) VALVES & STRUCTURAL HEART DISEASE (V)

● BASIC ■ BASIC/INTERMEDIATE ▲ INTERMEDIATE ◆ INTERMEDIATE/ADVANCED ◆ ADVANCED ★ BASIC/INTERMEDIATE/ADVANCED

Schedule subject to change. For detailed information, please download the ASE Courses app.



## Welcome Reception Featuring ASE's SPECIALTY INTEREST GROUPS (SIG)

Ellis Plaza (outdoors, weather permitting)  
& Atrium Lobby Level 4

**FRIDAY, JUNE 10: 5:30 – 6:30 PM**

Each of the ASE Specialty Interest Groups (SIG) will have a designated area to gather that will make it easy for attendees to interact with and learn about the SIGs. The Welcome Reception will take place in Ellis Plaza (outdoors, weather permitting) and Atrium Lobby Level 4.

- Critical Care Echocardiography  
(transitioning to a Council in July 2022)
- Emerging Echo Enthusiasts
- Interventional Echocardiography  
(transitioning to a Council in January 2023)
- Neonatal Hemodynamics TnECHO
- Cardio-Oncology
- Veterinary



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MD, FASE



Abimbola Faloye,  
MD, FASE, FASA



Daniel Forsha,  
MD, MCS, FASE



Madeline Jankowski,  
BS, RDCS,  
ACS, FASE



Noreen Kelly, MD,  
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MD, PhD, FASE



Matthew Parker,  
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Nina Rashedi,  
MD, FASE



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MD, FASE



Matthew Vorsanger,  
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Questions? Contact [LeadershipAcademy@ASEcho.org](mailto:LeadershipAcademy@ASEcho.org)





## 2:00 PM – 3:30 PM



### Echo Path Session – Ballroom 6B

*Chairs: A. Bhat, B. Landeck*

#### 2:00 PM – 2:12 PM

Fetal Diagnosis

*N. Pinto*

#### 2:12 PM – 2:27 PM

Path

*L. Rogers*

#### 2:27 PM – 2:39 PM

Neonatal Assessment

*J. Lipinski*

#### 2:39 PM – 2:51 PM

Surgical Repair

*M. McMullan*

#### 2:51 PM – 3:03 PM

Pitfalls and Challenges in the Post-Op Follow-up

*M. Renno*

#### 3:03 PM – 3:15 PM

Multimodality Imaging in the Adult

*A. Prakash*

#### 3:15 PM – 3:30 PM

Question & Answer

## 2:00 PM – 3:30 PM



### What's to Gain from Strain – Ballroom 6C

*Chairs: A. Pearlman, M. Umland*

#### 2:00 PM – 2:02 PM

Session Introduction

*A. Pearlman*

#### 2:02 PM – 2:10 PM

Case Intro

*M. Jankowski*

#### 2:10 PM – 2:22 PM

The Nitty-Gritty of Strain Imaging

*J. Hill*

#### 2:22 PM – 2:34 PM

Tips & Tricks for Strain Imaging

*D. Bourque*

#### 2:34 PM – 2:46 PM

Abnormal Strain Patterns in “Left Ventricular Hypertrophy”

*D. Phelan*

#### 2:46 PM – 2:58 PM

Strain for the Right Ventricle & Left Atrium

*M. Kraushaar*

#### 2:58 PM – 3:10 PM

Clinical Value of Myocardial Work

*T. Marwick*

#### 3:10 PM – 3:20 PM

Case Conclusion

*M. Jankowski*

#### 3:20 PM – 3:30 PM

Question & Answer

## 2:00 PM – 3:30 PM



### IAC Accreditation Boot Camp – Room 611-612

*Chair: K. Gibson*

*Panelists: C. Fleishman, E. Garcia-Sayan, B. Richards, R. Sheu*

IAC Boot Camp: Accreditation Simplified

*A. Groves, S. Jensen*

Quality Improvement in the Echo Lab

*M. Bremer*

Ask the Experts: Panel Discussion and Audience Question & Answer

Wrap-up

## 2:00 PM – 3:30 PM



### From POCUS/CCE SIG to CCE Council: A Transformative Intersocietal Collaboration – Room 608-609

*Chairs: A. Labovitz, N. Panebianco*

#### 2:00 PM – 2:15 PM

History of the POCUS/CCE Specialty Interest Group (SIG)

*A. Labovitz*

#### 2:15 PM – 2:30 PM

The Value of Intersocietal Collaboration Through POCUS and CCE

*N. Panebianco*

#### 2:30 PM – 2:45 PM

Understanding Non-Cardiology POCUS/CCE Practitioners

*S. Kort*

#### 2:45 PM – 3:00 PM

Vision for CCE Council Guidelines

*P. Mayo*



# FRIDAY, JUNE 10 SCHEDULE

## 3:00 PM – 3:15 PM

The Future of POCUS and CCE in the Clinical Practice  
*S. Mulvagh*

## 3:15 PM – 3:30 PM

Question & Answer

## 3:45 PM – 5:30 PM

### Council on Cardiovascular Sonography Networking Event – Ballroom 6B

Chair: *Keith Collins, MS, RDCS, FASE*  
Chair-Elect: *G. Monet Strachan, ACS, RDCS, FASE*

## 3:45 PM – 5:30 PM

### Council on Pediatric and Congenital Heart Disease Networking Event and Nomenclature Fest – Ballroom 6C

Chair: *Carolyn Altman, MD, FACC, FAHA, FASE*  
Chair-Elect: *Craig Fleishman, MD, FASE*

Nomenclature Fest

Chairs: *M. Brook, T. Slesnick*

Team A

*M. Cohen, G. Ensing, L. Lopez*

Team B

*N. Ayres, B. Eidem, A. Powell*

Team C

*P. Barker, C. Fleishman, S. Srivastava*

## 3:45 PM – 5:30 PM

### Council on Perioperative Echocardiography Networking Event – Room 611-612

Chair: *G. Burkhard Mackensen, MD, PhD, FASE*  
Chair-Elect: *Sheela Pai Cole, MD, FASE*

## 3:45 PM – 5:30 PM

### Council on Circulation and Vascular Networking Event – Room 608-609

Chair: *Bryan Wells, MD, FASE*  
Chair-Elect: *Fadi Shamoun, MD, FASE*

# GINGER'S PET RESCUE BARK PARK



Spend some time relaxing and socializing with dogs in **ASE's Bark Park in the Echo Expo**. This experience is provided in partnership with **Ginger's Pet Rescue**, a Seattle nonprofit organization that specializes in saving death row dogs. **These dogs are all adoptable!**

**The Bark Park will be open during  
the following hours:**

**SUNDAY, JUNE 12**  
11:00 AM – 1:00 PM  
2:00 – 2:30 PM

**MONDAY, JUNE 13**  
12:30 – 2:00 PM



# SCHEDULE AT A GLANCE

## SATURDAY, JUNE 11

All times are Pacific time.

REGISTRATION OPEN: 6:00 AM – 6:15 PM / ECHO EXPO OPEN: 3:30 – 6:15 PM						
ROOM	BALLROOM 6E	BALLROOM 6C	BALLROOM 6B	BALLROOM 6A	ROOM 611-612	ROOM 608-609
6:30 – 7:30 AM	BREAKFAST – Lobby on Level 6					
7:00 – 9:30 AM	  STATE OF ASE, 2022 AWARDS PRESENTATION, FASE AND LEADERSHIP ACADEMY RECOGNITION, and 33 <sup>RD</sup> ANNUAL EDLER LECTURE by Catherine Otto, MD, FASE – Ballroom 6E					
9:30 – 10:00 AM	REFRESHMENT BREAK CHALK TALK: Advanced Hemodynamics in Hypertrophic Cardiomyopathy – Room 204					
9:30 – 11:30 AM	WORKSHOP: Innovations in Perioperative Imaging – Room 2A (Ticketed Event. Additional Fee Required.)					
9:30 – 11:30 AM	LEARNING LAB: 3D Cropping (Valves) – Room 602-604 (Ticketed Event. Additional Fee Required.)					
10:00 – 11:30 AM	   Translating Knowledge Across Generations	  Interventional Echo Basics for Beginners: Tips Today for Use Tomorrow	 POCUS (Part 1) in Acute Vascular Disease and Access Complications: Learn the Basics!	   Top Echo Research of the Year: Innovations Today for Tomorrow's Practice	  New Waves to Assess Ventricles <i>Kalmanson Lecture</i>	
10:00 – 11:30 AM	 DIY ACQUISITION ROOM: 3D Echocardiography – Room 606-607 (Ticketed Event. Additional Fee Required.)					
11:30 AM – 1:00 PM	LUNCH BREAK CHALK TALK: E21 Grantees – Room 204 (12:00 – 12:45 PM)					
11:30 AM – 12:00 PM	 Speaker's Corner: Ergonomics – Atrium Lobby					
12:00 – 2:00 PM	LEARNING LAB: Basic Myocardial Strain Imaging (LV, RV, LA) – ROOM 602-604 (Ticketed Event. Additional Fee Required.)					
1:00 – 2:30 PM	   Standards for the Performance of TEE Screening for Structural Heart Intervention	 Echo-OR Correlation	 Looking Good: Practical Tips to Optimize Images and Assure Quality Improvement	 Great Debates: Waves vs. Particles	   Challenges of Adult Congenital Heart Disease	 3D Echo: It's Totally Worth It
1:00 – 2:30 PM	 DIY ACQUISITION ROOM: POCUS (Part 2) in Acute Vascular Disease and Access Complications – Room 606-607 (Ticketed Event. Additional Fee Required.)					
2:30 – 3:00 PM	REFRESHMENT BREAK CHALK TALK: Strain Imaging and Left Ventricular Mechanics – Room 204					
2:30 – 3:00 PM	 Speaker's Corner: Challenges of Adult Congenital Heart Disease – Atrium Lobby					
2:30 – 4:30 PM	LEARNING LAB: Advanced Myocardial Strain Imaging (LV, RV, LA) – Room 602-604 (Ticketed Event. Additional Fee Required.)					
3:00 – 4:00 PM	  New Approaches to Vascular Imaging: Arteriopathy	 Is My Lab Ready for Contrast Perfusion Stress Echocardiography? Tips and Tricks	   WASE Research in Depth	 Sonographer Career Development Pathways	 Prediction: Can We See the Future?	 Thinking Outside the Box in Adult Congenital Heart Disease
3:00 – 4:30 PM	 DIY ACQUISITION ROOM: 3D Echocardiography – Room 606-607 (Ticketed Event. Additional Fee Required.)					
4:00 – 6:00 PM	PRESIDENT'S RECEPTION  ECHO EXPO					
4:30 – 5:15 PM	SCIENCE AND TECHNOLOGY THEATER 1: BRISTOL MYERS SQUIBB					

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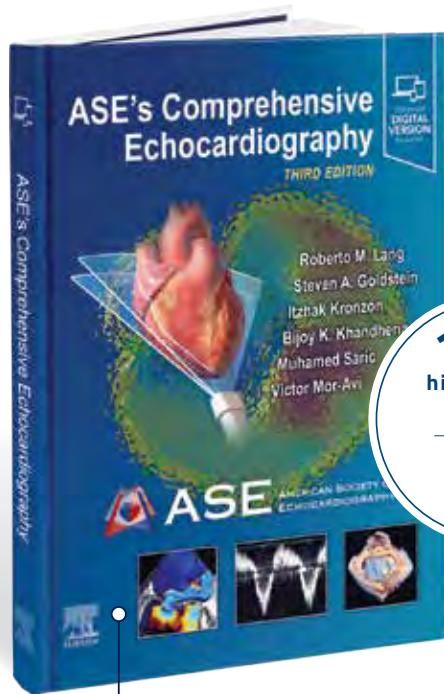


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**BOOK SIGNING | Sunday, June 12 | 2:00–2:30 PM PT**  
**ASE Headquarters Booth in the Echo Expo**

Don't miss meeting the authors Roberto Lang, MD, FASE; Steven Goldstein, MD, FASE; Bijoy Khandheria, MD, FASE; Muhamed Saric, MD, PhD, FASE; Thomas Marwick, MBBS, PhD, MPH, MD; and Theodore Abraham, MD, FASE.



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**ASE**

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**7:00 AM – 9:30 AM**

**S State of ASE, 2022 Awards Presentation, FASE and Leadership Academy Recognition, and 33<sup>rd</sup> Annual Edler Lecture – Ballroom 6E**

*Chair: R. Stainback*

**7:00 AM – 7:10 AM**

State of ASE  
*R. Stainback*

**7:10 AM – 7:25 AM**

Board of Directors Induction and Announcements  
*R. Stainback*

**7:25 AM – 7:45 AM**

FASE Recognition  
*R. Stainback, J. Warmsbecker*

**7:45 AM – 8:00 AM**

Leadership Academy Recognition  
*N. Weissman*

**8:00 AM – 8:20 AM**

Edler Lecture: Aortic Valve Stenosis: Moving from Diagnosis to Patient Outcomes  
*C. Otto*

**8:20 AM – 8:55 AM**

ASE Award Presentations and Recognitions  
*R. Stainback*

**8:55 AM – 9:05 AM**

ASE Foundation Award Presentations and Recognitions  
*V. Rigolin*

**9:05 AM – 9:15 AM**

Incoming President's Address  
*S. Little*

**9:15 AM – 9:20 AM**

ASE's E21 Research Spotlight: DeepEcho: Echocardiogram Image Normalization Using Deep Learning for Detection and Prognostication of Heart Failure  
*P. Pellikka*

**9:20 AM – 9:25 AM**

ASE's E21 Research Spotlight: Bedside Cardiovascular Monitoring of Neonates with Patent Ductus Arteriosus  
*J. Rubin*

**9:25 AM – 9:30 AM**

ASE's E21 Research Spotlight: Echocardiographic Optimization of Ultrasound Septal Reduction for Hypertrophic Cardiomyopathy  
*D. Giraud*

**9:30 AM – 11:30 AM**

**Workshop: Innovations in Perioperative Imaging – Room 2A** (Ticketed Event. Additional Fee Required.)  
*Chair: K. Howard-Quijano*

Advanced Strain Imaging for TEE: Right Ventricle and Left Ventricle Station  
*J. Nelson*

Perioperative 3D for Quantification: Right Ventricle and Left Ventricle Station  
*M. Kraushaar*

Perioperative 3D Quantification: Mitral Valve Station  
*A. Faloye*

Perioperative 3D Quantification: Aortic Valve Station  
*S. McCartney*

Multiplanar Reformatting for Structural Heart Procedures Station  
*E. Garcia-Sayan*

**9:30 AM – 11:30 AM**

**Learning Lab: 3D Cropping (Valves) – Room 602-604** (Ticketed Event. Additional Fee Required.)  
*Chairs: E. Kruse, R. Lang*  
*Lab Assistants: K. Billick, D. McCullough, M. Yamat, K. Zimmerman*

**10:00 AM – 11:30 AM**

**★ ❖ Translating Knowledge Across the Generations – Ballroom 6E**  
*Panelists: W. Lai, V. Rigolin, D. Shook, L. Young*

**10:00 AM – 10:05 AM**

Case: Challenging Coronary Artery Anomaly (Sonographer Perspective)  
*B. Olson*

**10:05 AM – 10:10 AM**

Case: Challenging Coronary Artery Anomaly (Physician Perspective)  
*B. Soriano*

**10:10 AM – 10:20 AM**

Coronary Artery Anomaly Discussion

**10:20 AM – 10:25 AM**

Case: Challenging Left Atrial Appendage (Sonographer Perspective)  
*TBD*

**10:25 AM – 10:30 AM**

Case: Challenging Left Atrial Appendage (Physician Perspective)  
*L. Safi*

**10:30 AM – 10:40 AM**

Left Atrial Appendage Discussion



# SATURDAY, JUNE 11 SCHEDULE

## 10:40 AM – 10:45 AM

Case: Tricuspid Valve Intervention (Sonographer Perspective)  
*R. Juras*

## 10:45 AM – 10:50 AM

Case: Tricuspid Valve Intervention (Physician Perspective)  
*N. Hamid*

## 10:50 AM – 11:00 AM

Tricuspid Valve Intervention Discussion

## 11:00 AM – 11:05 AM

Case: Challenging Cardio-Obstetric Case (Sonographer Perspective)  
*TBD*

## 11:05 AM – 11:10 AM

Case: Challenging Cardio-Obstetric Case (Physician Perspective)  
*N. Scott*

## 11:10 AM – 11:20 AM

Cardio-Obstetric Discussion

## 11:20 AM – 11:30 AM

Question & Answer

## 10:00 AM – 11:30 AM

### **V R** **Interventional Echo Basics for Beginners: Tips Today for Use Tomorrow – Ballroom 6C**

*Chairs: S. Little, G. Mackensen*

## 10:00 AM – 10:12 AM

Guiding Mitral Valve Edge-To-Edge Repair: Where to Start;  
When to Stop  
*R. Sheu*

## 10:12 AM – 10:24 AM

Left Atrial Appendage Closure Procedures: A Spectrum  
of Challenges  
*M. Saric*

## 10:24 AM – 10:36 AM

Tricuspid Valve Anatomy: Clarifying Tricuspid Regurgitation  
Mechanism, Severity, and Treatability  
*P. Collier*

## 10:36 AM – 10:41 AM

P3-15: Clinical Outcomes of Urgent Versus Elective Percutaneous  
MitraClip Procedures  
*I. Doshi*

## 10:41 AM – 10:53 AM

Perivalvular Leak Closure: Guiding Catheters and Decisions  
*J. Thaden*

## 10:53 AM – 11:05 AM

Interventional TEE: Unique Tips and Tricks for Success in the Cath Lab  
*E. Gill*

## 11:05 AM – 11:17 AM

Structural Heart Disease Lessons Learned from Good, Bad, and  
Ugly Cases  
*R. Attar*

## 11:17 AM – 11:30 AM

Question & Answer

## 10:00 AM – 11:30 AM

### **C** **POCUS (Part 1) In Acute Vascular Disease and Access Complications: Learn the Basics! – Ballroom 6B**

*Chairs: C. Fanola, M. Vorsanger*

## 10:00 AM – 10:15 AM

Rapid Assessment for Deep Vein Thrombosis in High Risk  
Pulmonary Embolism Patient  
*K. Kuester*

## 10:15 AM – 10:30 AM

Assessment of Radial Artery in Coronary Angiogram (including  
Allens Test)  
*M. Cordio*

## 10:30 AM – 10:45 AM

Assessment of Femoral Artery Access Complications After  
Coronary Angiogram  
*C. Busse*

## 10:45 AM – 11:00 AM

Assessment of Lower Extremity Arterial Flow in Mechanical  
Support Devices in Advanced Heart Failure  
*S. De*

## 11:00 AM – 11:15 AM

Rapid Assessment of Abdominal Aortic Aneurysm  
*C. Mitchell*

## 11:15 AM – 11:30 AM

Question & Answer



**10:00 AM – 11:30 AM**

**SR Top Echo Research of the Year:  
Innovations Today for Tomorrow's Practice  
– Ballroom 6A**

*Chairs: C. Luoma, S. Siu*

**10:00 AM – 10:02 AM**

Session Introduction  
*S. Siu*

**10:02 AM – 10:17 AM**

Valvular Heart Disease Research  
*K. Addetia*

**10:17 AM – 10:32 AM**

Heart Failure, Hemodynamics, and Ischemic Disease Research  
*A. Shah*

**10:32 AM – 10:47 AM**

Pediatric Imaging Research  
*D. Forsha*

**10:47 AM – 11:02 AM**

Multimodality Imaging Research/Miscellaneous  
*S. Graham-Hill*

**11:02 AM – 11:30 AM**

Question & Answer

**10:00 AM – 11:30 AM**

**PC ❖ New Waves to Assess Ventricles –  
Room 611-612**

*Chairs: M. Dimaria, M. Lewin, S. Srivastava*

**10:00 AM – 10:20 AM**

Kalmanson Lecture: Ultrafast Ultrasound - Insight into Left Ventricular Mechanics  
*O. Villemain*

**10:20 AM – 10:30 AM**

Novel Left Ventricular Function Parameters: Impact in Patient Outcomes  
*S. Srivastava*

**10:30 AM – 10:40 AM**

Function, Mass, and Volume: Which One Really Matters?  
*D. Harrild*

**10:40 AM – 10:50 AM**

Blood Speckle Tracking vs. Vector Flow Mapping  
*M. Friedberg*

**10:50 AM – 11:00 AM**

Single Right Ventricle: Which Is the Most Repeatable or Reproducible Measure? How Do I Follow My Patient?  
*E. Selamet Tierney*

**11:00 AM – 11:10 AM**

Imaging the Transplanted Heart  
*J. Soslow*

**11:10 AM – 11:20 AM**

3D Predictor of Better Outcome of Valves  
*A. Parthiban*

**11:20 AM – 11:30 AM**

Question & Answer

**10:00 AM – 11:30 AM**

**F DIY Acquisition Room: 3D Echocardiography  
– Room 606-607**

*(Ticketed Event. Additional Fee Required.)*

*DIY Instructors: J. Brabender, E. McIlwain, B. Roberts, J. Schaaf*

**11:30 AM – 11:45 AM**

**PC Speaker's Corner: Ergonomics – Atrium Lobby**

Identifying Risk Factors for Work-Related Musculoskeletal Disorders  
*B. Richards*

Developing A Strategy for Education and Prevention  
*J. Goulding*

**11:45 AM – 12:45 PM**

**PC ❖ Equitable Echocardiography and Echo in  
the Americas – Pre-Recorded Viewing  
Room 208**

*Chairs: L. Mercer-Rosa, D. Parra, R. Pignatelli*

Equity: Care of Congenital Heart Disease: Who Are Our Patients and Why We Need to Know  
*K. Lopez*

Increasing Diversity in The Imaging Workforce  
*A. Patel*

Training Program for Non-Cardiologist: Early Detection of Fetal Heart Disease (Argentina Experience)  
*M. Fernanda Biancolini*

Early Cardiac Manifestations of Overweight and Obesity in A Pediatric Population in Mexico  
*C. Vazquez Antona*

Errors in Pediatric and Congenital Echocardiography: How are We Dealing with Them?  
*J. Afiune*

Panel Discussion



# SATURDAY, JUNE 11 SCHEDULE

**12:00 PM – 2:00 PM**

## **Learning Lab: Basic Myocardial Strain Imaging (LV, RV, LA) – Room 602-604**

*(Ticketed Event. Additional Fee Required.)*

*Chairs: J. Hill, J. Strom*

*Lab Assistants: T. Green, J. Hodovan, M. Jankowski, R. Palma, G. Strachan*

**1:00 PM – 2:30 PM**

## **Standards for the Performance of TEE Screening for Structural Heart Intervention – Ballroom 6E**

*Chairs: E. Garcia-Sayan, R. Hahn*

*Panelists: S. Goldstein, K. Horton, S. Little, M. Saric*

**1:00 PM – 1:12 PM**

The Essentials of Pre-Procedural TEE for TAVI

*O. Khalique*

**1:12 PM – 1:24 PM**

The Essentials of Pre-Procedural TEE for Transcatheter Edge-To-Edge Mitral Repair

*G. Mackensen*

**1:24 PM – 1:36 PM**

The Essentials of Pre-Procedural TEE for Tricuspid Valve Interventions

*R. Hahn*

**1:36 PM – 1:48 PM**

The Essentials of Pre-Procedural TEE for Left Atrial Appendage Closure

*N. Quader*

**1:48 PM – 2:00 PM**

The Essentials of Pre-Procedural TEE for Interatrial Septal Devices

*R. Garg*

**2:00 PM – 2:12 PM**

Advanced 3D Imaging for Structural Heart Disease Interventions

*A. Bhatt*

**2:12 PM – 2:30 PM**

Question & Answer

**1:00 PM – 2:30 PM**

## **Echo-OR Correlation – Ballroom 6C**

*Chairs: K. Addetia, R. Lang*

*Discussants: V. Jeevanandam, B. Khandheria, S. Lester, V. Rigolin, C. Taub*

**1:00 PM – 1:18 PM**

A Case of Prosthetic Valve Dysfunction

*J. Cotella*

**1:18 PM – 1:36 PM**

A Case of Paravalvular Leak

*M. Henry*

**1:36 PM – 1:54 PM**

A Foreign Object in the Left Ventricle

*E. Wali*

**1:54 PM – 2:12 PM**

Degenerative Mitral Valve Disease

*M. Henry*

**2:12 PM – 2:30 PM**

Implantable Cardioverter Defibrillator Side Effects

*K. Addetia*

**1:00 PM – 2:30 PM**

## **Looking Good: Practical Tips to Optimize Images and Assure Quality Improvement – Ballroom 6B**

*Chairs: S. Ahmed, A. Johri*

**1:00 PM – 1:12 PM**

Session Introduction

*A. Johri*

**1:12 PM – 1:24 PM**

Speckle Tracking: Accept Or Reject?

*K. Yared*

**1:24 PM – 1:36 PM**

Contrast Imaging: When and How to Make It Best

*H. Becher*

**1:36 PM – 1:48 PM**

3D Imaging: Pearls and Pitfalls

*S. Blissett*

**1:48 PM – 2:00 PM**

The View from Here: Finding Challenging Windows

*K. Szeto*

**2:00 PM – 2:12 PM**

Wrapping It Up: Quality Improvement Strategies

*S. Ahmed*

**2:12 PM – 2:30 PM**

Question & Answer

**1:00 PM – 2:30 PM**

## **The Great Debate: Waves vs. Particles – Ballroom 6A**

*Chairs: A. Kelsey*

**1:00 PM – 1:10 PM**

Round 1: “Enhancing” the Diagnosis of Cardiac Amyloidosis

*M. Chetrit*



## 1:10 PM – 1:20 PM

Round 1: Does Strain Solve Under Recognition?

*A. Sadeghpour*

## 1:20 PM – 1:25 PM

Debrief

*J. Marshall*

## 1:25 PM – 1:35 PM

Round 2: Perfusion Plus Enhancement is the Non-Invasive Gold Standard

*M. Salerno*

## 1:35 PM – 1:45 PM

Round 2: Perfusion to Eliminate Confusion in Ischemia Assessment

*T. Porter*

## 1:45 PM – 1:50 PM

Debrief

*B. Davidson*

## 1:50 PM – 2:00 PM

Round 3: Cardiac MRI: The Forgotten Modality for the Forgotten Valve

*A. Albulushi*

## 2:00 PM – 2:10 PM

Round 3: For Tricuspid Regurgitation: Echo is the Best and CMRI is Just One of the Rest

*N. Hamid*

## 2:10 PM – 2:15 PM

Debrief

*D. Sanborn*

## 2:15 PM – 2:30 PM

Conclusion and Question & Answer

## 1:00 PM – 2:30 PM

### ❖ Challenges of Adult Congenital Heart Disease – Room 611-612

*Chairs: A. Cedars, K. Stout*

## 1:00 PM – 1:02 PM

Session Introduction

*K. Stout*

## 1:02 PM – 1:19 PM

When Adult Echo Guidelines Don't Fit Adult Congenital Heart Disease Patients

*M. Earing*

## 1:19 PM – 1:36 PM

Ebstein's Anomaly: More Than the Tricuspid Valve

*K. Thorson*

## 1:36 PM – 1:53 PM

Abnormal Findings: What Does and Doesn't Go Together?

*J. Deen*

## 1:53 PM – 2:10 PM

P2-07: Echocardiographic Predictors of Medium-Term Left Ventricular Remodeling After Ross Aortic Valve Replacement in Children and Young Adults

*S. Duong*

## 2:10 PM – 2:30 PM

Question & Answer

## 1:00 PM – 2:30 PM

### 3D Echo: It's Totally Worth It – Room 608-609

*Chairs: K. Collins, J. Kisslo*

## 1:00 PM – 1:02 PM

Session Introduction

*K. Collins*

## 1:02 PM – 1:10 PM

Case Introduction

*E. Kruse*

## 1:10 PM – 1:22 PM

Current Techniques of 3D Echocardiography

*J. Pereira*

## 1:22 PM – 1:34 PM

Clinical Benefits of 3D Echocardiography in Assessing the Left Ventricle

*B. Roberts*

## 1:34 PM – 1:46 PM

Essential Role of 3D Echocardiography for Mitral Valve Interventions

*L. Safi*

## 1:46 PM – 1:58 PM

Added Value of 3D Echocardiography in Assessing the Tricuspid Valve

*M. Yamat*

## 1:58 PM – 2:10 PM

Where To Next? Future Directions of 3D Echocardiography

*W. Tsang*

## 2:10 PM – 2:20 PM

Case Conclusion

*E. Kruse*

## 2:20 PM – 2:30 PM

Question & Answer



# SATURDAY, JUNE 11 SCHEDULE

1:00 PM – 2:30 PM

**C DIY Acquisition Room: POCUS (Part 2)  
In Acute Vascular Disease and Access  
Complications – Room 606-607**

*(Ticketed Event. Additional Fee Required.)*

Rapid Assessment for Deep Vein Thrombosis in High Risk  
PE Patient  
*K. Kuester*

Assessment of Radial Artery in Coronary Angiogram (Including  
Allens Test)  
*M. Cordio*

Assessment of Lower Extremity Arterial Flow in Mechanical  
Support Devices in Advanced Heart Failure  
*S. De*

Rapid Assessment of Abdominal Aortic Aneurysm  
*C. Busse, C. Mitchell*

2:30 PM – 3:00 PM

**★ R Speaker's Corner: Challenges of Adult  
Congenital Heart Disease – Atrium Lobby**

Adult Congenital Heart Disease Patients: Who Is at Risk of Aortic  
Dilatation and Rupture?  
*H. Connolly*

The Cardiology Supernova: Training in ACHD: Medical Viewpoint  
*K. Stout*

The Cardiology Supernova: Training in ACHD: Sonographer Viewpoint  
*N. Soni-Patel*

2:30 PM – 4:30 PM

**Learning Lab: Advanced Myocardial Strain  
Imaging (LV, RV, LA) – Room 602-604**

*(Ticketed Event. Additional Fee Required.)*

*Chairs: D. Ignatowski, B. Khandheria*

*Lab Assistants: N. Enger, H. Hayes, J. Hill, A. Kaminski,  
T. Van Houten*

3:00 PM – 4:00 PM

**▲ C New Approaches to Vascular Imaging:  
Arteriopathy – Ballroom 6E**

*Chairs: A. Klein, G. Nesbitt*

3:00 PM – 3:12 PM

Get With the Guidelines: How to Assess Carotid Plaque  
*A. Johri*

3:12 PM – 3:24 PM

Non-Atherosclerotic Carotid Disease: Fibromuscular Dysplasia  
and Dissection  
*R. Benenstein*

3:24 PM – 3:36 PM

Acute Management and Multimodality Imaging Techniques in  
Spontaneous Coronary Artery Dissection  
*E. Kim*

3:36 PM – 3:48 PM

Diagnosis and Intervention in Renovascular Hypertension Related  
to Fibromuscular Dysplasia  
*B. Wells*

3:48 PM – 4:00 PM

Question & Answer

3:00 PM – 4:00 PM

**◆ I Is My Lab Ready for Contrast Perfusion  
Stress Echocardiography? Tip and Tricks –  
Ballroom 6C**

*Chairs: J. Lindner, J. Olsen*

3:00 PM – 3:15 PM

Why We Decided to Start: Benefits and Challenges to Using  
Contrast Perfusion in Stress Echocardiography  
*M. Bremer*

3:15 PM – 3:30 PM

Nuts and Bolts: Techniques That Need to Be Mastered, and Where  
to Learn Them  
*B. Davidson*

3:30 PM – 3:45 PM

Contrast for Microvascular Disease: The Next Horizon  
*T. Porter*

3:45 PM – 4:00 PM

Question & Answer

3:00 PM – 4:00 PM

**◆ S R WASE Research In-Depth – Ballroom 6B**

*Chairs: F. Asch, R. Lang*

3:00 PM – 3:15 PM

COVID Through the Eyes of WASE: Value of Automated Intelligence  
*I. Karagodin*

3:15 PM – 3:30 PM

Left and Right Atrium: How Will Lessons Learned Impact  
Future Studies  
*J. Banchs*



## 3:30 PM – 3:45 PM

Appropriate Use of Statistics in WASE: Pros and Cons  
*W. Tsang*

## 3:45 PM – 4:00 PM

WASE in Depth: Diastolic Right Ventricular and Left Ventricular Function  
*T. Miyoshi*

## 3:00 PM – 4:30 PM

### **EC** Sonographer Career Development Pathways – Ballroom 6A

*Chairs: D. Bourque, M. Wasserman*

## 3:00 PM – 3:05 PM

Session Introduction  
*M. Wasserman*

## 3:05 PM – 3:18 PM

Transitioning to Administration  
*K. Billick*

## 3:18 PM – 3:31 PM

Echo Research  
*C. Cassidy*

## 3:31 PM – 3:44 PM

Education Dedication  
*E. Kruse*

## 3:44 PM – 3:57 PM

Promoting Yourself Within Your Institution  
*I. Crandall*

## 3:57 PM – 4:10 PM

Volunteering and Networking  
*N. Soni-Patel*

## 4:10 PM – 4:30 PM

Question & Answer

## 3:00 PM – 4:00 PM

### **P** Prediction: Can We See the Future? – Room 611-612

*Chairs: Y. Maldonado, K. Zimmerman*

## 3:00 PM – 3:02 PM

Session introduction  
*Y. Maldonado*

## 3:02 PM – 3:14 PM

Systolic Anterior Motion Risks: Patient vs. Procedure  
*H. Bhatt*

## 3:14 PM – 3:26 PM

Will the Right Ventricle Fail When the Left Side is the Problem?  
*Y. Maldonado*

## 3:26 PM – 3:38 PM

Will the Left Ventricle Fail with A Bad Valve  
*M. Sarano*

## 3:38 PM – 3:50 PM

Man vs. Machine: Artificial Intelligence vs. Augmented Intelligence in the Operating Room  
*S. Pislaru*

## 3:50 PM – 4:00 PM

Question & Answer

## 3:00 PM – 4:00 PM

### **A** ❖ Thinking Outside the Box in Adult Congenital Heart Disease – Room 608-609

*Chairs: H. Connolly, L. Hua*

## 3:00 PM – 3:04 PM

Session Introduction  
*H. Connolly*

## 3:04 PM – 3:16 PM

Pregnancy in Transposition of the Great Arteries Repaired Patients: What to Look for with Echo  
*D. DeFaria Yeh*

## 3:16 PM – 3:28 PM

The Left Ventricle in Tetralogy of Fallot  
*N. Soni-Patel*

## 3:28 PM – 3:40 PM

Anomalous Coronary Arteries in Adult Congenital Heart Disease: A Curiosity or A Game Changer?  
*Z. Steinberg*

## 3:40 PM – 4:00 PM

Question & Answer

## 3:00 PM – 4:30 PM

### **F** DIY Image Acquisition Room: 3D Echocardiography – Room 606-607

*(Ticketed Event. Additional Fee Required.)*

*DIY Instructors: J. Betz, J. Brabender, K. Collins, E. McIlwain, K. Szeto*



# CONGRATULATIONS TO DR. PATRICIA A. PELLIKKA

The American Society of Echocardiography is pleased to announce that Patricia A. Pellikka, MD, FASE, of the Mayo Clinic, has been selected to become the Editor-in-Chief of the *Journal of the American Society of Echocardiography* (JASE) on January 1, 2023. A leading figure in the cardiovascular community, Dr. Pellikka is well positioned to continue the legacy of former JASE Editors Drs. Michael H. Picard, Alan S. Pearlman, and Harvey Feigenbaum. Her stellar contributions to the field of cardiovascular ultrasound, including patient care, lab management, teaching, research, and publishing, as well as serving as ASE's President (2012–2013), means the future of JASE is in great hands.












# SCHEDULE AT A GLANCE

## SUNDAY, JUNE 12

All times are Pacific time.

REGISTRATION OPEN: 6:30 AM – 5:00 PM / ECHO EXPO OPEN: 9:00 AM – 2:45 PM						
ROOM	BALLROOM 6E	BALLROOM 6C	BALLROOM 6B	BALLROOM 6A	ROOM 611-612	ROOM 608-609
6:30 – 7:30 AM	BREAKFAST – Lobby on Level 6					
7:00 – 8:30 AM	   Hot Topics in Structural Heart Disease	  Fetal Symposium: Improving Outcomes (7:30-9:00 AM)				
7:30 – 9:00 AM	 <b>DIY ACQUISITION ROOM: Left Ventricular, Right Ventricular, and Left Atrial Strain – Room 606-607</b> (Ticketed Event. Additional Fee Required.)					
7:30 – 9:30 AM	LEARNING LAB: 3D Cropping (Valves) – Room 602-604 (Ticketed Event. Additional Fee Required.)					
8:30 – 9:00 AM	  <b>GARDIN LECTURE</b> by Suzanne Simard, PhD – Ballroom 6E					
9:00 – 9:30 AM	REFRESHMENT BREAK: VISIT ECHO EXPO AND POSTERS CHALK TALK: Novel Uses of Agitated Saline and Contrast in Ultrasound – Chalk Talk Theater Echo Expo					
9:00 – 9:45 AM	SCIENCE AND TECHNOLOGY THEATER 1: ABBOTT / SCIENCE AND TECHNOLOGY THEATER 2: PFIZER					
9:30 – 11:00 AM	   Women in Echo (Joint ASE/EACVI Session)	 Innovation Through Collaboration: Tackling POCUS Training and Education from a Multi-Specialty Perspective	  Advances in Echo for the Assessment of Congenital Heart Disease (Joint ASE/JSE Session)	  Intracardiac Imaging: Preparing for the ICE Storm	  Stress Echo in Special Populations	 Educator Summit: Contrast and Competency (Limited Attendance)
9:30 – 11:00 AM	 <b>DIY ACQUISITION ROOM: Pediatric &amp; Fetal Imaging – Room 606-607</b> (Ticketed Event. Additional Fee Required.)					
11:00 – 1:00 PM	LUNCH BREAK: VISIT ECHO EXPO / MODERATED POSTERS: ECHO EXPO CHALK TALK (11:30 AM – 12:15 PM): The Future of QI in Pediatric Cardiology: The QI Consortium – Chalk Talk Theater Echo Expo					
11:15 AM – 12:15 PM	SCIENCE AND TECHNOLOGY THEATER 1: GE HEALTHCARE / SCIENCE AND TECHNOLOGY THEATER 2: PHILIPS					
11:30 AM – 1:30 PM	LEARNING LAB: 3D Volume Function – Room 602-604 (Ticketed Event. Additional Fee Required.)					
1:00 – 2:00 PM	  Multispecialty POCUS in a Continuum of Care for the Critically Ill	   Brian Haluska Sonographer Research Award Competition		 Perioperative Case Dilemmas: Role of Imaging to Optimize Patient Care	 Advancing Your Academic Career for Physicians Pursuing Research Careers	 Diagnosis and Novel Intervention for the High-Risk Pulmonary Embolism
2:00 – 2:30 PM	REFRESHMENT BREAK: VISIT ECHO EXPO AND POSTERS CHALK TALK: Aortic Stenosis: Clarifying the Concepts of Severity – Chalk Talk Theater Echo Expo					
2:00 – 2:45 PM	SCIENCE AND TECHNOLOGY THEATER 1: ULTROMICS					
2:30 – 3:00 PM	 <b>KERBER LECTURE</b> by Linda K. Kerber, PhD – Ballroom 6A					
2:30 – 3:30 PM	  CROP OFF!		   Pediatric Echo Jeopardy	 Women in Echo Networking Session (3:00 – 3:30 PM)		
3:45 – 5:15 PM	   Multimodality Imaging in Cardiomyopathy	 ShowCASE Competition				
7:00 – 11:00 PM	ASE FOUNDATION RESEARCH AWARDS GALA (Ticketed Event. Additional Fee Required.)					



## Join the Success as the ImageGuideEcho Registry Continues to Grow!

ImageGuideEcho Contains **327,000+** TTE Studies

### PILLARS OF THE REGISTRY

*There is something for everyone!*



#### QUALITY IMPROVEMENT

- Compare quality of care against national benchmarks
- Submit data to IAC for ease of accreditation
- Address quality gaps identified with ASE guideline-based feedback
- Examine all echo report information for all studies performed at your institution
- Leverage automatic data submission for participation



#### DISEASE-FOCUSED RESEARCH

- Include report and images focused on a specific pathology
- Enable site enrollment, researcher investigation, and stakeholder access to research data
- Utilize interface for expert interpretation of findings
- Generate insights with an analytics-driven interface
- House report and imaging data for your project in one repository



#### DIGITAL DISEASE REPOSITORY

- Upload your de-identified images to the image portal
- Search specific cases and pathologies to find images for education and training tools
- Download images and use them for your presentations
- Assist fellows and early career sonographers in identifying unique pathologies



#### AI ALGORITHM VERIFICATION

- Leverage multi-institutional database of “real world” images and reports
- Serve as engine for AI development and testing to ensure algorithm integrity and transparency
- Utilize ASE’s DICOM anonymization tool provided by ARMUS to allow for ease of case submission
- Create a rich database of rare disease cases for improved patient care
- Participate in expert review and annotation for comparison against industry tools

STOP BY BOOTH #1729 OR LEARN MORE HERE.





**7:00 AM – 8:30 AM**

**★ R 🗼 Hot Topics in Structural Heart Disease – Ballroom 6E**

*Chairs: M. Cantu, G. Pressman*

**7:00 AM – 7:05 AM**

Introduction  
*M. Cantu*

**7:05 AM – 7:15 AM**

P5-32: Leveraging Automated Neural Network Segmentation of 3D-Transesophageal Echocardiography (3D-TEE) to Assess Mitral Valve Geometry with MitraClip Transcatheter Edge-to-Edge Repair (TEER)  
*K. Lee*

**7:15 AM – 7:30 AM**

Ultrasound Guided Vascular Access: Getting in Is Half the Battle  
*J. Astbury*

**7:30 AM – 7:45 AM**

What's New in Left Atrial Appendage Occlusion Devices  
*R. Vadlamudi*

**7:45 AM – 8:00 AM**

Updates in Imaging for Percutaneous Tricuspid Valve Procedures  
*R. Hahn*

**8:00 AM – 8:15 AM**

Imaging for Percutaneous Mitral Procedures: Pearls to Take Your Results to the Next Level  
*G. Mackensen*

**8:15 AM – 8:30 AM**

Question & Answer

**7:30 AM – 9:00 AM**

**◆ PC ❖ Fetal Symposium: Improving Outcomes – Ballroom 6C**

*Chairs: B. Cuneo, M. Puchalski, K. Thorson*

**7:30 AM – 7:40 AM**

Ultrasound Safety in Prenatal Imaging  
*A. Moon-Grady*

**7:40 AM – 7:50 AM**

Artificial Intelligence in Fetal Screening: Are We There Yet?  
*S. Morris*

**7:50 AM – 8:00 AM**

MRI in Fetal Congenital Heart Disease  
*M. Seed*

**8:00 AM – 8:10 AM**

Predicting Coarctation: An Ongoing Conundrum  
*S. Maskatia*

**8:10 AM – 8:13 AM**

Dextro-Transposition of the Great Arteries: Clues to Urgent Intervention  
*D. McVadon*

**8:13 AM – 8:20 AM**

Dextro-Transposition of the Great Arteries: Clues to Urgent Intervention  
*Discussant: C. Taylor*

**8:20 AM – 8:23 AM**

Ebstein Anomaly  
*S. Sunthakar*

**8:23 AM – 8:30 AM**

Ebstein Anomaly  
*Discussant: A. Kavanaugh-McHugh*

**8:30 AM – 8:33 AM**

Hypoplastic Left Heart Syndrome and the Atrial Septum: When is Restrictive, Too Restrictive?  
*D. Sganga*

**8:33 AM – 8:40 AM**

Hypoplastic Left Heart Syndrome and the Atrial Septum: When is Restrictive, Too Restrictive?  
*Discussant: T. Tacy*

**8:40 AM – 8:43 AM**

Ventricular Outpouchings: Aneurysms/Diverticula: Are They as Scary as They Sound?  
*S. Doucet*

**8:43 AM – 8:50 AM**

Ventricular Outpouchings: Aneurysms/Diverticula: Are They as Scary as They Sound?  
*Discussant: S. Morris*

**8:50 AM – 9:00 AM**

Question & Answer

**7:30 AM – 9:30 AM**

**Learning Lab: 3D Cropping (Valves) – Room 602-604**

*(Ticketed Event. Additional Fee Required.)*

*Chairs: K. Addetia, M. Yamat*

*Lab Assistants: J. Betz, N. Enger, A. Kaminski, C. Kramer, E. Kruse*



# SUNDAY, JUNE 12 SCHEDULE

7:30 AM – 9:00 AM

**F** **DIY Acquisition Room: Left Ventricular, Right Ventricular, and Left Atrial Strain – Room 606-607**

(Ticketed Event. Additional Fee Required.)

DIY Instructors: M. Kraushaar, M. Park, B. Roberts, K. Szeto

8:30 AM – 9:00 AM

**S** **Gardin Lecturer – Ballroom 6E**

Chair: S. Mulvagh

**8:30 AM – 8:32 AM**

Introduction

S. Mulvagh

**8:32 AM – 8:58 AM**

Gardin Lecture: Finding the Mother Tree

S. Simard

**8:58 AM – 9:00 AM**

Conclusion

S. Mulvagh

9:30 AM – 11:00 AM

**☆** **Women in Echocardiography – Ballroom 6E**

(ASE/EACVI Joint Session)

Chairs: S. Mulvagh, R. Thamman



**EACVI**  
European Association of  
Cardiovascular Imaging

**9:30 AM – 9:45 AM**

Is Meritocracy Still Relevant?

D. Sanborn

**9:45 AM – 10:00 AM**

Peculiarity of Heart Disease in Women: What Does It Mean for the Echocardiographic Assessment?

R. Thamman

**10:00 AM – 10:15 AM**

Imaging Ischemic Heart Disease in Women

L. Sade

**10:15 AM – 10:30 AM**

Assessment of Coronary Artery Disease in Women

N. Scott

**10:30 AM – 10:45 AM**

Assessment of Valvular Heart Disease in Women

V. Delgado

**10:45 AM – 11:00 AM**

Question & Answer

9:30 AM – 11:00 AM

**POC** **Innovation Through Collaboration: Tackling POCUS Training and Education from a Multi-Specialty Perspective – Ballroom 6C**

Chairs: J. Diaz-Gomez, N. Panebianco

**9:30 AM – 9:32 AM**

Session Introduction

N. Panebianco

**9:32 AM – 9:39 AM**

POCUS Training, Credentialing, Documentation: International Perspective on Internal Medicine

I. Ma

**9:39 AM – 9:46 AM**

POCUS Training, Credentialing, Documentation: Emergency Medicine Perspective

R. Liu

**9:46 AM – 10:00 AM**

POCUS Training, Credentialing, Documentation: Critical Care Perspective

P. Mayo, S. Nikravan

**10:00 AM – 10:14 AM**

POCUS Training, Credentialing, Documentation: Internal Medicine Perspective

R. Dversdal, M. Lanspa

**10:14 AM – 10:35 AM**

POCUS Training, Credentialing, Documentation: Cardiology Perspective

A. Labovitz, J. Kirkpatrick, V. Sorrell

**10:35 AM – 11:00 AM**

Question & Answer

9:30 AM – 11:00 AM

**◆** **Advances in Echocardiography for the Assessment of Congenital Heart Disease – Ballroom 6B**

(ASE/JSE Joint Session)

Chairs: G. Ensing, S. Iwanaga



**9:30 AM – 9:32 AM**

Session Introduction

G. Ensing

**9:32 AM – 9:47 AM**

4D Imaging for the Management of Congenital Heart Disease

K. Takigiku

**9:47 AM – 10:02 AM**

Right-Sided Complications in Adult Congenital Heart Disease

T. Ishizu



## 10:02 AM – 10:17 AM

The Eisenmenger Patient: Which Echo Parameters Really Matter?  
*M. Fuchs*

## 10:17 AM – 10:32 AM

Mechanical Circulatory Support in Adult Congenital Heart Disease  
*A. Cedars*

## 10:32 AM – 10:47 AM

Long Term Outcomes in Shone's Complex - What I Need from Echo  
*TBD*

## 10:47 AM – 11:00 AM

Question & Answer

## 9:30 AM – 10:30 AM

### **V R Intracardiac Imaging: Preparing for the ICE Storm – Ballroom 6A**

*Chairs: T. Chen, D. Fan*

## 9:30 AM – 9:42 AM

2D and 3D ICE: Basic Concepts and Views  
*T. Chen*

## 9:42 AM – 9:54 AM

Can 3D ICE Replace TEE for LAAO Guidance?  
*M. Saric*

## 9:54 AM – 9:59 AM

PC-02: Three-Dimensional Intracardiac Echocardiography in Transcatheter Pulmonary Valve Replacement  
*C. Gonzalez de Alba*

## 9:59 AM – 10:11 AM

3D ICE for Mitraclip: Is It Possible?  
*C. Sanchez*

## 10:11 AM – 10:23 AM

ICE for Tricuspid Procedures: Adding Views and Value?  
*M. Vannan*

## 10:23 AM – 10:30 AM

Question & Answer

## 9:30 AM – 11:00 AM

### **I R Stress Echo in Special Populations – Room 611-612**

*Chairs: J. Marshall, P. Pellikka*

## 9:30 AM – 9:34 AM

Session Introduction  
*J. Marshall*

## 9:34 AM – 9:48 AM

Performing Stress Echo for Liver and Renal Transplant Evaluation  
*A. Albulushi*

## 9:48 AM – 10:02 AM

Performing Stress Echo for Post-Cardiac Transplant Surveillance  
*P. Rahko*

## 10:02 AM – 10:16 AM

Using Stress Echo in Pre-Operative Evaluation of Vascular Surgery Patients  
*B. Wells*

## 10:16 AM – 10:30 AM

Update: 2021 ACC AUC for Multimodality Pre-Operative Imaging  
*A. Hays*

## 10:30 AM – 10:40 AM

PC-07: Myocardial Scar Detection and Quantification Using Phase Change Ultrasound Contrast Agents  
*C. Chen*

## 10:40 AM – 11:00 AM

Question & Answer

## 9:30 AM – 11:00 AM

### **F Educator Summit: Contrast and Competency – Room 608-609**

*Chairs: M. Bremer, R. Palma*  
*Lab Assistants: J. Betz, M. Hepinstall*

Why Do We Need Contrast?  
*R. Palma*

Content for Teaching Contrast  
*G. Strachan*

Methods of Testing Competency  
*M. Bremer*

Practical Competency for Educators  
*Panelists: T. Gallagher, C. Mitchell, R. Palma*

Question & Answer

## 9:30 AM – 11:00 AM

### **PC ❖ DIY Acquisition Room: Fetal and Pediatric Imaging – Room 606-607**

*(Ticketed Event. Additional Fee Required.)*

Normal Arch Imaging, Optimization of Coronaries, Subcostal Sweeps  
*K. Nichols*

Normal Fetus Situs Determination, Three-Vessel View, Arch Assessment  
*M. Clouse*

Congenitally Corrected Transposition of the Great Arteries  
*H. Cuffee*

Ebstein Anomaly  
*B. Olson*



# SUNDAY, JUNE 12 SCHEDULE

11:15 AM – 12:15 PM

**▼ A New Vision for Tricuspid Valve Therapies – Pre-Recorded Viewing Room 208**

Tricuspid Valve insufficiency: Defining Pathology and Severity With TTE  
*B. Schwaegler*

TEE for Tricuspid Valve Interventions: Pain Points and Pearls  
*T. Smith*

CMR for Right Ventricular Function and Tricuspid Regurgitation Quantification: When and Why?  
*D. Shah*

What's New in Transcatheter Tricuspid Valve Therapies?  
*J. McCabe*

Post-Intervention Assessment of The Tricuspid Valve with TTE: What's Essential?  
*A. Rangosch*

3 Tricuspid Regurgitation Cases: Diagnostic Data, Intervention, Outcome, Lessons Learned  
*O. Khalique*

11:30 AM – 1:30 PM

**Learning Lab: 3D Volume/Function Chamber Quantification Learning Lab – Room 602-604**

*(Ticketed Event. Additional Fee Required.)*

*Chairs: K. Collins, L. Sugeng*

*Lab Assistants: A. Dewar, T. Green, M. Jankowski, J. Pereira, Z. Robinson*

**PC ❖ Let's Assess That Single Ventricle – Pre-Recorded Viewing Room 208**

*Chairs: J. Dwyer, J. Lu, J. Robinson*

Can Imaging Predict Outcomes of Single Ventricle  
*R. Rathod*

Repair the AVV, Why and How?  
*G. Hill*

Intervening On the Aortic Arch  
*N. Soni-Patel*

How and When Do We Need to Image the Lymphatic System in Fontan  
*D. Biko*

The Burden of Collaterals in Fontan  
*L. Olivieri*

Panel Discussion

1:00 PM – 2:00 PM

**POC ★ Multispecialty POCUS In A Continuum of Care For the Critically Ill – Ballroom 6E**

*Chairs: A. Labovitz, C. Troianos*

**1:00 PM – 1:10 PM**

Introduction to CCE SIG  
*A. Labovitz*

**1:10 PM – 1:20 PM**

CASE 1: The Shocky Patient  
*N. Panebianco*

**1:20 PM – 1:30 PM**

CASE 2: The Dyspneic Patient  
*P. Mayo*

**1:30 PM – 1:40 PM**

CASE 3: The Cardiac Arrest Patient  
*N. Kumar*

**1:40 PM – 1:50 PM**

Moving Forward: Cardiologist's Perspective  
*V. Sorrell*

**1:50 PM – 2:00 PM**

Moving Forward: Intensivist's Perspective  
*S. Nikravan*

1:00 PM – 2:00 PM

**FR ★ The Brian Haluska Sonographer Research Award Competition – Ballroom 6C**

*Chairs: J. Kirkpatrick*

*Judges: F. Asch, C. Mitchell, G. Strachan*

**1:00 PM – 1:03 PM**

Welcome and Introduction of Judges  
*J. Kirkpatrick*

**1:03 PM – 1:13 PM**

SIA-01: Right Heart Function and Recovery in Multisystem Inflammatory Syndrome in Children  
*C. Polsen*

**1:13 PM – 1:23 PM**

SIA-02: Incorporating Ergonomic Scanning Practices in Echocardiography Lab Using Quality Improvement Methodology  
*J. Goulding*

**1:23 PM – 1:33 PM**

SIA-03: Use of Layer Specific Strain Imaging and Shear Wave Elastography to Evaluate Subclinical Cardiovascular Dysfunction in Patients with Turner's Syndrome  
*M. Craft*



## 1:33 PM – 1:43 PM

SIA-04: Reproducibility of Pediatric Echocardiographic Strain Data  
Comparing Two Commonly Used Analysis Methods  
*G. Coburn*

## 1:43 PM – 1:45 PM

Introduction of Guest Speaker  
*J. Kirkpatrick*

## 1:45 PM – 1:55 PM

Sonographer-Led Research: How You Can Make a Difference  
*J. Hodovan*

## 1:55 PM – 2:00 PM

Recognition of Competition Finalists, Announcement of Winner  
*J. Kirkpatrick*

## 1:00 PM – 2:00 PM

### **P** Perioperative Case Dilemmas: Role of Imaging to Optimize Patient Care – Ballroom 6A

*Chairs: J. Thaden, R. Vadlamudi*

## 1:00 PM – 1:02 PM

Session Introduction  
*R. Vadlamudi*

## 1:02 PM – 1:14 PM

Failed Structural Heart Procedures: What's Next for My Symptomatic Patient?  
*G. Mackensen*

## 1:14 PM – 1:26 PM

Imaging for Hybrid Interventional and Surgical Procedures  
*J. Thaden*

## 1:26 PM – 1:38 PM

Mechanical Circulatory Support Decision Making: ECMO vs. Impella vs. BiVAD  
*S. Pai Cole*

## 1:38 PM – 1:50 PM

Perioperative Incidentalomas: Management of Unanticipated Findings on the Intraoperative TEE  
*S. McCartney*

## 1:50 PM – 2:00 PM

Question & Answer

## 1:00 PM – 2:00 PM

### **EC** Advancing Your Academic Career for Physicians Pursuing Research Careers In Adult and Pediatric Cardiology – Room 611-612

*Chairs: P. Douglas, S. Kuttly*

## 1:00 PM – 1:06 PM

Session Introduction  
*P. Douglas*

## 1:06 PM – 1:12 PM

Brief Topics: Funding Options  
*D. Forsha*

## 1:12 PM – 1:18 PM

Brief Topics: Finding Mentors and Collaborators  
*P. Jone*

## 1:18 PM – 1:24 PM

Making Your Job Work for Your Career  
*J. Strom*

## 1:24 PM – 1:30 PM

Quality Improvement Leadership in the Echo Lab  
*J. Kim*

## 1:30 PM – 2:00 PM

Question & Answer

## 1:00 PM – 2:00 PM

### **C** Diagnosis and Novel Intervention for the High Risk Pulmonary Embolism – Room 608-609

*Chairs: G. Kane, M. Park*

## 1:00 PM – 1:10 PM

Rapid Risk Assessment in Pulmonary Embolism  
*J. Horowitz*

## 1:10 PM – 1:20 PM

A Sonographer's Guide to Accurate Assessment of Right Ventricular Dysfunction and Clot-in-Transit in Pulmonary Embolism  
*M. Bremer*

## 1:20 PM – 1:30 PM

Transesophageal Guidance in Placement and Surveillance of ECMO in PE  
*D. Dudzinski*

## 1:30 PM – 1:40 PM

Catheter-Based Therapies for High-Risk Pulmonary Embolism and Clot-in-Transit  
*G. Piazza*



# SUNDAY, JUNE 12 SCHEDULE

## 1:40 PM – 1:50 PM

Imaging Diagnosis and Advanced Treatment Options for Chronic Thromboembolic Pulmonary Hypertension  
*G. Kane*

## 1:50 PM – 2:00 PM

Question & Answer

## 2:30 PM – 3:30 PM

### **IT CROP OFF! – Ballroom 6E**

*Chairs: M. Kraushaar, A. Narang*

## 2:30 PM – 2:35 PM

Mitral Valve Case Presentation  
*S. Walling*

## 2:35 PM – 2:45 PM

Live Cropping the Mitral Valve  
*V. Rigolin*

## 2:45 PM – 2:50 PM

Question & Answer  
*V. Rigolin, S. Walling*

## 2:50 PM – 2:55 PM

Tricuspid Valve Case Presentation  
*C. Marsiglio*

## 2:55 PM – 3:05 PM

Live Cropping the Tricuspid Valve  
*K. Addetia*

## 3:05 PM – 3:10 PM

Question & Answer  
*K. Addetia, C. Marsiglio*

## 3:10 PM – 3:15 PM

Left Atrial Appendage Case Presentation  
*C. Frye*

## 3:15 PM – 3:25 PM

Live Cropping the Left Atrial Appendage  
*M. Saric*

## 3:25 PM – 3:30 PM

Question & Answer  
*C. Frye, M. Saric*

## 2:30 PM – 3:30 PM

### **PC Pediatric Echo Jeopardy Game Show – Ballroom 6B**

*Chairs: M. Brook, T. Slesnick*

Team A

*B. Landeck, N. Pinto, D. Saurers*

Team B

*J. Acevedo, A. Bhat, J. Kovalchin*

Team C

*C. Dunbar, N. Khoo, C. Taylor*

## 2:30 PM – 3:30 PM

### **S Kerber Lecture – Ballroom 6A**

*Chair: S. Mulvagh*

## 2:30 PM – 2:35 PM

Introduction  
*S. Mulvagh*

## 2:35 PM – 3:00 PM

Kerber Lecture: The Dick Kerber Only Some of Us Knew  
*L. Kerber*

## 3:00 PM – 3:30 PM

Women in Echo Networking Session

## 3:45 PM – 5:15 PM

### **M R Multimodality Imaging in Cardiomyopathy – Ballroom 6E**

*Chairs: A. Hays, C. Kramer*

## 3:45 PM – 3:58 PM

Cardiac MRI Basics: What the Echocardiographer Needs To Know  
*Y. Han*

## 3:58 PM – 4:11 PM

What Do I Need to Know About Myocardial Fibrosis?  
*M. Chetrit*

## 4:11 PM – 4:24 PM

Echo Is First Line in Cardiac Amyloid  
*S. Dorbala*

## 4:24 PM – 4:37 PM

CMR Is First Line in Cardiac Amyloid  
*A. Choi*

## 4:37 PM – 4:47 PM

P4-03: Three-Dimensional Speckle-Tracking Echocardiography for Assessment of Left Ventricular Myocardial Fibrosis in Patients with End-Stage Heart Failure: Comparison with Cardiac Magnetic Resonance Imaging  
*Y. Li*



## 4:47 PM – 5:00 PM

Multimodality Imaging in COVID-19

*P. Parwani*

## 5:00 PM – 5:15 PM

Question & Answer

## 3:45 PM – 5:15 PM

### **S** ShowCASE Competition – Ballroom 6C

*Chairs: V. Sorrell, R. Stepien*

*Panelists: M. Makhoud, A. Narang, L. Sugeng*

## 3:45 PM – 3:55 PM

Session Introduction

*V. Sorrell*

## 3:55 PM – 4:05 PM

Mysterious Infantile Cyanosis: An Imaging Case Series  
(Congenital)

*S. Sunthakar*

## 4:05 PM – 4:15 PM

A Rare Case of Cardiac Echinococcosis: The Role of Multimodality  
Imaging (General)

*J. Wedin*

## 4:15 PM – 4:25 PM

Fatal Sinus of Valsalva Aneurysm and Dissection into the Left  
Ventricle With Extension to the Interventricular Septum: A  
Challenging Diagnosis (General)

*J. Armenta-Moreno*

## 4:25 PM – 4:35 PM

Acquired Stenosis of All Four Heart Valves in a Boxer Mix Dog  
(Veterinary)

*M. Boothe*

## 4:35 PM – 4:45 PM

Beyond the Wires: A Case of Leadless Pacemaker -Mediated  
Tricuspid Regurgitation (General)

*F. Cirne*

## 4:45 PM – 5:00 PM

MACH-1: Sonographer Rapid Fire Cases

## 5:00 PM – 5:15 PM

Wrap up and Award Presentation

*V. Sorrell*

## DON'T MISS THE *ECHO* MAGAZINE – NOW A MONTHLY ONLINE PUBLICATION!



ASE has thousands of members, and this means that there are thousands of voices with things to say about echocardiography. This magazine is an outlet for all ASE members to contribute interesting articles or images related to cardiovascular ultrasound that are not research articles/images.

### *Each issue contains:*

- *Communications from the ASE President ASE Councils and Specialty Interest Groups*
- *Education Calendar*

Read past issues and learn more at [ASEcho.org/EchoMagazine](https://ASEcho.org/EchoMagazine).



# GET INVOLVED

ASE Councils bring together ASE members with similar professional interests and areas of expertise, providing a forum for networking, knowledge sharing, provide guidance to the ASE Board of Directors regarding subspecialty area, help create education offerings and guidance on standards of care to the Board and Guidelines and Standards Committee. Council membership is open to all ASE members with an interest in the field, regardless of their area of practice.



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*Mayo Clinic Arizona  
Council on Circulation  
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**G. Monet Strachan, ACS, RDCS, FASE**  
*University of California  
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**Carolyn Altman, MD, FACC, FAHA, FASE**  
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Congenital Heart Disease  
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**Arthur Labovitz, MD, FASE**  
*Naples Cardiac &  
Endovascular Center  
Critical Care  
Echocardiography Council  
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Specialty Interest Groups (SIGs) support our members who have a like interest in specialized areas with growth potential in cardiovascular ultrasound. SIGs bring together ASE members with similar professional interests and areas of expertise, providing a forum for networking, knowledge sharing, and the development of SIG-specific programs and services within ASE.



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*University of Pennsylvania  
Cardio-Oncology  
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**Lucy Safi, DO, FASE**  
*Hackensack University  
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**Muhamed Saric, MD, PhD, FASE**  
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**Etienne Côté, DVM**  
*Atlantic Veterinary  
College | University of  
Prince Edward Island  
Veterinary SIG  
(VetSIG) Chair*



# SCHEDULE AT A GLANCE

## MONDAY, JUNE 13

All times are Pacific time.

REGISTRATION OPEN: 7:30 AM – 5:30 PM / ECHO EXPO OPEN: 10:00 AM – 4:00 PM						
ROOM	BALLROOM 6E	BALLROOM 6C	BALLROOM 6B	BALLROOM 6A	ROOM 611-612	ROOM 608-609
7:30 – 8:30 AM	BREAKFAST – Lobby on Level 6					
8:00 – 10:00 AM	   ARTHUR E. WEYMAN YOUNG INVESTIGATOR COMPETITION and 23 <sup>RD</sup> ANNUAL FEIGENBAUM LECTURE by Harvey Feigenbaum, MD, FASE – Ballroom 6E					
10:00 – 10:30 AM	REFRESHMENT BREAK: VISIT ECHO EXPO AND POSTERS CHALK TALK (10:00 – 10:45 AM): What is the Volume Status of My Patient: How POCUS Can Help – Chalk Talk Theater Echo Expo					
11:00 AM – 12:30 PM	   Stress Echo: Intersection of Guidelines and Clinical Practice	 Value Summit: Maintaining Value in the Echo Lab	  Deep Dive into the Atria	   Multidisciplinary Approach to Complex Adult Congenital Heart Disease Cases	 Mitral Regurgitation: Stuff You Should Know	   Veterinary Echo Cases
11:00 AM – 12:30 PM	 DIY ACQUISITION ROOM: Left Ventricular, Right Ventricular, and Left Atrial Strain – Room 606-607 (Ticketed Event. Additional Fee Required.)					
11:00 AM – 2:30 PM	 LEARNING LAB: Strain/3D in Congenital Heart Disease Patients – Room 602-604 (Ticketed Event. Additional Fee Required.)					
12:30 – 2:00 PM	LUNCH BREAK: VISIT ECHO EXPO MODERATED POSTERS: ECHO EXPO CHALK TALK (12:30 – 1:15 PM): From Twitter To Tenure: How to Effectively Use Social Media as an Echocardiographer – Chalk Talk Theater Echo Expo					
12:45 – 1:45 PM	SCIENCE AND TECHNOLOGY THEATER 1: BRACCO DIAGNOSTICS INC. SCIENCE AND TECHNOLOGY THEATER 2: LANTHEUS					
2:00 – 3:30 PM	    COVID After the Pandemic	 Artificial Intelligence: Echocardiography and the Global Digital Transformation (Joint ASE/EACVI Session)	  Screening and Diagnosis of Complex Aortic Disease	  Establishing a Structural Interventional Imaging Program: An Echocardiographer's Perspective	  Decoding Mysteries of a Thick Heart	 Great Debates: 3D, Artificial Intelligence, and Multimodality Imaging
2:00 – 3:30 PM	 DIY ACQUISITION ROOM: Adult Congenital Heart Disease – Room 606-607 (Ticketed Event. Additional Fee Required.)					
3:30 – 4:00 PM	REFRESHMENT BREAK: VISIT ECHO EXPO AND POSTERS ~ Passport and ASEF CV Challenge Prizes Announced CHALK TALK (3:30 – 4:15 PM): Educating Fellows in the Art of Imaging – Chalk Talk Theater Echo Expo					
3:30 – 4:00 PM	 Speaker's Corner: Great Debates – Atrium Lobby					
4:00 – 5:30 PM	  Discordant Data Dilemmas in Aortic Stenosis	 Great Debates: Transesophageal Echocardiography During Cardiac Arrest Resuscitation	 Deploying Artificial Intelligence Systems in the Echo Lab	  Great Debates: Approaches to Mitral Regurgitation and 3D Quantification	 CODE AORTA! Management and Surveillance of Acute Aortic Syndromes	 Contemporary Role of Echo in Cardio-Oncology
4:00 – 5:30 PM	 MEET THE FACULTY NETWORKING SESSION – Room 204					

ACHD (A) CIRCULATION (C) EARLY CAREER (EC) IMAGING FUNDAMENTALS (F) INNOVATION/TECHNOLOGY (IT) ISCHEMIA (I) MYOCARDIUM/FUNCTION (M)  
PEDIATRIC/CONGENITAL (PC) PERIOPERATIVE (P) POINT OF CARE (POC) RESEARCH (R) SPECIAL SESSIONS (S) VALVES & STRUCTURAL HEART DISEASE (V)

● BASIC ■ BASIC/INTERMEDIATE ▲ INTERMEDIATE ◆ INTERMEDIATE/ADVANCED ♦ ADVANCED ★ BASIC/INTERMEDIATE/ADVANCED

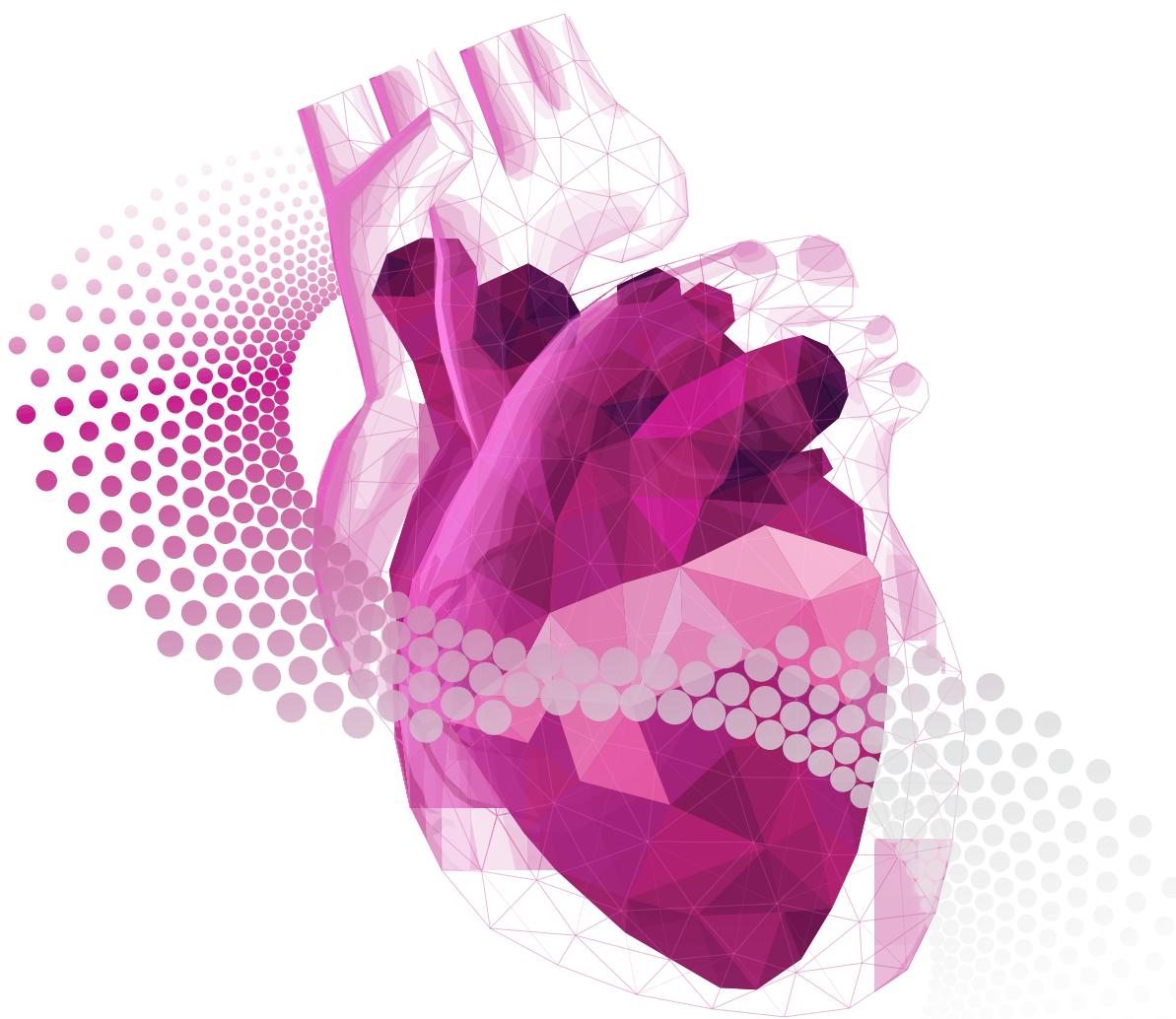
Schedule subject to change. For detailed information, please download the ASE Courses app.





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MONDAY



## 8:00 AM – 10:00 AM

### **R Arthur E. Weyman Young Investigator's Award Competition and 23<sup>rd</sup> Annual Feigenbaum Lecture – Ballroom 6E**

*Chairs: J. Kirkpatrick*

*Judges: F. Asch, B. Cosyns, V. Sachdev, S. Siu, R. Stainback*

#### **8:00 AM – 8:05 AM**

Welcome and Introduction

*J. Kirkpatrick*

#### **8:05 AM – 8:20 AM**

YIA-1: Deep Learning-Based Prediction of Right Ventricular Ejection Fraction Using 2D Echocardiographic Videos

*M. Tokodi*

#### **8:20 AM – 8:35 AM**

YIA-2: Association of Prenatal Level of Care Assignments with Postnatal Clinical Outcomes in Fetuses Diagnosed with Congenital Heart Disease

*S. Ro*

#### **8:35 AM – 8:50 AM**

YIA-3: A Deep Patient-Similarity Learning Framework for Age-Invariant Recognition of Diastolic Dysfunction in Elderly Patients

*R. Shah*

#### **8:50 AM – 9:05 AM**

YIA-4: The Effect of Sonothrombolysis on Infarct Size and Myocardial Salvage in ST Elevation Myocardial Infarction: A Pilot RCT

*P. Jeyaparakash*

#### **9:05 AM – 9:08 AM**

Concluding Remarks

*J. Kirkpatrick*

#### **9:08 AM – 9:11 AM**

Introduction of the Feigenbaum Lecturer

*R. Stainback*

#### **9:11 AM – 9:46 AM**

Feigenbaum Lecture: History of Echocardiography: A Personal Perspective

*H. Feigenbaum*

#### **9:46 AM – 9:48 AM**

Recognition of Feigenbaum Lecturer, Presentation of Plaque, Concluding Remarks

*R. Stainback*

#### **9:48 AM – 9:53 AM**

Recognition of the TOMTEC Innovator Research Travel Grant Recipient, Presentation of Plaque

*TOMTEC Representative*

#### **9:53 AM – 10:00 AM**

Presentation of YIA Plaques and Winner Announcement

*J. Kirkpatrick*

## 10:00 AM – 11:00 AM

### **❖ Quality of Waves – Pre-Recorded Viewing Room 208**

*Chairs: C. Dunbar, C. Fleishman, B. Landeck*

Using Echo Images from Other Centers for Research  
*R. Sachdeva*

The Diagnostic Accuracy of Fetal Imaging  
*K. Stern*

Standards in Multimodality Imaging  
*N. Choueiter*

Quality Improvement: The Role of The Sonographer  
*D. Saurers*

Quality Metrics in Echo Reporting  
*S. Balasubramanian*

## 11:00 AM – 12:30 PM

### **R Stress Echo: Intersection of Guidelines and Clinical Practice – Ballroom 6E**

*Chairs: M. Corretti, T. Ryan*

#### **11:00 AM – 11:15 AM**

Exercise Echo: Challenges in Performing and Reporting the Exercise and EKG Component  
*K. Maganti*

#### **11:15 AM – 11:30 AM**

Dobutamine/Atropine Echo: The Double-Edged Sword of Chemicals  
*M. Corretti*

#### **11:30 AM – 11:45 AM**

Left Ventricular Opacification Use in Stress Echo Imaging: Not All Patients Read the Guidelines  
*H. Leong-Poi*

#### **11:45 AM – 12:00 PM**

Navigating the Selection of a Stress Modality Based on Guidelines  
*A. DeMaria*

#### **12:00 PM – 12:15 PM**

P3-14: Patterns of Global Myocardial Work and Efficiency in True vs. False Positive Dobutamine Stress Echocardiography  
*S. Kachur*

#### **12:15 PM – 12:30 PM**

Question & Answer



# MONDAY, JUNE 13 SCHEDULE

11:00 AM – 12:30 PM

**★ Value Summit: Maintaining Value in the Echo Lab – Ballroom 6C**

*Chairs: S. Mayer, R. Wright*

11:00 AM – 11:15 AM

Value of ImageGuideEcho Registry in Echo Lab Accreditation  
*M. Bremer*

11:15 AM – 11:30 AM

Update on ImageGuideEcho Registry  
*J. Strom*

11:30 AM – 11:45 AM

Appropriate Use of Add-on Codes in Echo Lab (3D and Strain)  
*S. Mayer*

11:45 AM – 12:00 PM

Sonographer Shortage, Satisfaction and Career Growth  
*K. Collins*

12:00 PM – 12:15 PM

Maintaining Quality in Echo Lab: Lessons Learned from COVID  
*G. Rose*

12:15 PM – 12:30 PM

Question & Answer

11:00 AM – 12:30 PM

**▲ R Deep Dive Into the Atria – Ballroom 6B**

*Chairs: L. Hua, A. Klein*

11:00 AM – 11:10 AM

Imaging the Left and Right Atrium  
*T. Thompson*

11:10 AM – 11:23 AM

Assessment of Left Atrial Function on Echocardiography  
*E. Donal*

11:23 AM – 11:36 AM

Atrial Myopathy: What Does It Mean?  
*B. Hoit*

11:36 AM – 11:49 AM

The Importance of the Left Atrium in Diastolic Dysfunction  
*S. Nagueh*

11:49 AM – 12:02 PM

PC-34: Can Right Atrial Size and Phasic Function Provide Prognostic Information in Cardiac Amyloidosis?  
*J. Slivnick*

12:02 PM – 12:15 PM

What Is the Importance of Right Atrial Assessment?  
*L. Hua*

12:15 PM – 12:30 PM

Question & Answer

11:00 AM – 12:30 PM

**▲ R ♦ Multidisciplinary Approach to Complex Cases – Ballroom 6A**

*Chairs: D. DeFaria Yeh, J. Tajik*

11:00 AM – 11:05 AM

Session Introduction  
*D. DeFaria Yeh*

11:05 AM – 11:15 AM

P5-44: Spontaneous Closure of a Large Ventricular Septal Defect by Fibrotic Tissue in an Adult Patient  
*R. Murphy*

11:15 AM – 11:20 AM

Discussions  
*S. Blissett*

11:20 AM – 11:25 AM

Discussions  
*K. Farooqi*

11:25 AM – 11:32 AM

Discussions  
*Z. Steinberg*

11:32 AM – 12:15 PM

Case Follow-Up  
*R. Murphy*

11:42 AM – 12:30 PM

Question & Answer

11:00 AM – 12:30 PM

**▲ F Mitral Regurgitation: Stuff You Should Know – Room 611-612**

*Chairs: R. Martin, E. McIlwain*

11:00 AM – 11:02 AM

Session Introduction  
*R. Martin*

11:02 AM – 11:10 AM

Case Introduction  
*A. Dillenbeck*

11:10 AM – 11:22 AM

Mitral Valve Anatomy  
*D. Ignatowski*



## 11:22 AM – 11:34 AM

Why Quantitate Mitral Regurgitation  
*B. Fey*

## 11:34 AM – 11:46 AM

How To Quantitate: Stroke Volume Methods  
*C. Kramer*

## 11:46 AM – 11:58 AM

How To Quantitate: PISA Method  
*D. McCullough*

## 11:58 AM – 12:10 PM

Stress & Strain for Mitral Regurgitation: When and Why  
*K. Zimmerman*

## 12:10 PM – 12:20 PM

Case Conclusion  
*A. Dillenbeck*

## 12:20 PM – 12:30 PM

Question & Answer

## 11:00 AM – 12:30 PM

### **Veterinary Echo Cases – Room 608-609**

*Chairs: E. Cote, P. Barker*

## 11:00 AM – 11:05 AM

Introduction  
*P. Barker*

## 11:05 AM – 11:25 AM

Close to Our Hearts: The Hearts of Household Animals  
*R. Stepien*

## 11:25 AM – 11:45 AM

In the Wild: The Hearts of More Exotic Animals  
*L. Nelson*

## 11:45 AM – 12:00 PM

Clinical Vignette  
*V. Fuentes*

## 12:00 PM – 12:30 PM

Question & Answer

## 11:00 AM – 12:30 PM

### **DIY Acquisition Room: Left Ventricular, Right Ventricular, and Left Atrial Strain – Room 606-607**

*(Ticketed Event. Additional Fee Required.)*

*DIY Instructors: K. Collins, K. Horton, M. Kraushaar, M. Park, B. Roberts*

## 11:00 AM – 2:30 PM

### **Learning Lab: Strain/3D in Congenital Heart Disease Patients – Room 602-604**

*(Ticketed Event. Additional Fee Required.)*

Introduction to 3D Imaging Basics of Acquisition  
*L. Le*

Imaging Ventricular Septal Defects in Complex Congenital Heart Disease  
*P. Jone*

Imaging the Common Atrioventricular Valve  
*D. Roberson*

Imaging the Abnormal Mitral Valve  
*N. Khoo*

A Beginner's Guide to Strain Imaging  
*D. Forsha*

Strain Analysis on A Vendor Neutral Platform  
*J. Brabender*

## 12:45 PM – 1:45 PM

### **Aortic Stenosis: Diagnostic and Therapeutic Challenges in 2022 – Pre-Recorded Viewing Room 208**

Best Practices for Aortic Stenosis Identification by TTE: Pearls for The Busy Sonographer  
*K. Billick*

Challenging Cases of Doppler Quantification: Low Flow, High Flow, Mixed Valvular Heart Disease  
*S. Robinson*

Aortic Stenosis Imaging with CT: TAVR Planning and Beyond  
*M. Chamsi-Pasha*

TAVR Expectations: Expected Hemodynamics and Complication to Recognize  
*G. Scalia*

Newest Applications of TAVR: Update on Aortic Regurgitation, Bicuspid, and Moderate Aortic Stenosis  
*S. Mankad*

Cases: Diagnostic Data; Intervention; Outcomes; Lessons Learned  
*R. Jain*



# MONDAY, JUNE 13 SCHEDULE

2:00 PM – 3:30 PM

**PC R COVID After the Pandemic – Ballroom 6E**

*Chairs: C. Altman, P. Parker, T. Bharucha*

**2:00 PM – 2:12 PM**

COVID Impact in the Outpatient Setting

*T. Bharucha*

**2:12 PM – 2:24 PM**

Multisystem Inflammatory Syndrome in Children: What Have We Learned

*J. Votava-Smith*

**2:24 PM – 2:36 PM**

COVID Vaccination Sequela

*D. Truong*

**2:36 PM – 2:48 PM**

Impact of COVID in Latin America: Results of the Inter-American Society of Cardiology Survey

*I. Rivera*

**2:48 PM – 3:00 PM**

Multimodality Imaging in COVID

*S. Buddhé*

**3:00 PM – 3:12 PM**

Fetal Diagnosis: Impact on Care and Outcomes

*B. Arya*

**3:12 PM – 3:16 PM**

P5-08: Association of Echocardiographic Indices with Myocarditis and Presence of Myocardial Delayed Enhancement by Cardiac Magnetic Resonance Imaging in Multisystem Inflammatory Syndrome in Children.

*S. Hudson*

**3:16 PM – 3:20 PM**

P5-01: Fatal COVID-19 Fetal Myocarditis

*P. Cabrera*

**3:20 PM – 3:30 PM**

Question & Answer

2:00 PM – 3:30 PM

**S Global Artificial Intelligence– Ballroom 6C**

*(ASE/EACVI Joint Session)*

*Chairs: B. Cosyns, D. Ouyang*



**EACVI**  
European Association of  
Cardiovascular Imaging

**2:00 PM – 2:02 PM**

Session Introduction

*B. Cosyns*

**2:02 PM – 2:19 PM**

Quality in the Era of the Digital Echo Lab

*T. Edvardsen*

**2:19 PM – 2:36 PM**

Digital Health for Echocardiography: Where Do We Stand?

*E. Donal*

**2:36 PM – 2:53 PM**

Challenges of Tomorrow Regarding the Use of Artificial Intelligence in Echocardiography

*P. Knoll*

**2:53 PM – 3:10 PM**

Big Data and Echocardiography: Perspectives

*T. Abraham*

**3:10 PM – 3:30 PM**

Question & Answer

2:00 PM – 3:30 PM

**C R Screening and Diagnosis of Complex Aortic Disease – Ballroom 6B**

*Chairs: M. Cordio, T. Coutinho*

**2:00 PM – 2:15 PM**

Hereditary Thoracic Aortic Disease and Use of Genetic Testing

*R. LeLeiko*

**2:15 PM – 2:30 PM**

The New International Consensus Nomenclature for the Congenital Bicuspid Aortic Valve Condition and Its Aortopathy

*H. Michelena*

**2:30 PM – 2:45 PM**

Controversies in the Multimodality Imaging Diagnosis of a Thoracic Aortic Aneurysm

*J. Markowitz*

**2:45 PM – 3:00 PM**

Use of Ultrasound in Abdominal Aortic Aneurysm: Are We Screening Enough?

*T. Coutinho*

**3:00 PM – 3:15 PM**

P2-01: Prognostic Value of the H<sub>2</sub>FPEF Score in Adults with Repaired Coarctation of Aorta

*K. Andi*

**3:15 PM – 3:30 PM**

Question & Answer



**2:00 PM – 3:30 PM**

**V R Establishing a Structural Interventional Imaging Program: An Echocardiographer's Perspective – Ballroom 6A**

*Chairs: S. Mankad, N. Quader*

**2:00 PM – 2:12 PM**

Training in Interventional Echocardiography in 2022  
*E. Garcia-Sayan*

**2:12 PM – 2:24 PM**

How Did I Get Good At 3D TTE? Tips and Tricks for Success  
*D. Adams*

**2:24 PM – 2:36 PM**

Incorporating Multimodality Imaging in a Structural Heart Imaging Program  
*R. Janardhanan*

**2:36 PM – 2:41 PM**

P3-29: Echocardiographic Predictors of Tricuspid Regurgitation Improvement After Transcatheter Aortic Valve Replacement  
*C. Maraboto Gonzalez*

**2:41 PM – 2:53 PM**

Intraprocedural Guidance: How to Survive in the Cath Lab?  
*L. Safi*

**2:53 PM – 3:05 PM**

Becoming an Indispensable Heart Team Imager: Before and After the Procedure  
*A. Choi*

**3:05 PM – 3:17 PM**

Institutional Models of Support: Recognizing Interventional Echo Quality, Productivity, and Value  
*N. Kelly*

**3:17 PM – 3:30 PM**

Question & Answer

**2:00 PM – 3:30 PM**

**M R Decoding the Mysteries of the Thick Heart – Room 611-612**

*Chairs: A. Johri, D. Wiener*

**2:00 PM – 2:10 PM**

A Case of Left Ventricular Hypertrophy On the Ward  
*A. Woo*

**2:10 PM – 2:27 PM**

Left Ventricular Hypertrophy Phenotypes and How Can Echo Help  
*L. Gillam*

**2:27 PM – 2:44 PM**

The Hypertrophied Ventricle: When is Echo Good Enough  
*M. Chetrit*

**2:44 PM – 2:54 PM**

A Case of Athlete's Heart  
*B. Fey*

**2:54 PM – 3:11 PM**

Echocardiography in the Evaluation of Athletes  
*A. Johri*

**3:11 PM – 3:30 PM**

Question & Answer

**2:00 PM – 3:30 PM**

**EC Great Debates: 3D, Artificial Intelligence, and Multimodality Imaging – Room 608-609**

*Chairs: A. Powell, A. Vainrib*

**2:00 PM – 2:10 PM**

All 3D, All the Time: Live Multiplanar Reformatting for Structural Interventions  
*S. Harb*

**2:10 PM – 2:20 PM**

2D + 3D: The Right Image at the Right Time  
*L. Rudski*

**2:20 PM – 2:25 PM**

Rebuttal: 3D  
*S. Harb*

**2:25 PM – 2:30 PM**

Rebuttal: 2D  
*L. Rudski*

**2:30 PM – 2:40 PM**

Your Lab Needs Artificial Intelligence  
*A. Narang*

**2:40 PM – 2:50 PM**

Your Lab Needs REAL Intelligence  
*N. Pandian*

**2:50 PM – 2:55 PM**

Rebuttal: AI  
*A. Narang*

**2:55 PM – 3:00 PM**

Rebuttal: No AI  
*N. Pandian*

**3:00 PM – 3:10 PM**

Multimodality Imaging is Reality  
*J. Gonzalez*



# MONDAY, JUNE 13 SCHEDULE

## 3:10 PM – 3:20 PM

Monomodality Echo is King

*J. Lu*

## 3:20 PM – 3:25 PM

Rebuttal: Multimodality Training and Practice

*J. Gonzalez*

## 3:25 PM – 3:30 PM

Rebuttal: Echo Training and Practice

*J. Lu*

## 2:00 PM – 3:30 PM

### **A** DIY Acquisition Room: Adult Congenital Heart Disease – Room 606-607

*(Ticketed Event. Additional Fee Required.)*

*Roving Instructors: H. Hayes, D. Ignatowski, A. Kaminski*

*Roving Chairs: R. Jain, B. Schwaegler, K. Stout*

Normal Model: Congenital Views

*H. Borchers*

Right Ventricle to Pulmonary Artery Conduit

*N. Enger*

Transposition of the Great Arteries Repair

*L. Hua*

Fontan Connections

*C. West*

## 3:30 PM – 4:00 PM

### **EC** Speaker's Corner: Great Debates – Atrium Lobby

## 4:00 PM – 5:30 PM

### **A** ❖ Shunt Lesions in Adults – Pre-Recorded Viewing Room 208

*Chairs: R. Ducas, N. Nanda*

Percutaneous Closure of Secundum ASDs in Simple and Complex Anatomy

*A. Armstrong*

Not All Shunts Are Holes - Anomalous Pulmonary Veins

*C. West*

Percutaneous Closure of Sinus Venosus ASDs - The Next Frontier

*S. Kabir*

Not All Holes Are Bad - Importance of Septal Defects in Selected Conditions

*R. Macrae*

Panel Discussion

## 4:00 PM – 5:30 PM

### **F** Discordant Data Dilemmas in Aortic Stenosis – Ballroom 6E

*Chairs: J. Gardin, M. LeFevre*

## 4:00 PM – 4:02 PM

Session Introduction

*J. Gardin*

## 4:02 PM – 4:10 PM

Case Introduction

*M. Parker*

## 4:10 PM – 4:22 PM

Common Technical Errors

*C. Bergeron*

## 4:22 PM – 4:34 PM

Fundamentals of Low Flow States

*K. Billick*

## 4:34 PM – 4:46 PM

Prognostic Value of Flow Rate

*R. Mankad*

## 4:46 PM – 4:58 PM

Deciphering Results with Stress Echo

*G. Strachan*

## 4:58 PM – 5:10 PM

How Can Strain Help?

*J. Warmsbecker*

## 5:10 PM – 5:20 PM

Case Conclusion

*M. Parker*

## 5:20 PM – 5:30 PM

Question & Answer

## 4:00 PM – 5:30 PM

### **POC** Great Debates: Transesophageal Echocardiography During Cardiac Arrest Resuscitation – Ballroom 6C

*Chairs: S. Mankad, S. Nikravan*

## 4:00 PM – 4:30 PM

Resuscitative TEE in the Operating Room

*S. Nikravan*

## 4:30 PM – 5:00 PM

Resuscitative TEE in the Intensive Care Unit

*J. Horowitz*

## 5:00 PM – 5:30 PM

Resuscitative TEE in the Emergency Room

*F. Teran*



**4:00 PM – 5:30 PM**

## ★ **Deploying AI Systems in the Echo Lab – Ballroom 6B**

*Chairs: C. Chow, D. Ouyang*

**4:00 PM – 4:10 PM**

40,000 Foot Overview

*C. Chow*

**4:10 PM – 4:25 PM**

View Classification and Organizing Echo Studies

*R. Arnaout*

**4:25 PM – 4:40 PM**

Automated Pipelines for Disease Detection and Characterization

*D. Ouyang*

**4:40 PM – 4:55 PM**

Integrations into Clinical Echo Labs

*M. Jankowski*

**4:55 PM – 5:10 PM**

Point of Care Ultrasound

*P. Sengupta*

**5:10 PM – 5:30 PM**

Question & Answer

**4:00 PM – 5:30 PM**

## 📌 **Great Debates: Approaches to Mitral Regurgitation and 3D Quantification – Ballroom 6A**

*Chairs: K. Howard-Quijano, J. Thaden*

**4:00 PM – 4:04 PM**

Session Introduction

*K. Howard-Quijano*

**4:04 PM – 4:09 PM**

Case Presentation

*K. Horton*

**4:09 PM – 4:22 PM**

To Clip It or Snip It? Surgical Repair (Mitral Regurgitation)

*D. Ramzy*

**4:22 PM – 4:35 PM**

To Clip It or Snip It? Interventional Repair (Mitral Regurgitation)

*G. Mackensen*

**4:35 PM – 4:43 PM**

Rebuttal

*G. Mackensen, D. Ramzy*

**4:43 PM – 4:48 PM**

Case Presentation

*R. Vadlamudi*

**4:48 PM – 5:01 PM**

3D Quantification in An Era of 2D Guidelines: 3D Measurements

Guide Us

*A. Smer*

**5:01 PM – 5:14 PM**

3D Quantification in An Era of 2D Guidelines: 3D Measurements

Can't Help Us Yet

*A. Faloye*

**5:14 PM – 5:22 PM**

Rebuttal

*A. Faloye, A. Smer*

**5:22 PM – 5:30 PM**

Question & Answer

**4:00 PM – 5:30 PM**

## 📌 **CODE AORTA! Management and Surveillance of Acute Aortic Syndromes – Room 611-612**

*Chairs: C. Fanola, R. Janardhanan*

**4:00 PM – 4:15 PM**

Acute Aortic Syndromes and Cardiac Complications

*S. Henkin*

**4:15 PM – 4:30 PM**

Complications of Thoracoabdominal Aortic Disease and the Chronic Dissection

*A. Aday*

**4:30 PM – 4:45 PM**

Imaging and Endovascular Intervention for Descending Aortic Disease

*TBD*

**4:45 PM – 5:00 PM**

Perioperative TEE Guidance in Aortic Repair

*C. Fanola*

**5:00 PM – 5:15 PM**

Imaging Surveillance of Post-Operative Thoracic Aortic Disease for the Echocardiographer

*J. Markowitz*

**5:15 PM – 5:30 PM**

Question & Answer



# MONDAY, JUNE 13 SCHEDULE

**4:00 PM – 5:30 PM**

**M Contemporary Role of Echo in Cardio-Oncology – Room 608-609**

*Chairs: J. Liu, J. Lopez-Mattei*

**4:00 PM – 4:10 PM**

Case Presentation of Cardiotoxicity as a Prelude to the Next Talk  
*C. Angulo*

**4:10 PM – 4:23 PM**

Surveillance and Treatment of Cancer Therapy Related Cardiac Dysfunction  
*N. Akhter*

**4:23 PM – 4:36 PM**

Radiation-induced Changes in the Heart  
*M. Scherrer-Crosbie*

**4:36 PM – 4:49 PM**

Check Point Inhibitors: What Are They and What Do I Need to Watch For?  
*A. Barac*

**4:49 PM – 5:02 PM**

How to Use Strain in the Oncology Population  
*J. Plana*

**5:02 PM – 5:15 PM**

Vascular Toxicity Related to Cancer Therapy  
*A. Yu*

**5:15 PM – 5:30 PM**

Question & Answer

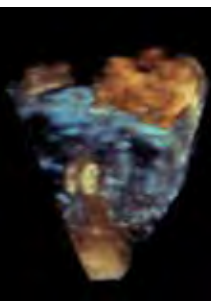
**4:00 PM – 5:30 PM**

**★ Meet the Faculty Networking Session – Room 204**

*Hosts: S. Buddhe, J. Strom, T. Thompson*

*M. Cohen, B. Eidem, L. Gillam, J. Hung, L. Lopez, C. Otto, V. Rigolin, M. Swaminathan, N. Weissman*

**10<sup>th</sup>**  
**A N N U A L**



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The Rules: The member referral program is an ASE member benefit designed to encourage current members to spread the word about the value of ASE membership. If you are not sure of your member status, call us at 919-861-5574. This offer expires August 31, 2022. New members must include the referring member's name on the membership application to receive the ASE referral gift. Referring credit is received once a new member joins ASE. A maximum of one free membership per member per year can be earned.

\*International Ambassadors and International new members through this program will receive an ASE branded face mask. We are no longer able to ship SpinSockets internationally.



## Image Calendar COMPETITION is back for 2023

Deadline to submit images is August 8

Visit [ASEcho.org/ImageCalendar](https://ASEcho.org/ImageCalendar)  
for competition rules and instructions.



# ASE

AMERICAN SOCIETY OF  
ECHOCARDIOGRAPHY  
*Sound Saves Lives*



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**Excellence in  
Patient Care**  
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**Earning IAC accreditation indicates that your facility is:**



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IAC's seal of approval verifies the quality your patients deserve. By earning IAC accreditation, you are showing referring physicians, patients and insurers that **your facility has undergone a rigorous evaluation, has been found to be in compliance with industry standards and is committed to continuous quality improvement.**

**Engaged in Continuous Improvement**

The IAC accreditation process is more than an update every three years. Accredited facilities receive a detailed Application Review Findings document as a **tool for improving the overall quality of their facility.** Special topic webinars, a CE finder and the IAC Quality Improvement (QI) Self-Assessment Tool are offered complimentary. Facilities use the QI Tool to assess case studies and final reports and receive a quantitative report targeting opportunities for continuous process improvement.



**Complying with Reimbursement and Regulatory Mandates**

**IAC notifies CMS and third-party payers of the status of accredited facilities to help ensure compliance with related mandates.** Physicians may also utilize IAC accreditation to satisfy a component of the Centers for Medicare & Medicaid Services (CMS) MIPS Improvement Activity as part of the MACRA Quality Payment Program. The IAC QI Tool is an independent option that may also be utilized to satisfy the MIPS Improvement Activity and MOC.

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# Echo Your Passion. Apply for FASE!

Echo practitioners of all specialty types who demonstrate proficiency and dedication to the field of cardiovascular ultrasound may apply to be a Fellow of the American Society of Echocardiography (FASE). The FASE credential recognizes dedicated ASE members with an extraordinary commitment to the field of cardiovascular ultrasound.

**Visit the ASE Headquarters Booth #1721 to learn more about applying for FASE.**



**Alexandra  
Gardner, RDCS  
(AE, PE), FASE**

*Sarasota Memorial  
Health Care System*



Being a FASE has allowed me to meet so many highly intelligent medical professionals from all over to collaborate with and expand my knowledge of the field.



**José L. Díaz-  
Gómez, MD,  
FCCM, FASE,  
NCC (UCNS)**

*Baylor St. Luke's  
Medical Center*



The FASE credential allows me to collaborate effectively in critical care echocardiography (CCE)/POCUS with the most diverse and talented colleagues representing many medical societies. A distinct blend between critical care medicine and CCE/POCUS!



**Pei-Ni Jone,  
MD, FASE**

*Children's Hospital  
Colorado, University  
of Colorado Anschutz  
Medical Campus*



As a FASE member, I am committed to the innovation in the field of ultrasound and love collaborating with colleagues around the world to advance the field of echocardiography.



**Muhamed  
Saric, MD,  
PhD, FASE**

*New York University*



Being a FASE allows me to learn from and share my knowledge of the amazing world of 3D echocardiography with my colleagues from around the world.



**Lucy M. Safi,  
DO, FASE**

*Hackensack University  
Medical Center*



Being a FASE highlights my commitment to education and quality in the field of echocardiography. As a FASE I am a member of a community that focuses on education, quality and shows commitment in the field of echocardiography.

## FASE Lounge: Rooms 615-617

Saturday, June 11 ..... 9:00 AM – 4:00 PM  
Sunday, June 12 ..... 9:00 AM – 4:00 PM  
Monday, June 13 ..... 9:00 AM – 4:00 PM



**FASE**

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





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Industry Roundtable  
Partners.*

Visit our IRT Partners  
in the Echo Expo on Level 4.



BOOTH #1720



LIFE FROM INSIDE  
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BOOTH #2106



BOOTH #1707



BOOTH #1915



BOOTH #1507



BOOTH #1907



BOOTH #1715



BOOTH #1726



## FRIDAY, JUNE 10

### ASE COUNCIL NETWORKING EVENTS

3:45 – 5:30 PM

ASE's four Councils will hold concurrent networking events on Friday afternoon. These events provide attendees the opportunity to learn about the Councils as they hold a brief business meeting followed by networking. If you are not currently a member of a Council, please plan to visit all four sessions and decide which one, or more, will be a good match for helping you advance your career.

### WELCOME RECEPTION FEATURING ASE'S SPECIALTY INTEREST GROUPS

5:30 – 6:30 PM

Join us for a Welcome Reception, where complimentary beer and wine, and light hors d'oeuvres will be served, to kick off the ASE 2022 Scientific Sessions! Each of ASE's six Specialty Interest Groups (SIGs), Cardio-Oncology, Critical Care Echocardiography (CCE), Emerging Echo Enthusiasts (E3), Interventional Echocardiography (IE), Neonatal Hemodynamics TnECHO SIG (NHTS) and Veterinary, will have a designated area to gather that will make it easy for attendees to interact and learn about the SIGs. The Welcome Reception will take place in Ellis Plaza (outdoors, weather permitting) and Atrium Lobby Level 4.

## SATURDAY, JUNE 11

### ASEF CARDIOVASCULAR CHALLENGE

ASEF BOOTH ATRIUM LOBBY LEVEL 4



Compete with your feet and get moving with the ASE Foundation Cardiovascular Challenge. Sign up to participate at the ASEF Booth in the Atrium Lobby Level 4, then record your miles exercised every day and log them at the booth. The person with the most overall miles logged will receive a \$150 Amazon gift card, second place will receive a \$75 Amazon gift card, and the person with the third highest will receive a limited edition ASEF hat. The winners will be announced Monday, June 13, at 3:30 PM in the Echo Expo. Special thanks to our 2022 Cardiovascular Challenge sponsors, AGFA HealthCare, CIVCO Medical Solutions, DiA Imaging Analysis, and the Intersocietal Accreditation Commission (IAC).



### HEARTS ALL AROUND US GALLERY

A special curated showcase of photographs will be on display from Saturday - Monday. This year's photo exhibit is *Hearts All Around Us*, and will showcase photographs of heart-shaped things you have come across in nature, architecture, and everyday life. Many photos will be available to take home with a donation to the ASE Foundation. Stop by the ASE Foundation booth to see hearts all around.

### STATE OF ASE, AWARDS PRESENTATION, FASE AND LEADERSHIP ACADEMY RECOGNITION, INCOMING PRESIDENT'S MESSAGE, AND 33<sup>RD</sup> ANNUAL EDLER LECTURE

7:00 – 9:30 AM

BALLROOM 6E LEVEL 6



**Catherine Otto, MD, FASE**, University of Washington Medical Center, Seattle, Washington, will present "Aortic Valve Stenosis: Moving from Diagnosis to Patient Outcomes" as the 33<sup>rd</sup> Annual Edler Lecture on Saturday morning, June 11. Dr. Otto is the J. Ward

Kennedy-Hamilton Endowed Chair in Cardiology, Professor of Medicine, and Director of the Heart Valve Clinic at the University of Washington School of Medicine. She is recognized internationally as an expert in the diagnosis and management of heart valve disease, Marfan syndrome, and other inherited structural heart conditions. Dr. Otto's research has transformed our understanding of calcific valve disease, showing that it may be amenable to medical therapy rather than being an inevitable consequence of aging. She is the author of several cardiology textbooks and cardiology editor-in-chief for the online medical textbook, *UpToDate*. Created in 1990, the annual Edler Lecture honors the founder of echocardiography, Dr. Inge Edler.

### LIFETIME ACHIEVEMENT AWARDS

ASE Lifetime Achievement Awards recognize individuals who have had a lifetime of outstanding achievements in the field of cardiovascular ultrasound, and have served as role models through service, research, and teaching. These individuals have a career in cardiovascular ultrasound spanning at least 25 years and are recognized at local, national, and international levels.



**Arthur J. Labovitz, MD, FACC, FACP, FCCP, FASE, FAHA**, Naples Cardiac & Endovascular Center (Retired), Naples, FL, has been named the 2022 Physician Lifetime Achievement Award recipient. Dr. Labovitz has made numerous contributions to echocardiography in his 40-year career as a clinician-researcher,

mentor, and volunteer. In addition to serving in a variety of leadership positions at major hospitals in Missouri and Florida, Dr. Labovitz had led and participated in more than 100 clinical research studies and has published over 400 scientific articles, books, and book chapters. As an active member of many health-care-related organizations, he served on ASE's Board of Directors from 1995-1997; numerous ASE committees; and most recently he helped establish the ASE Critical Care Specialty Interest group that will become the Critical Care Council in July 2022. He is also a founding member and Past President of the National Board of Echocardiography.





**Carol Mitchell, PhD, RDMS, RDCS, RVT, RT(R), ACS, FASE**, University of Wisconsin, Madison, WI, has been named the 2022 Sonographer Lifetime Achievement Award recipient. Dr. Mitchell is being honored for her exceptional capabilities as a sonographer, instructor, and leader in ultrasound imaging and

for the many ways she has helped advance the role sonographers play in providing quality patient care. A prolific teacher and education researcher, Dr. Mitchell was awarded the Society of Diagnostic Medical Sonography's Distinguished Educator of the Year Award in 2006 and ASE's Cardiac Sonographer Distinguished Teacher Award in 2010. She has held a variety of volunteer leadership positions on ASE councils, committees, and task forces—including serving as ASE's Treasurer from 2018-2021. Dr. Mitchell has been instrumental in helping ASE create adaptive learning models and resources that provide quality cardiovascular education to all members.

## RICHARD POPP EXCELLENCE IN TEACHING AWARD



Recognized for his passion for education, love of echocardiography, and his ability to combine the two to inspire all levels of learners,

**Gregory J. Ensing, MD, FASE**, University of Michigan, Ann Arbor, MI, has been named the 21<sup>st</sup> annual recipient of the Richard Popp Excellence in Teaching Award. Dr. Ensing has

helped train more than 100 practicing pediatric and adult cardiologists, and is proud to have mentored many gifted sonographers, echocardiography lab directors, and pediatric ASE leaders. He is also a recipient of the Morris Green Pediatric Teaching Award at Indiana University and the inaugural Dennis Crowley Pediatric Cardiology Teaching Award at the University of Michigan. This ASE teaching award is given in honor of the Society's second president, Richard L. Popp, MD, FASE, and recognizes physicians who epitomize the ideal qualities possessed by a mentor and role model.

## OUTSTANDING ACHIEVEMENT IN PERIOPERATIVE ECHOCARDIOGRAPHY AWARD



**Annette Vegas, MD, FASE**, Toronto General Hospital, Toronto, Ontario, Canada, has been named the 9<sup>th</sup> recipient of the Outstanding Achievement in Perioperative Echocardiography Award. Dr. Vegas is a well-respected perioperative echocardiographer and currently

serves as the Director of Perioperative Echocardiography at Toronto General Hospital in Canada. Her clinical interests are cardiac anesthesia, adult congenital heart disease, and TEE. In addition to authoring an impressive list of books, book chapters, and articles on echocardiography, she is an award-winning

educator and developer of the popular educational website Virtual TEE (<http://pie.med.utoronto.ca>). She is also an original organizer of the largest TEE meeting in Canada—the TGH TEE Symposium. The Council recognizes an individual who has made significant clinical, research, or educational contributions to the development of the field of perioperative echocardiography with the presentation of this award.

## FOUNDERS' AWARD FOR LIFETIME ACHIEVEMENT IN ECHOCARDIOGRAPHY FOR PEDIATRIC AND CONGENITAL HEART DISEASE



**Lisa Hornberger, MD, FASE**, Stollery Children's Hospital, Edmonton, Alberta, Canada, is being honored as the 17<sup>th</sup> recipient of the Founders' Award for Lifetime Achievement in Echocardiography for Pediatric and Congenital Heart Disease, which

recognizes continued major scholarly contributions to the field of pediatric echocardiography. Nearly 30 years ago, Dr. Hornberger was introduced to research in pediatric and fetal echocardiography by her mentor and friend, the late David Sahn, MD, FASE. She has served as the Director of Fetal Cardiac Programs at internationally recognized institutions in the United States and Canada, and her work has played a role in starting some of the first early fetal echocardiography programs in North America. Dr. Hornberger's research has spanned clinical, population, health services, and basic science research pillars through strategic collaborations with local, regional, national, and international colleagues.

## COUNCIL ON CIRCULATION & VASCULAR ULTRASOUND LUMINARY AWARD



The Council on Circulation & Vascular Ultrasound (CAVUS) is pleased to present **Soo Hyun (Esther) Kim, MD, MPH, RPVI, FASE**, Vanderbilt University Medical Center, Nashville, TN, with the inaugural CAVUS Luminary Award for her many contributions to the

scholarly, educational, and clinical endeavors in the fields of circulation and vascular ultrasound. In addition to authoring an impressive list of peer-reviewed publications and reviews, Dr. Kim has given more than 100 invited lectures on vascular imaging. Dr. Kim was an author on the ASE document "Recommendations for the Assessment of Carotid Arterial Plaque by Ultrasound for the Characterization of Atherosclerosis and Evaluation of Cardiovascular Risk" and she chaired the writing committee for the 2020 Society of Vascular Medicine/Society of Vascular Ultrasound "Consensus Statement for the Interpretation of Arterial and Venous Doppler Waveforms," a document that will standardize reporting in vascular labs across the world.



## MERITORIOUS SERVICE AWARD



ASE is pleased to present **Neil J. Weissman, MD, FACC, FASE**, MedStar Health Washington, DC, with the 2022 Meritorious Service Award, which recognizes individual members for their substantial and generous efforts to the Society's betterment. Dr. Weissman is an ASE all-star. He served as President from

2014-2015, Chair of two successful Echo Hawaii courses, and has chaired or co-chaired a large number of committees and task forces. His work as Chair of the Governance and Compliance Committee spearheaded changes in the organization's structure and code of ethics. He conceived of, and implemented, the ASE Leadership Academy as a way of growing the future leadership of the Society ensuring they develop the necessary skills to effectively lead ASE into the future. When not going above and beyond as a volunteer, Dr. Weissman works as the Chief Scientific Officer for MedStar Health in Washington, D.C. and Maryland, and Professor of Medicine (Cardiology) at Georgetown University School of Medicine.

## MENTORSHIP AWARD



ASE recognizes **Karen Zimmerman, BS, ACS, RDCS (AE, PE), RVT, FASE**, Henry Ford Health System, Detroit, MI, as the 2022 Mentorship Award recipient. Ms. Zimmerman is a founding Editor-in-Chief of CASE. She started as the only sonographer in a small northern Michigan hospital. She became the

Advanced Imaging Specialist for Munson Healthcare bringing 3D image-guidance to the open-heart and transcatheter programs. She established the West Virginia University School of Echocardiography, and now provides sonographer education and QA as Quality Facilitator for Henry Ford Health. Ms. Zimmerman has served on various ASE councils, writing groups and special projects. She serves on the Michigan Society of Echocardiography and Michigan ACC Cardiovascular Team. Her career has centered on mentoring across the full spectrum of clinical echocardiographers, those for whom English is a second language, and first-time authors and imagers from around the world.

## CHALK TALKS

9:30 – 10:00 AM | 12:00 – 12:45 PM |  
2:30 – 3:00 PM  
ROOM 204 LEVEL 2

Have clinical questions? This is your opportunity to get answers from luminaries in the field of echo in an intimate setting. During the morning break, **Theodore Abraham, MD, FASE**, will be available to answer all of your questions about Advanced Hemodynamics in Hypertrophic Cardiomyopathy. During the lunch break you can hear all about the three ASE Foundation E21 Research Grants from **Patricia Pellikka, MD, FASE**, **Jonathan Rubin, MD, PhD**, and **David Giraud, MD**. The afternoon break will feature Strain Imaging and Left Ventricular Mechanics with **James Thomas, MD, FASE**.

## KALMANSON LECTURE

10:00 – 11:30 AM  
ROOM 611-612 LEVEL 6



The ASE Foundation is honored to recognize **Olivier Villemain, MD, PhD**, The Hospital for Sick Children, Toronto, Ontario, Canada, as the 2022 Kalmanson Lecturer. Established in memory of Professor Daniel Kalmanson, a pioneer in the use of Doppler echocardiography, and funded through a grant from the International

Cardiac Doppler Society (ICDS), this annual lectureship provides a forum for honoring worthy investigators while promoting research and education in cardiovascular Doppler ultrasound. Dr. Villemain will present his lecture entitled "Ultrafast Ultrasound: Insight Into Left Ventricular Mechanics" during the New Waves to Assess Ventricles session.

## PRESIDENT'S RECEPTION

4:00 – 6:00 PM  
ECHO EXPO

All attendees are invited to celebrate ASE 2022 at the President's Reception, hosted by ASE President, **Raymond Stainback, MD, FASE**. This is an opportunity to network with colleagues and friends while learning more about the newest equipment and services in the cardiovascular field. Nearly 40 exhibitors will be showcasing their products. Complimentary beer and wine, and light hors d'oeuvres will be available at many stations throughout the hall. Admission is included in your registration fee, and guest tickets can be purchased during the registration process.



# SPECIAL EVENTS AND NETWORKING OPPORTUNITIES

## ASE 2022 PRESIDENT'S CIRCLE (PC)

### POSTER SESSION

4:00 – 6:00 PM

#### TOPIC

#### POSTERS

3D Echocardiography .....PC-01 through PC-02

Artificial Intelligence /  
Machine Learning .....PC-03 through PC-05

New Technology .....PC-06 through PC-08

Cardio-Oncology .....PC-09 through PC-10

Critical Care Ultrasound /  
Point of Care Ultrasound .....PC-11 through PC-12

Echocardiography in Myocardial  
Disease (HCM, Amyloidosis,  
Sarcoidosis, Chagas) .....PC-13 through PC-14

Echocardiography in Systemic  
Diseases (DM, HTN, Obesity) /  
Pericardial Disease .....PC-15 through PC-20

Pediatric & Congenital  
Heart Disease .....PC-21 through PC-31

Quality / Practice Improvement /  
Education .....PC-32 through PC-33

Value of Echocardiography  
(Quality & Cost) / Outcomes /  
Comparative Effectiveness .....PC-34

Valvular Heart Disease: Aorta .....PC-35 through PC-37

Valvular Heart Disease: Mitral .....PC-38 through PC-41

Ventricular Function /  
Myocardial Mechanics .....PC-42 through PC-52

## SCIENCE & TECHNOLOGY THEATER

4:30 – 5:15 PM

ECHO EXPO

THEATER 1

### Imaging the Heart: Echocardiographic Approaches for HCM

*Presented by Bristol Myers Squibb*

This session reviews echo imaging and findings that should raise considerations for obstructive hypertrophic cardiomyopathy (oHCM) and describes evaluations of left ventricular hypertrophy, ejection fraction, and outflow tract obstruction as components of patient assessment.

*Refreshments are provided by ASE, with support from Bristol Myers Squibb, and are included in all Scientific Sessions registration fees, but space and food are first come, first served. This session is not part of the official ASE 2022 Scientific Sessions as planned by the Program Committee or in any way endorsed by or affiliated with ASE.*

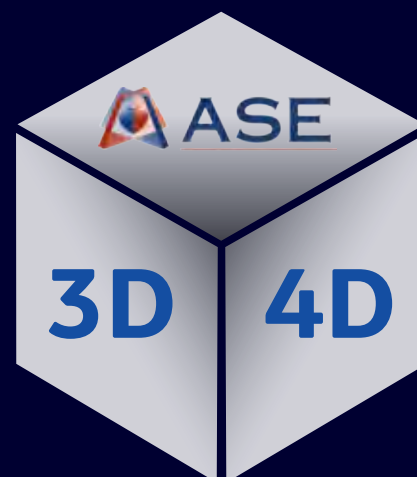
**ASE has partnered with echo companies to facilitate  
3D/4D data connections and integrations across vendors.**

**Join these vendors alongside leaders from ASE for a  
public demonstration of interoperable 3D/4D data and  
see how we are working together to provide seamless  
access.**

**Sunday: 12:15 – 1:00 PM**

**Monday: 10:00 – 11:00 AM**

**Visit Booth #1420 in the Echo Expo**





## SUNDAY, JUNE 12

### POSTER SESSION 1 (P1)

9:00 AM – 2:45 PM

ECHO EXPO

### MODERATED POSTER SESSION 1

11:00 AM – 1:00 PM

Critical Care Ultrasound /  
Point of Care Ultrasound .....PC-11

Echocardiography in Systemic Disease  
(DM, HTN, Obesity) / Pericardial Disease .....PC-15

Pediatric & Congenital  
Heart Disease.....PC-21 through PC-25

Valvular Heart Disease: Aorta .....PC-35 through PC-36

Valvular Heart Disease: Mitral .....PC-38 through PC-40

### SESSION 1 (P1): 9:00 – 9:45 AM

Critical Care Ultrasound /  
Point of Care Ultrasound .....P1-01 through P1-08

Echocardiography in Myocardial  
Disease (HCM, Amyloidosis,  
Sarcoidosis, Chagas).....P1-09 through P1-17

Echocardiography in SOE /  
Arrhythmias / Atrial Function .....P1-18 through P1-23

Echocardiography in Systemic  
Diseases (DM, HTN, Obesity) /  
Pericardial Disease.....P1-24 through P1-39

Adult Patient Cases .....P1-40 through P1-51

### SESSION 2 (P2): 10:00 – 10:45 AM

Adult Congenital Heart Disease.....P2-01 through P2-06

Pediatric & Congenital  
Heart Disease.....P2-07 through P2-52

### SESSION 3 (P3): 1:00 – 1:45 PM

Diseases of the Aorta /  
Vascular Diseases .....P3-01 through P3-02

Valvular Heart Disease: Aorta .....P3-03 through P3-13

Valvular Heart Disease: Mitral .....P3-14 through P3-28

Valvular Heart Disease:  
Tricuspid & Pulmonic .....P3-29 through P3-36

Intraprocedural Echocardiography  
(Operating Room and  
Interventional Lab) / TEE.....P3-37 through P3-41

Adult Patient Cases .....P3-42 through P3-52

### SESSION 4 (P4): 2:00 – 2:45 PM

Adult & Pediatric Heart Failure /  
Transplant / Other.....P4-01 through P4-07

Athlete's Heart .....P4-08

Cardio-Oncology.....P4-09 through P4-10

Doppler / Hemodynamics.....P4-11

Ischemic Heart Disease .....P4-12 through P4-14

Ventricular Function /  
Myocardial Mechanics.....P4-15 through P4-23

Adult Patient Cases .....P4-24 through P4-52

### GARDIN LECTURE

8:30 – 9:00 AM

BALLROOM 6E LEVEL 6



ASE is proud to have **Suzanne Simard, PhD**, Professor of Forest Ecology at the University of British Columbia and author of *Finding the Mother Tree: Discovering the Wisdom of the Forest* deliver the 4<sup>th</sup> Annual Gardin Lecture, "Finding the Mother Tree" on Sunday, June 12. This lectureship was endowed to the ASE

Foundation through a generous gift from ASE Past President, Julius Gardin, MD, FASE. Dr. Gardin mentored numerous physicians and sonographers and this lecture series supports his passion for education by providing funding to bring a luminary speaker to the Scientific Sessions every year.

### BOOK SIGNING WITH SUZANNE SIMARD, PHD

9:00 – 10:00 AM

ASE FOUNDATION TABLE LEVEL 6



Dr. Simard will be signing copies of her book *Finding the Mother Tree: Discovering the Wisdom of the Forest*. Copies of the book were available for pre-order and a limited number are available for purchase on-site. 100% of each sale will be treated as a charitable donation to the ASE Foundation. Be sure to stop by and meet the author of this fascinating book!



# SPECIAL EVENTS AND NETWORKING OPPORTUNITIES

## CHALK TALKS

9:00 – 9:30 AM | 11:30 AM – 12:15 PM |  
2:00 – 2:30 PM

### ECHO EXPO – CHALK TALK THEATER

**Jonathan Lindner, MD, FASE**, will be sharing about Novel Uses of Agitated Saline and Contrast in Ultrasound and answering your questions during the morning break. The Future of QI in Pediatric Cardiology: The QI Consortium is the topic of the lunch Chalk Talk with **Ritu Sachdeva, MBBS, FASE, Brian Soriano, MD, FASE**, and **Kenan Stern, MD, FASE**. The afternoon break will feature **William Zoghbi, MD, FASE**, discussing Aortic Stenosis: Clarifying the Concepts of Severity.

## SCIENCE & TECHNOLOGY THEATERS

9:00 – 9:45 AM  
ECHO EXPO

### THEATER 1

#### **Optimizing Imaging in the MitraClip™ Procedure to Treat Complex Mitral Valve Anatomies: A Case Based Discussion** *Presented by Abbott*

Join us to learn more about screening for mitral regurgitation in patients with complex mitral valve anatomies, and for a case-based discussion on ways to optimize imaging during a MitraClip™ Procedure to treat both simple and complex anatomies.

### THEATER 2

#### **Utilizing Imaging Approaches to Identify Patients with Transthyretin Amyloid Cardiomyopathy (ATTR-CM) for Appropriate Treatment** *Presented by Pfizer*

Transthyretin amyloid cardiomyopathy (or ATTR-CM) is an under-recognized and underdiagnosed disease that presents as heart failure. This presentation will provide an overview of the importance of echocardiography imaging in the detection and diagnosis of patients with ATTR-CM. Throughout the program, the focus will be on the burden of disease, signs and symptoms, confirming suspicion, and screening for ATTR-CM in patients who may be undiagnosed. The program will end with an overview of a treatment option for patients with ATTR-CM.

*Refreshments are provided by ASE, with support from Abbott and Pfizer, and are included in all Scientific Sessions registration fees, but space and food are first come, first served.*

*These sessions are not part of the official ASE 2022 Scientific Sessions as planned by the Program Committee or in any way endorsed by or affiliated with ASE.*

## SCIENCE & TECHNOLOGY THEATERS

11:15 AM – 12:15 PM  
ECHO EXPO

### THEATER 1

#### **Advanced Contrast Echo for Ischemic Heart Disease** *Presented by GE Healthcare*

The use of ultrasound-enhancing agents (UEAs) is now considered essential for state-of-the-art echocardiography. The aim of this symposium is to provide education on applications of contrast echocardiography in ischemic syndromes beyond LV opacification, including myocardial perfusion imaging and therapeutic applications.

### THEATER 2

#### **Novel Approach to 3D Use in Routine and Interventional Echocardiography Exams** *Presented by Philips*

Join leading imagers, researchers, and professors in exploring new and emerging 3D echocardiography solutions designed to strengthen clinical confidence, build efficiency through the care pathway, and improve cardiac care experiences.

*Lunch is provided by ASE, with support from GE Healthcare and Philips, and is included in all Scientific Sessions registration fees. Space and food are first come, first served.*

*These sessions are not part of the official ASE 2022 Scientific Sessions as planned by the Program Committee or in any way endorsed by or affiliated with ASE.*

## ImageGuideEcho REGISTRY INFORMATION SESSION

11:30 AM – 12:00 PM  
ECHO EXPO

#### **Expanding the Registry – The Pediatric Echo Module**

**Dan Forsha, MD, MCS, FASE & Leo Lopez, MD, FASE**

## BRIAN HALUSKA SONOGRAPHER RESEARCH AWARD COMPETITION

1:00 – 2:00 PM  
BALLROOM 6C LEVEL 6

The ASE Foundation's annual Brian Haluska Sonographer Research Award Competition honors the late Brian Haluska, PhD, MSC (HONS), MSC, RDCS, AMS, FASE, and his incredible contributions to sonographer-led research over the course of his career. This competition recognizes non-physicians who served as the primary investigator on their project of original work. During this session the competition finalists will present their research, and a winner will be selected by a panel of echo experts.



# SPECIAL EVENTS AND NETWORKING OPPORTUNITIES

**Gary Coburn, RDSCS, RCCS, RCS, CCT**, Monroe Carell Jr. Children's Hospital at Vanderbilt, Nashville, TN – Reproducibility of Pediatric Echocardiographic Strain Data Comparing Two Commonly Used Analysis Methods

**Mary Craft, RDSCS, FASE**, Children's Hospital and Medical Center, Omaha, NE – Use of Layer Specific Strain Imaging and Shear Wave Elastography to Evaluate Subclinical Cardiovascular Dysfunction in Patients with Turner's Syndrome

**Joey Goulding, RCS, RCCS**, Seattle Children's Hospital, Seattle, WA – Incorporating Ergonomic Scanning Practices in Echocardiography Lab Using Quality Improvement Methodology

**Cassandra Polsen, RDSCS**, Children's Hospital Colorado, Aurora, CO – Right Heart Function and Recovery in Multisystem Inflammatory Syndrome in Children

## ImageGuideEcho REGISTRY INFORMATION SESSION

2:00 – 2:30 PM

ECHO EXPO

**ASE & IAC – A Continued Alignment in Quality**  
*David H. Wiener, MD, FASE*

## SCIENCE & TECHNOLOGY THEATER

2:00 – 2:45 PM

ECHO EXPO

## THEATER 1

**AI: Revolutionizing the Diagnosis of Heart Disease in Echocardiography**  
*Presented by Ultromics*

Ultromics CEO & Founder, Dr. Ross Upton welcomes Dr. Patricia Pellikka from Mayo Clinic and Dr. Federico Asch from MedStar Health to share the latest studies and advances in AI for echocardiography. Learn about the latest results using Ultromics' revolutionary AI-powered solutions for advanced heart disease detection and predication.

*Refreshments are provided by ASE, with support from Ultromics, and are included in all Scientific Sessions registration fees. Space and food are first come, first served.*

*This session is not part of the official ASE 2022 Scientific Sessions as planned by the Program Committee or in any way endorsed by or affiliated with ASE.*

## KERBER LECTURE

2:30 – 3:00 PM

BALLROOM 6C LEVEL 6



The ASE Foundation is proud to recognize **Linda K. Kerber, PhD**, May Brodbeck Professor in Liberal Arts & Sciences, University of Iowa, Iowa City, Iowa, as the 2022 Richard E. Kerber Ethics/Humanitarian Lecturer. Dr. Kerber, who is the widow of Dr. Richard Kerber, will present "The Dick Kerber Only Some of Us Knew." This annual lectureship was established in memory of ASE Past President Richard E. Kerber, MD, FASE. Dr. Richard Kerber championed issues of morality and ethics and how medicine fits into the broader world. To honor his legacy, this annual lectureship will feature an ethical dilemma or humanitarian patient care activity. The Women in Echo Networking session will immediately follow the Kerber Lecture.

## ShowCASE Competition

3:45 – 5:15 PM

BALLROOM 6C LEVEL 6

This exciting NEW 90-minute session, chaired by CASE Editor-in-Chief **Vincent L. Sorrell, MD, FASE**, and CASE Associate Editor **Rebecca L. Stepien, DVM, MS, DACVIM**, will feature authors representing the best CASEs published in 2021. These five finalists will present their CASE for everyone to listen and learn about, then CASE's Editorial leadership team will facilitate a brief Q&A session to expand further on the CASE report presentation. The audience will have a chance to ask questions and participate in the process of which one should be crowned the CASE of the Year. For even more educational excitement, the MACH-1 Sonographer Presentations will allow sonographers to highlight their Posters in a fun and succinct Rapid-Fire event aimed at enticing you to visit their scholarly research work.

## ASE FOUNDATION RESEARCH AWARDS GALA

7:00 – 11:00 PM

GRAND HYATT SEATTLE

The premier annual fundraiser for the ASE Education and Research Foundation is the 13<sup>th</sup> Annual Research Awards Gala. The ASE Foundation is proud to host a magical evening in the Emerald City to celebrate cardiovascular ultrasound research and honor ASE's 2022 award recipients. Black tie is encouraged for this evening of entertainment, dinner, and dancing. Event proceeds support research activities that advance the progress and future of our field. Tickets are required. New this year, the Foundation is proud to introduce five Legacy Tables in honor of five ASE luminaries: Drs. Harvey Feigenbaum, Liv Hatle, Mary Etta King, Nelson Schiller, and Arthur Weyman. Each luminary was nominated for this honor, and a table will be dedicated in their name for five years. For more information and to pick up your table assignment for the event, visit the ASE Foundation booth, located in the Atrium Lobby on Level 4 prior to 5:00 PM on Sunday.



# SPECIAL EVENTS AND NETWORKING OPPORTUNITIES

## MONDAY, JUNE 13

### POSTER SESSION 2 (P2)

10:00 AM – 4:00 PM

ECHO EXPO

### MODERATED POSTER SESSION 2

12:30 – 2:00 PM

Adult & Pediatric Heart Failure /

Transplant / Other ..... JSE-1

3D Echocardiography ..... PC-01

Quality / Practice Improvement / Education ..... PC-32

Ventricular Function /

Myocardial Mechanics ..... PC-42 through PC-47

### SESSION 5 (P5): 10:00 – 10:45 AM

COVID-19 ..... P5-01 through P5-06

COVID-19 Patient Cases ..... P5-07 through P5-13

Quality / Practice Improvement /

Education ..... P5-14 through P5-28

Value of Echocardiography

(Quality & Cost) / Outcomes /

Comparative Effectiveness ..... P5-29 through P5-31

3D Echocardiography ..... P5-32 through P5-39

Contrast Echocardiography ..... P5-40 through P5-43

Pediatric & Congenital Patient

Cases ..... P5-44 through P5-50

### SESSION 6 (P6): 11:00 – 11:45 AM

New Technology ..... P6-01 through P6-06

Artificial Intelligence /

Machine Learning ..... P6-07 through P6-19

Pediatric & Congenital Patient

Cases ..... P6-20 through P6-48

### SESSION 7 (P7): 2:00 – 2:45 PM

Adult Patient Cases ..... P7-01 through P7-51

### ARTHUR E. WEYMAN YOUNG INVESTIGATOR'S AWARD COMPETITION AND 23<sup>RD</sup> ANNUAL FEIGENBAUM LECTURE

8:00 – 10:00 AM

BALLROOM 6E LEVEL 6

This annual competition is supported by the National Board of Echocardiography (NBE) in honor of its first president, Arthur E. Weyman, MD, FASE. These investigators will present their research, and a winner will be selected by a panel of echo experts.

**Prajith Jeyaprakash, Bmed MD, MMed (Clin Epi), FRACP**, Nepean Hospital, Kingswood, Australia – The Effect of Sonothrombolysis on Infarct Size and Myocardial Salvage in ST Elevation Myocardial Infarction: A Pilot RCT

**Sanghee Ro, MD**, Children's Healthcare of Atlanta, Atlanta, GA – Association of Prenatal Level of Care Assignments with Postnatal Clinical Outcomes in Fetuses Diagnosed with Congenital Heart Disease

**Rohan Shah, MD**, Rutgers Robert Wood Johnson Medical School, New Brunswick, NJ – A Deep Patient-Similarity Learning Framework for Age-Invariant Recognition of Diastolic Dysfunction in Elderly Patients

**Márton Tokodi, MD**, WVU Heart & Vascular Institute, Morgantown, WV – Deep Learning-Based Prediction of Right Ventricular Ejection Fraction Using 2D Echocardiographic Videos

### FEIGENBAUM LECTURER



**Harvey Feigenbaum, MD, FASE**, will present the 23<sup>rd</sup> Annual Feigenbaum Lecture titled "History of Echocardiography: A Personal Perspective." as the 23<sup>rd</sup> Annual Feigenbaum Lecture. Dr. Feigenbaum, who founded ASE in 1975 and is widely recognized as the "Father of Echocardiography," is a Distinguished Professor at

the Indiana University School of Medicine and a cardiologist at Indiana University Health. He received his medical degree from Indiana University and following an internship at Philadelphia General Hospital, he returned to the Indiana University Medical Center to complete his residency. During his career, he has received awards from numerous professional organizations. Dr. Feigenbaum is a Past President of ASE and the founding editor of the *Journal of the American Society of Echocardiography*. He has trained and mentored numerous echocardiographers and cardiac sonographers during his career, written textbooks with multiple editions, and conducted research that has contributed to advancement and innovation in the field.



## ImageGuideEcho REGISTRY INFORMATION SESSION

10:00 – 10:30 AM

ECHO EXPO

### Overview and Question & Answer

*Jordan Strom, MD, MSc, FASE*

## CHALK TALKS

10:00 – 10:45 AM | 12:30 – 1:15 PM |

3:30 – 4:15 PM

ECHO EXPO – CHALK TALK THEATER

During the morning break, **Mourad Senussi, MD**, will present What is the Volume Status of My Patient: How POCUS Can Help. The lunch Chalk Talk, From Twitter to Tenure: How to Effectively Use Social Media as an Echocardiographer with **Akhil Narang, MD, FASE**, will answer all your questions about how social media can help your career. During the afternoon break, pediatric experts **Lowell Frank, MD, Peter Koenig, MD, FASE, Dawn Park, BS, RDCS, RDMS, FASE**, and **Pierre Wong, MD**, will present Educating Fellows in the Art of Imaging.

## VALUE SUMMIT: MAINTAINING VALUE IN THE ECHO LAB

11:00 AM – 12:30 PM

BALLROOM 6C LEVEL 6

**Merri Bremer, EdD, RN, ACS, RDCS, FASE**, and **Jordan Strom, MD, MSc, FASE**, will discuss the value and give an update on the ASE ImageGuideEcho Registry. **Susan Mayer, MD, FASE**, will present important information on the use of add-on codes for 3D and strain. **Keith Collins, MS, RDCS, FASE**, will share thoughts about sonographer shortages, satisfaction, and career growth, and rounding out the session, **Geoffrey Rose, MD, FASE**, will discuss quality in the echo lab and lessons learned from COVID.

## SCIENCE & TECHNOLOGY THEATERS

12:45 – 1:45 PM

ECHO EXPO

### THEATER 1

#### Becoming Visually Decisive in Echo

*Presented by Bracco Diagnostics Inc.*

Case studies demonstrating the utility of ultrasound enhancing agents with audience participation solving interesting cases.

### THEATER 2

#### A Clearer Echo: Improve Your Lab Efficiency and Patient Outcomes

*Presented by Lantheus*

Join expert faculty for an interactive panel discussion on enhanced echocardiography. Learn about the important role that UEAs have on improving echo lab efficiency and their impact on patient management and outcomes. Moderated Q&A will conclude the session.

*Lunch is provided by ASE, with support from Bracco and Lantheus, and is included in all Scientific Sessions registration fees. Space and food are first come, first served.*

*These sessions are not part of the official ASE 2022 Scientific Sessions as planned by the Program Committee or in any way endorsed by or affiliated with ASE.*

## MEET THE FACULTY NETWORKING RECEPTION

4:00 – 5:30 PM

ROOM 204 LEVEL 2

Hosted by the Emerging Echo Enthusiasts SIG, students, fellows, sonographers, and physicians who are early in their careers are invited to meet other members who are just beginning their careers, while networking with leaders in the field of echocardiography including ASE 2022 faculty. Complimentary beer, wine, and light hors d'oeuvres will be served.





## ASE Foundation

The following Awards and Grants are supported by the ASE Foundation. Charitable donations are fostering the next generation of cardiovascular ultrasound professionals.

### 2022 ASE FOUNDATION TOP INVESTIGATORS

The presentation of original research from around the world is an integral component of ASE's annual meeting. A special group of early career abstract presenters were selected by the Abstract Chairs based on the scientific merit of their research projects and were awarded complimentary registration to the Scientific Sessions from the Foundation. The **Alan S. Pearlman Research Award**, established to honor Dr. Pearlman's ten years of service as JASE Editor-In-Chief and supported by a grant to the ASE Foundation by Elsevier, is an annual award of \$1,000 given to the highest scoring investigator in this group.

### 2022 INVESTIGATORS

- ★ **Matthew Muller, BA**, Oregon Health and Sciences University, Portland, OR - **Alan S. Pearlman Research Awardee**
- ★ **Rowa Attar, MD**, Methodist DeBakey Heart and Vascular Center, Houston, TX
- ★ **Cheng Chen, PhD**, Center for Ultrasound Molecular Imaging and Therapeutics, University of Pittsburgh, Pittsburgh, PA
- ★ **Juan Cotella, MD**, University of Chicago Medical Center, Chicago, IL
- ★ **Alessandra Ferraro, MD**, Boston Children's Hospital, Brookline, MA
- ★ **Cesar Gonzalez de Alba, MD**, Children's Hospital Colorado, University of Colorado, Aurora, CO
- ★ **Yi Huang, MS**, Shenzhen Children's Hospital, Shenzhen, China
- ★ **Stephan Juergensen, MD**, University of California San Francisco, San Francisco, CA
- ★ **Uswa Khan, BS**, Piedmont Heart Institute, Atlanta, GA
- ★ **Linda Lee, MD**, University of Chicago Medical Center, Chicago, IL
- ★ **Martha Moran, MD**, Stollery Children Hospital, Edmonton, AB, Canada
- ★ **Proscovia Mugaba, MBBCh**, University of Alberta, Edmonton, AB, Canada
- ★ **Samana Mukhtar, MD**, University at Buffalo, Buffalo, NY
- ★ **Rabia Noor, MD**, University of Mississippi Medical Center, Jackson, MS
- ★ **Hean Patel, MD**, University of Chicago Medical Center, Chicago, IL

- ★ **Jean Michel Saad, MD**, Houston Methodist DeBakey Heart and Vascular Center, Houston, TX
- ★ **Jeremy Slivnick, MD**, University of Chicago Medical Center, Chicago, IL
- ★ **Manasi Tannu, MD**, Duke University Medical Center, Durham, NC
- ★ **Eric Tran, DO**, Scripps Mercy Hospital, San Diego, CA
- ★ **Stephen Williams, MD**, Texas Children's Hospital | Baylor College of Medicine, Houston, TX

### 2022 TOMTEC INNOVATOR RESEARCH TRAVEL GRANT

**Shawn Ahn, MS, MD**, Yale University in New Haven, CT, is the recipient of the 2022 TOMTEC Innovator Research Travel Grant. Supported by a grant to the ASE Foundation from TOMTEC IMAGING SYSTEMS GMBH, this annual award of \$4,000 is given to assist a promising young researcher presenting their work at the ASE Scientific Sessions.

### 2022 ALAN D. WAGGONER STUDENT SCHOLARSHIP AWARDS

The Alan D. Waggoner Student Scholarship program was established in 2001 in recognition of Mr. Waggoner's professional achievements and service to ASE. Funding from the ASE Foundation provides a limited number of \$1,000 scholarship awards for students enrolled in a cardiac ultrasound program accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in the United States or by an equivalent Canadian or external ultrasound program. Also included with each scholarship award is complimentary registration for the recipient to attend the Scientific Sessions and limited travel support. Recipients were chosen from a large number of students who were nominated by their program directors. The 2022 scholarship award recipients will be recognized during ASE's Annual Awards Presentation and Edler Lecture on Saturday, June 11, in Ballroom 6E Level 6.

### 2022 WINNERS

- ★ **Nicole Bochenek, RDMS**, Aurora St. Luke's Diagnostic Medical School of Sonography, Downers Grove, IL
- ★ **Natanael Flecha**, Saint Francis Hospital and Medical Center, Woodstock, CT
- ★ **Makanda Lieberenz**, Mayo Clinic School of Health Sciences, Tempe, AZ
- ★ **Tory Long**, South Hills School of Business & Technology, Bigler, PA
- ★ **Nicholas Medlock**, Duke University Hospital, Carrboro, NC
- ★ **Taylor Moore**, Clemson University Cardiovascular Imaging Technology Program, Seneca, SC
- ★ **Rebecca Sabourin, RDMS**, UWMC School of Diagnostic Medical Sonography, Madison, WI



- ✦ **Christopher Ryan Stuck**, University of Arkansas for Medical Sciences, North Little Rock, AR
- ✦ **Taedra Thrums**, Aurora St. Luke's Diagnostic Medical School of Sonography, Sullivan, WI

## KATANICK SCHOLARSHIP AWARD

The 2022 Katanick Scholarship Award will be awarded to **Daisy Chang**, Duke University, Durham, NC. This award includes a \$1,000 student scholarship for the highest-ranking student sonographer candidate nominated for ASEF scholarship awards and up to \$500 in travel reimbursement to attend the ASE Scientific Sessions. This award was named to honor the legacy of Sandy Katanick, RN, RVT, CAE, who retired as CEO of the Intersocietal Accreditation Commission after over 25 years of service to the field.

## 2022 FEIGENBAUM CARDIOVASCULAR SONOGRAPHER STUDENT TRAVEL GRANT

This \$1,000 award is supported by a grant to the ASE Foundation from Elsevier Inc. to honor Dr. Harvey Feigenbaum's commitment and tenure as the former JASE Editor for 20 years. It is presented to a sonographer student enrolled in a CAAHEP accredited cardiac ultrasound program. This grant provides funding to assist a student to attend the Scientific Sessions or other ASE sponsored educational courses.

The 2022 student travel grant has been awarded to **Krishnakumari Patel**, Johns Hopkins University, Baltimore, MD. This award will be recognized during the Council on Cardiovascular Sonography Business Meeting, on Friday, June 10 at 5:30 PM in Ballroom 6B Level 6.

## 2022 COUNCIL TRAVEL GRANT AWARDS

The ASE Foundation sponsors Council Travel Grant Awards to fellows, trainees, and sonographers to fund their attendance at the Scientific Sessions. These travel grants are part of an ongoing effort by the Foundation, with the assistance of the Council Steering Committees, to encourage trainees in cardiovascular specialties to focus on the respective echocardiography sub-specialty. In addition, the Council Steering Committees hope to provide interested fellows with a deeper understanding of the imaging field and facilitate the development of meaningful mentoring opportunities for trainees with established imaging faculty.

### COUNCIL ON CARDIOVASCULAR SONOGRAPHY TRAVEL GRANT AWARDS

- ✦ **Elise Hawes, BAS, ACS, RDCS, FASE**, Henry Ford Allegiance Health, Albion, MI
- ✦ **Megan Schoessling, BS, RDCS**, Children's Hospital of Wisconsin, Glendale, WI

### COUNCIL ON PEDIATRIC AND CONGENITAL HEART DISEASE TRAVEL GRANT AWARD

- ✦ **David Barris, MD**, Mount Sinai Hospital, Bronx, NY
- ✦ **Jennifer Klein, MD**, Children's National Hospital, Washington, DC

### COUNCIL ON PERIOPERATIVE ECHOCARDIOGRAPHY TRAVEL GRANT AWARD RECIPIENTS

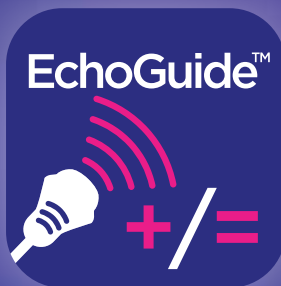
- ✦ **Ezeldeen Abuelkasem, MBBCh, MSc**, University of Pittsburgh Medical Center, Pittsburgh, PA
- ✦ **Antonia van Kampen, MD**, Massachusetts General Hospital, Cambridge, MA



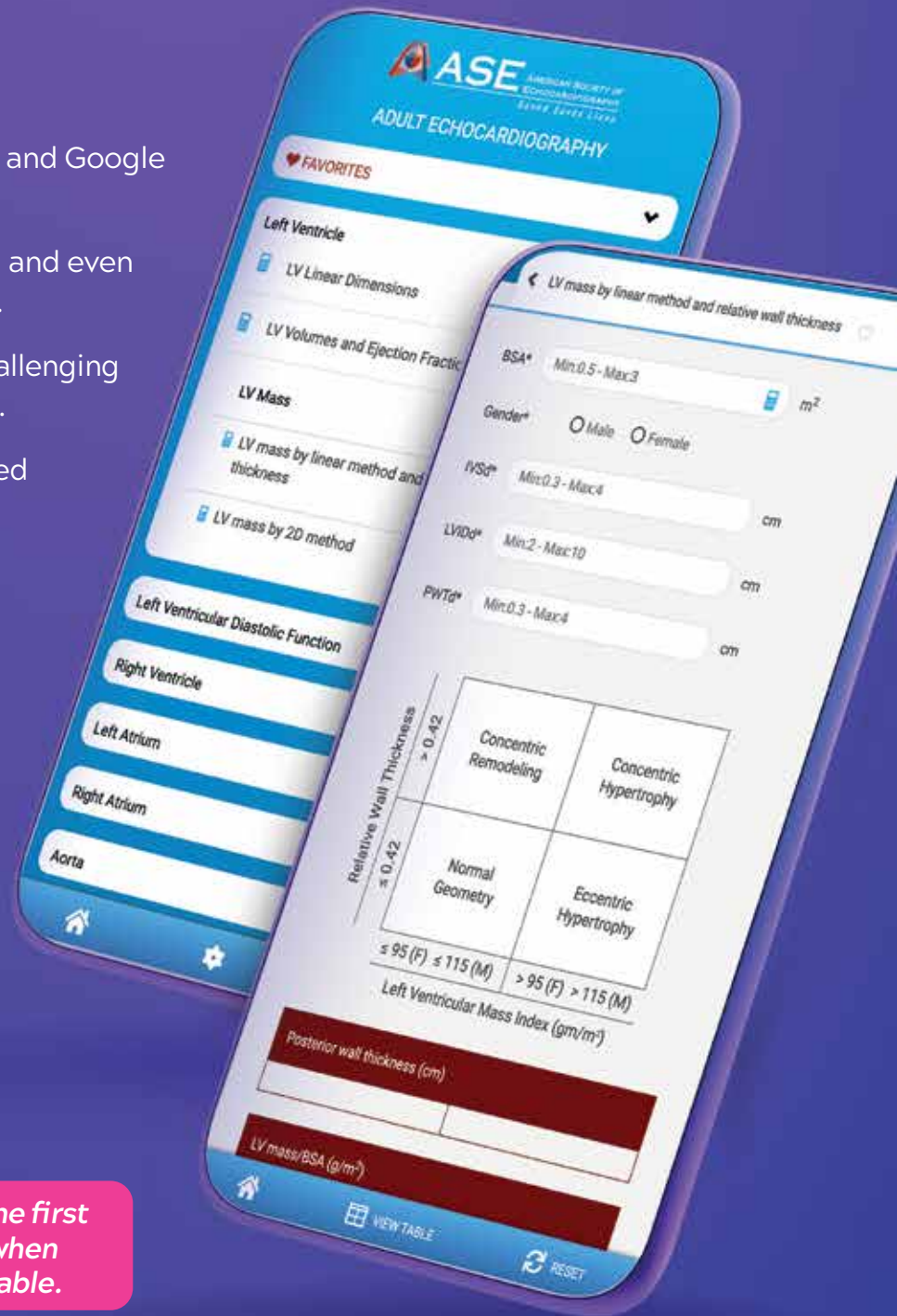
# COMING SOON! THE NEW ASE GUIDELINE CALCULATOR AND ALGORITHM APP.

## EchoGuide™

- FREE to download on the Apple and Google Play Stores.
- Works on smartphones, tablets, and even includes a web-based interface.
- Quick access to common and challenging echo measurements and values.
- Calculators and algorithms based on the most popular guidelines published by ASE.



*Sign up to be the first to be notified when the app is available.*



Thank you to Marcelo Miglioranza, MD, PhD, FASE, for providing the new name for the new app, EchoGuide™, determined by ASE member votes.



# ASE

AMERICAN SOCIETY OF  
ECHOCARDIOGRAPHY  
Sound Saves Lives



# Don't Miss the Latest Products from the ASE Learning Hub

ASE is your one-stop-shop for everything you need in cardiovascular ultrasound education!



Purchase all of ASE's products at the following locations:

ASE Headquarters Booth #1721

Saturday, June 11 ..... 3:30 – 6:00 PM  
 Sunday, June 12 ..... 9:00 AM – 2:45 PM  
 Monday, June 13 ..... 10:00 AM – 4:00 PM

ASE Products Sales Booth – 6ABC Lobby

Friday, June 10 ..... 12:00 – 6:30 PM  
 Saturday, June 11 ..... 6:00 AM – 6:15 PM  
 Sunday, June 12 ..... 6:30 AM – 5:00 PM  
 Monday, June 13 ..... 7:30 AM – 5:30 PM

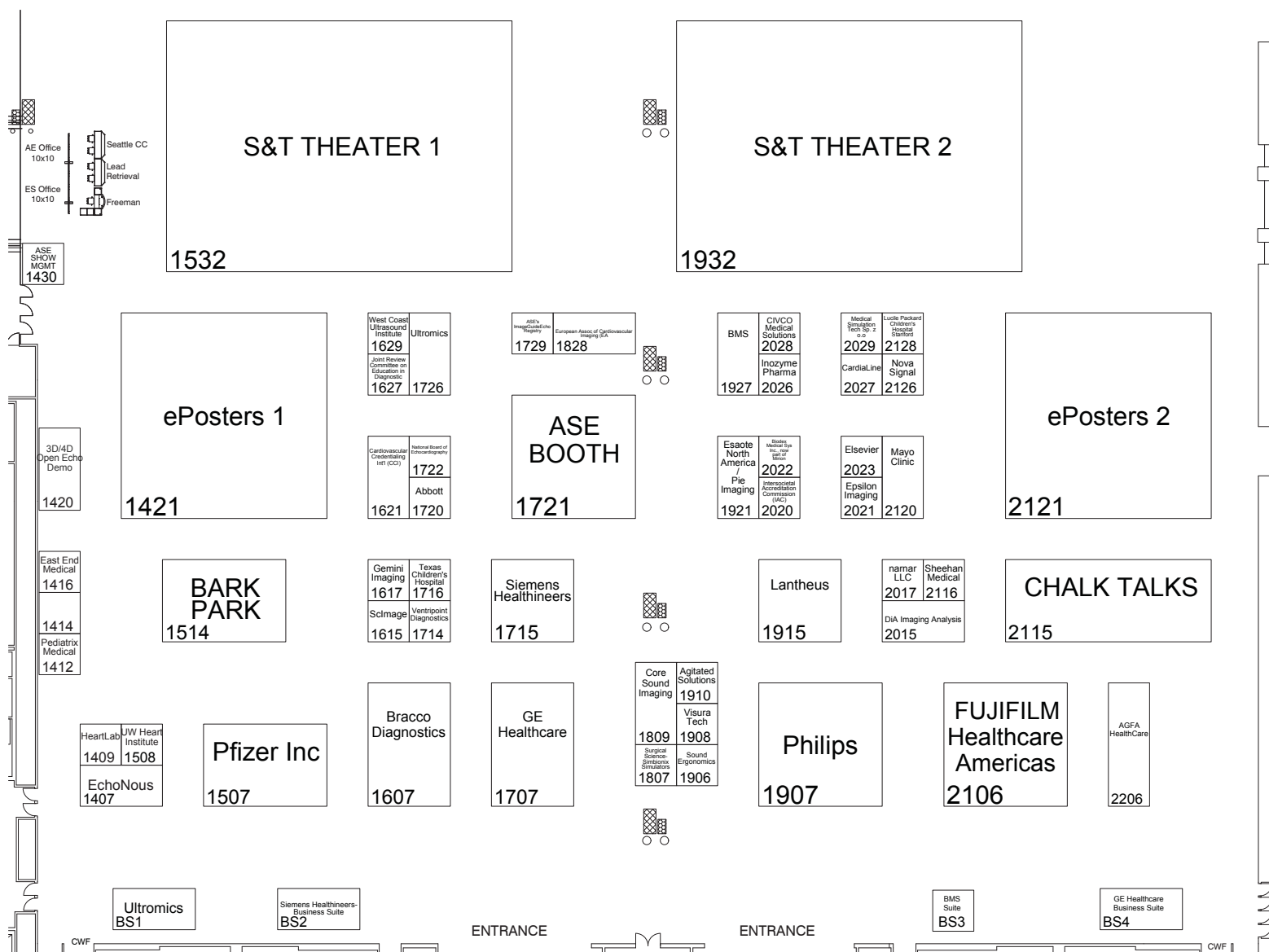
ASE products will also be for sale on Saturday during the President's Reception.



Also Order Products Online at [ASELearningHub.org](http://ASELearningHub.org)



## EXHIBITS





## ECHO EXPO HOURS

**SATURDAY, JUNE 11.....3:30 – 6:15 PM**  
**President's Reception ....4:00 – 6:00 PM**

**SUNDAY, JUNE 12..... 9:00 AM – 2:45 PM**

**MONDAY, JUNE 13...10:00 AM – 4:00 PM**

## ECHO EXPO BREAK SCHEDULE

**SUNDAY, JUNE 12**

**Coffee Breaks ..... 9:00 – 9:30 AM**  
**2:00 – 2:30 PM**

**Lunch Break\* ..... 11:00 AM – 1:00 PM**

**MONDAY, JUNE 13**

**Coffee Breaks ..... 10:00 – 10:30 AM**  
**3:30 – 4:00 PM**

**Lunch Break\* ..... 12:30 – 2:00 PM**

*\*Lunch is not provided for conference attendees unless you are attending the Science & Technology Theater presentations which is available on a first-come, first-served basis. However, food and refreshments will be available for purchase in the Echo Expo.*

## SCIENCE & TECHNOLOGY THEATER SCHEDULE ECHO EXPO

**NEW THIS YEAR:** ASE is pleased to offer two Science & Technology Theater presentation spaces. Please be sure to double check the schedule for the correct theater space for the presentation you are interested in attending. ASE will provide boxed meals during each lunch session on a first come, first served basis (max. 300 participants). Various refreshments may also be available for the morning and evening sessions. These refreshments are included in all Scientific Sessions registration fees, but space and food are on a first come, first served basis.

### SATURDAY, JUNE 11

4:30 PM – **THEATER 1**  
 5:15 PM **IMAGING THE HEART: ECHOCARDIOGRAPHIC APPROACHES FOR HCM**  
*Presented by Bristol Myers Squibb*

### SUNDAY, JUNE 12

9:00 AM – **THEATER 1**  
 9:45 AM **OPTIMIZING IMAGING IN THE MITRACLIP™ PROCEDURE TO TREAT COMPLEX MITRAL VALVE ANATOMIES: A CASE BASED DISCUSSION**  
*Presented by Abbott*

**THEATER 2**  
**UTILIZING IMAGING APPROACHES TO IDENTIFY PATIENTS WITH TRANSTHYRETIN AMYLOID CARDIOMYOPATHY (ATTR-CM) FOR APPROPRIATE TREATMENT**  
*Presented by Pfizer*

11:15 AM – **THEATER 1**  
 12:15 PM **ADVANCED CONTRAST ECHO FOR ISCHEMIC HEART DISEASE**  
*Presented by GE Healthcare*

**THEATER 2**  
**NOVEL APPROACH TO 3D USE IN ROUTINE AND INTERVENTIONAL ECHOCARDIOGRAPHY EXAMS**  
*Presented by Philips*

2:00 PM – **THEATER 1**  
 2:45 PM **AI: REVOLUTIONIZING THE DIAGNOSIS OF HEART DISEASE IN ECHOCARDIOGRAPHY**  
*Presented by Ultrasonics*

### MONDAY, JUNE 13

12:45 PM – **THEATER 1**  
 1:45 PM **BECOMING VISUALLY DECISIVE IN ECHO**  
*Presented by Bracco Diagnostics Inc.*

**THEATER 2**  
**A CLEARER ECHO: IMPROVE YOUR LAB EFFICIENCY AND PATIENT OUTCOMES**  
*Presented by Lantheus*

*These sessions are not part of the official ASE 2022 Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.*



## WHERE INNOVATION AND SCIENCE MEET

Don't miss the Echo Expo on Level 4 of the Seattle Convention Center. The exchange of information and access to new concepts, technology, devices, and research is a vital component of your professional development. Get face-to-face with the industry's leading developers and executives who can help you discover what's new, assist you in making the right choices for your institution, and show you ways to reduce costs and improve productivity. Network with colleagues and friends, while experiencing the best our rapidly changing industry has to offer, including the newest equipment and devices, as well as the latest in research and development. You can also grab a cup of coffee, lunch, or snack. The showcase of investigators from around the world presenting cutting-edge research on the latest advances in cardiovascular ultrasound is a highlight of ASE's Scientific Sessions. Spend time in the poster area and gain firsthand knowledge and insight from scientific investigators.

**Don't miss daily poster sessions on Sunday and Monday.**

## ASE HEADQUARTERS BOOTH #1721

As the largest organization representing the cardiovascular ultrasound community, ASE is a vibrant and progressive organization. Visit the ASE Headquarters booth #1721 to find comprehensive information on all our educational programs and products, membership opportunities, and advocacy efforts. Don't miss the debut of exciting new products and services designed to help with your practice of cardiovascular ultrasound. ASE staff is available to help you find whatever you need. If you have not logged in to the ASE Learning Hub or used Connect@ASE, come by for a tutorial. Have a question about ASE? There will be a variety of opportunities to meet committee leaders and staff in the ASE booth.

## MEET FACE TO FASE

Are you interested in becoming a Fellow of the American Society of Echocardiography (FASE) but have questions about whether you may qualify? Stop by the ASE Booth #1721 to talk one-on-one with a member of the FASE Advisory Group or ASE staff about any questions you have about achieving the FASE designation.

## ACTIVITIES IN THE ASE BOOTH

### SATURDAY, JUNE 11

**4:30 – 5:00 PM**

Meet ASE President Raymond Stainback, MD, FASE

**4:30 – 5:30 PM**

ASE Tweet Up

### SUNDAY, JUNE 12

**9:00 - 9:30 AM**

Face to FASE – Learn How to Achieve the FASE Designation  
Meet FASE Advisory Committee Chair, **Jennifer Warmesbecker, BS, RDMS, FASE**

**9:00 – 9:30 AM**

Learn About the Committee on Accreditation for Advanced Cardiovascular Sonography (CoA-ACS)

**Michelle Bierig, PhD, ACS, RCS, RDMS, FASE**

**11:00 – 12:00 PM**

Learn About the Committee on Accreditation for Advanced Cardiovascular Sonography (CoA-ACS)

**Joy Guthrie, PhD, ACS, RDMS, RDMS, RVT, FASE**

**1:30 – 2:00 PM**

Learn About ASE's Leadership Academy

**Vera Rigolin, MD, FASE**

**2:00 – 2:30 PM**

Learn About the Committee on Accreditation for Advanced Cardiovascular Sonography (CoA-ACS)

**Michelle Bierig, PhD, ACS, RCS, RDMS, FASE**

**2:00 – 2:30 PM**

Special Book Signing Event for ASE's Latest Textbooks

**Roberto Lang, MD, FASE; Steven Goldstein, MD, FASE; Bijoy Khandheria, MD, FASE; Muhamed Saric, MD, PhD, FASE; Thomas Marwick, MBBS, PhD, MPH, MD; and Theodore Abraham, MD, FASE**

## MONDAY, JUNE 13

**10:00 – 10:30 AM**

Learn About ASE's Committees and How to Apply  
**Suzanne Morris, Director of Volunteer Activities**

**10:00 – 10:30 AM**

Face to FASE – Learn How to Achieve the FASE Designation  
Meet FASE Advisory Committee Chair, **Jennifer Warmesbecker, BS, RDMS, FASE, FASE**

**10:00 – 10:30 AM**

Learn About the Committee on Accreditation for Advanced Cardiovascular Sonography (CoA-ACS)

**Matt Umland, ACS, RDMS, FASE**

**1:30 – 2:00 PM**

*ECHO* Magazine, Now a Monthly Publication - Learn How You Can Submit an Article

**Benjamin Eidem, MD, FASE, Echo Magazine Review Task Force Co-Chair**

**1:30 – 2:00 PM**

Learn About Submitting or Reviewing for CASE, ASE's Case Reports Journal.

Meet CASE Editor-in-Chief, **Vincent Sorrell, MD, FASE, FACP (honorary), FACC, FSCCT, FSCMR**

**3:30 PM**

Drawing for the Passport Prizes and Announcement of the ASE Foundation Cardiovascular Challenge Winners



## NEW THIS YEAR! PASSPORT TO DISCOVERY: A FUN INTERACTIVE GAME WITH EXHIBITORS

Join in the fun by participating in the ASE 2022 Passport adventure! You should have received an official ASE 2022 Passport when you picked up your registration packet. Once you have your passport, venture around the Echo Expo visiting participating exhibitor's booths and collecting your stamp from each destination. Once you complete your Passport, come to the ASE Booth #1721 to fill out a raffle ticket to be entered to win the following prizes. All tickets must be entered no later than 3:15 PM, Monday, June 13, and you need to be present to win.

Grand prize package includes:

- Complimentary full meeting registration for 2023 ASE Scientific Sessions
- 2023 ASE membership through December 31, 2023
- Hotel accommodations during 2023 ASE Scientific Sessions
  - ✦ Prize is transferable, but all elements of the prize must be utilized by the same individual.
  - ✦ VALUE OVER \$1550!

Second Prize:

- \$500.00 USD towards any ASE Conference Registration (Echo Hawaii, SOTA, Scientific Sessions, Echo Florida)
- A copy of ASE's Comprehensive Echo Textbook 3<sup>rd</sup> Edition
  - ✦ VALUE OVER \$750!

Third Prize:

- \$350 USD credit towards ASE's Learning Hub store

## BARK PARK

Spend some time relaxing and socializing with dogs in ASE's Bark Park in the Echo Expo. This experience is provided in partnership with Ginger's Pet Rescue, a Seattle non-profit organization that specializes in saving death row dogs. These dogs are all adoptable! Space for visitors to the Bark Park is limited to provide a safe environment for both attendees and the dogs. The Bark Park will be open during the following hours:

### SUNDAY, JUNE 12

11:00 AM – 1:00 PM

2:00 – 2:30 PM

### MONDAY, JUNE 13

12:30 – 2:00 PM

# New This Year: Passport to Discovery in the ECHO EXPO!

Venture around the Echo Expo visiting participating exhibitor's booths and collecting your stamp from each destination. Once you complete your Passport, come to the ASE Booth #1721 to fill out a raffle ticket to be entered to win the following prizes. All tickets must be entered no later than 3:15 PM, Monday, June 13, and you need to be present to win. The prize winners will be revealed at 3:45 PM on Monday, June 13.

### Grand Prize Package:

- Complimentary full meeting registration for 2023 ASE Scientific Sessions
- ASE membership through December 31, 2023
- Hotel accommodations during 2023 ASE Scientific Sessions

Prize is transferable, but all elements of the prize must be utilized by the same individual.

VALUE OVER \$1550!

### Second Prize:

- \$500.00 USD towards any ASE Conference Registration (Echo Hawaii, SOTA, Scientific Sessions, Echo Florida)
- A copy of ASE's Comprehensive Echo Textbook 3<sup>rd</sup> Edition
  - ✦ VALUE OVER \$750!

### Third Prize:

- \$350 USD credit towards ASE's Learning Hub store







Michael Trump, RCS  
Structural Heart Lead | Cardiac Sonographer II  
University of Alabama at Birmingham (UAB)  
Birmingham, Alabama

*Speaker has been compensated for their time*



# Imaging the Heart: Echocardiographic Approaches for HCM

Join us for a Science and Technology Theater

**Theater #1**

**Saturday, June 11 | 4:30 PM - 5:15 PM PST**

Join us for a review of echocardiography imaging, including considerations for obstructive hypertrophic cardiomyopathy (oHCM) and evaluations of left ventricular hypertrophy, ejection fraction, and outflow tract obstruction as components of patient assessment



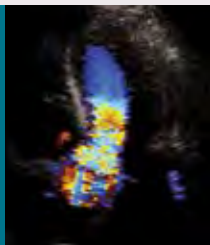
Learn more about HCM

*This session is not part of the official ASE 33rd Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE. This event does not qualify for continuing medical education (CME) credit.*

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CV-US-2200274 05/22

**32<sup>nd</sup>**  
**ANNUAL**



**January 16–20, 2023**

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



**Course Director**  
James D. Thomas,  
MD, FASE  
Past President, ASE

**ECHO**  
**HAWAII**



**Course Co-Director**  
Jonathan R.  
Lindner, MD, FASE  
Past President, ASE

**#EchoHawaii**

“The faculty at this conference were awesome. Every one of them were very approachable and the discussions held ‘off line’ were a significant source of education.” Echo Hawaii Attendee

**Learn More at [ASEcho.org/EchoHawaii](https://ASEcho.org/EchoHawaii)**



## Optimizing Imaging in the MitraClip™ Procedure to Treat Complex Mitral Valve Anatomies

*A Case Based Discussion*

**Sunday, June 12, 2022 | 9:00 AM – 9:45 AM PST**



**Richard Bae, MD**



**Nadira Hamid, MD**



**Akhil Narang, MD**

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Abbott 3200 Lakeside Dr., Santa Clara, CA 95054 USA, Tel: 1 800 227 9902  
www.structuralheart.abbott

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## Utilizing Imaging Approaches to Identify Patients With Transthyretin Amyloid Cardiomyopathy (ATTR-CM) for Appropriate Treatment



**Sunday, June 12, 2022  
9:00 AM - 9:45 AM**



**Roxana Ghashghaei, MD**  
Assistant Professor in the Division  
of Cardiology at the University of  
California, Irvine



**Dermot M Phelan, MD, PhD, FASE, FACC**  
Medical Director, Cardiovascular Imaging  
Director, Sports Cardiology Program  
Co-Director, Hypertrophic Cardiomyopathy Program  
Atrium Health

**Science & Technology | Theater #2 Exhibit Hall Floor**

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# Advanced Contrast Echo for Ischemic Heart Disease

## FREE CONTINUING EDUCATION LUNCH SYMPOSIUM

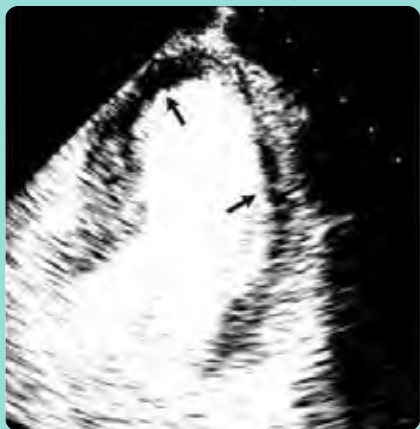
Sunday, June 12, 2022

11:15 AM – 12:15 PM

Science & Technology Theater: #1

Seattle Convention Center

Seattle, Washington



### *Myocardial Perfusion Imaging at Rest and During Stress in Chronic and Acute Ischemic Syndromes*

**Jonathan R. Lindner, MD, FACC, FASE**

Oregon Health & Science University, Portland, Oregon

### *New Roles for Contrast Echo in Coronary Artery Disease (CAD): Molecular Imaging and Therapy*

**James D. Thomas, MD, FACC, FASE, FESC**

Northwestern Medicine Bluhm Cardiovascular Institute, Chicago, Illinois



### Educational Objectives

- Apply myocardial contrast echocardiography (MCE) at rest to improve and expedite care in acute coronary syndromes
- Identify reasons to use stress perfusion imaging for improving diagnosis of CAD and microvascular dysfunction
- Discuss the future role of echo molecular imaging for ischemia, and the potential for improving outcomes through ultrasound cavitation therapy

Register at [www.Contrast-Echo.com](http://www.Contrast-Echo.com)

Approved by Medical Education Resources for  
1 AMA PRA Category 1 Credit™ for physicians  
and 1 ANCC Contact Hour for nurses.

Approved by the Society of Diagnostic Medical  
Sonography (SDMS) for 1.0 SDMS CME Credit.

This activity is jointly provided by:



and



This activity is supported by an educational grant from  
GE Healthcare.

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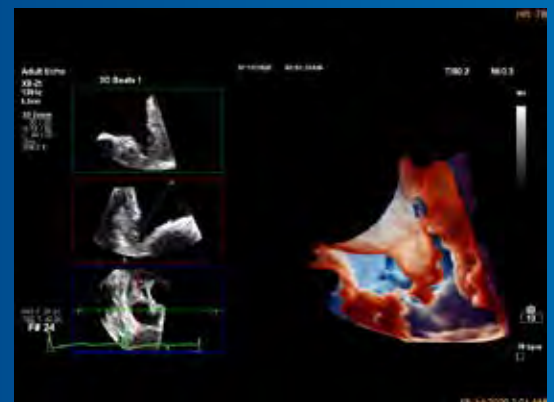
**PHILIPS**

# Join us for a Science & Technology Theater event

## Novel approach to 3D use in routine and interventional echocardiography exams

Join leading imagers, researchers, and professors in exploring new and emerging 3D echocardiography solutions designed to strengthen clinical confidence, build efficiency through the care pathway, and improve cardiac care experiences.

**Sunday June 12**  
**11:15 am – 12:15 pm**  
**Theater #2**  
**Exhibit & Poster Hall**



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# AI: Revolutionizing the diagnosis of heart disease in echocardiography

Sunday, June 12, 2:00pm

Science & Technology Theater #1



**Dr. Ross Upton**  
CEO and Founder  
at Ultrasonics



**Dr. Patricia A. Pellikka**  
Vice Chair, Department of Director of the Echo Core Lab  
Cardiovascular Medicine at Mayo Clinic



**Dr. Federico M. Asch**  
at MedStar Health Research  
Institute

# 35<sup>th</sup> ANNUAL



**February 18–20, 2023**

Optional Preconference Learning Lab  
February 17–18

The Westin Kierland Resort & Spa  
Scottsdale, AZ



**Course Director**  
William A. Zoghbi, MD, FASE  
Past President, ASE



**Course Co-Director**  
Sunil V. Mankad, MD, FASE

## State-of-the-Art ECHOCARDIOGRAPHY™

#EchoSOTA



"I loved every minute of this conference! I also enjoyed the structure, as it was cohesive with each segment."  
— State-of-the-Art  
Echocardiography Attendee

Learn More at [ASEcho.org/SOTA](https://ASEcho.org/SOTA)



Jointly provided by the American Society of Echocardiography and the ASE Foundation.



**Join Live Presentation**  
**Monday, June 13, 2022 | 12:45 – 1:45 PM**  
**at**  
**Science & Technology Theater**

# **“Becoming Visually Decisive in Echo”**

**Case studies demonstrating the utility of ultrasound enhancing agents  
with audience participation solving interesting cases**

**GUEST MODERATOR**

**Jordan B. Strom, MD, MSc, FACC, FASE**

Associate Director, Echocardiography Laboratory,  
Director of Echocardiographic Research, Division of Cardiovascular Medicine,  
Beth Israel Deaconess Medical Center

Section Head, Cardiovascular Imaging Research,  
Richard A. and Susan F. Smith Center for Outcomes Research  
in Cardiology, Beth Israel Deaconess Medical Center

Assistant Professor of Medicine, Harvard Medical School

**Please visit Bracco Booth #2027 at ASE 2022**

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The individuals who appear in the background image are for illustrative purposes. All persons or animations depicted are models and not real healthcare professionals.

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*Lantheus invites you to a*

# LUNCH SYMPOSIUM

## A Clearer Echo: Improve Your Lab Efficiency and Patient Outcomes

Join expert faculty for an interactive panel discussion on enhanced echocardiography. Learn about the important role that UEAs have on improving echo lab efficiency and their impact on patient management and outcomes. Moderated Q&A will conclude the session.

**Monday, June 13, 2022  
12:45 pm – 1:45 pm (PT)**

**Science and Technology Theater  
Seattle Convention Center**

### Speakers:



**Paul Bhella, MD**  
FAHA, FACC, FASE  
Baylor Heart and Vascular Hospital  
Dallas, TX



**Martin Goldman, MD**  
Icahn School of Medicine  
at Mount Sinai  
New York, NY

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# EXHIBITOR LOCATION LISTED ALPHABETICALLY

Company	Booth
3D/4D Open Echo Interoperability	<b>1420</b>
Abbott	<b>1720</b>
AGFA HealthCare	<b>2206</b>
Agitated Solutions, Inc.	<b>1910</b>
American Society of Echocardiography (ASE)	<b>1721</b>
ASE's ImageGuideEcho Registry	<b>1729</b>
Bark Park	<b>1514</b>
Biodex Medical Systems, Inc., now part of Mirion	<b>2022</b>
Bracco Diagnostics	<b>1607</b>
Bristol Myers Squibb	<b>1927</b>
CardiaLine	<b>2027</b>
Cardiovascular Credentialing International (CCI)	<b>1621</b>
CIVCO Medical Solutions	<b>2028</b>
Core Sound Imaging	<b>1809</b>
DiA Imaging Analysis	<b>2015</b>
East End Medical	<b>1416</b>
EchoNous	<b>1407</b>
Elsevier	<b>2023</b>
Epsilon Imaging	<b>2021</b>
Esaote North America / Pie Imaging	<b>1921</b>
European Association of Cardiovascular Imaging (EACVI)	<b>1828</b>
FUJIFILM Healthcare Americas Corporation	<b>2106</b>
GE Healthcare	<b>1707</b>
Gemini Imaging Group	<b>1617</b>

Company	Booth
HeartLab Limited	<b>1409</b>
Inozyme Pharma	<b>2026</b>
Intersocietal Accreditation Commission (IAC)	<b>2020</b>
Joint Review Committee on Education in Diagnostic (JRC-DMS)	<b>1627</b>
Lantheus	<b>1915</b>
Lucile Packard Children's Hospital Stanford	<b>2128</b>
Mayo Clinic	<b>2120</b>
Medical Simulation Technologies	<b>2029</b>
narnar LLC	<b>2017</b>
National Board of Echocardiography (NBE)	<b>1722</b>
Nova Signal	<b>2126</b>
Pediatric Medical Group	<b>1412</b>
Pfizer Inc.	<b>1507</b>
Philips	<b>1907</b>
Sclmage, Inc.	<b>1615</b>
Sheehan Medical LLC	<b>2116</b>
Siemens Healthineers	<b>1715</b>
Sound Ergonomics, LLC	<b>1906</b>
Surgical Science - Symbionix Simulators	<b>1807</b>
Texas Children's Hospital	<b>1716</b>
Ultromics	<b>1726</b>
University of Washington Heart Institute	<b>1508</b>
Ventripoint Diagnostics	<b>1714</b>
Visura Technologies	<b>1908</b>
West Coast Ultrasound Institute	<b>1629</b>





## **3D/4D Open Echo Interoperability..... 1420**

2530 Meridian Parkway, Suite 450

Durham, NC 27713

United States

Phone: 919-297-7183

**Email: [SBBdoyan@ASEcho.org](mailto:SBBdoyan@ASEcho.org)**

ASE has partnered with echo companies to facilitate 3D/4D data connections and integrations across vendors. Join these vendors, alongside leaders from ASE, for a public demonstration of interoperable 3D/4D data and see how we are working together to provide seamless access. Demonstrations will take place Sunday, June 12, 12:15 – 1:00 PM and Monday, June 13, 10:00 – 11:00 AM.



## **Abbott..... 1720**

3200 Lakeside Drive

Santa Clara, California 95054

United States

Phone: 408-845-3000

**StructuralHeart.Abbott**

Abbott is a global healthcare leader that helps people live more fully at all stages of life. Our life-changing technologies span the spectrum of healthcare in diagnostics, medical devices, nutritionals and branded generic medicines. Our 109,000 colleagues serve people in more than 160 countries.



## **AGFA HealthCare..... 2206**

10 S Academy Street

Greenville, SC 29601

United States

Phone: 978-284-7900 x8542203

**[AGFAHealthCare.com](http://AGFAHealthCare.com)**

Agfa HealthCare's Enterprise Imaging for Cardiology delivers a unified imaging ecosystem that speeds up image acquisition and retrieval and enhances the delivery of care. Across specialties and modalities, it improves the cardiologist's work experience, by offering across all cardiology departments -Ultrasound, Cathlab, ECG, Nuclear Cardiology and MR&CT- web-based image viewing and access, advanced analysis applications, structured reporting, flexible workflows and collaboration tools in ONE single workspace. At Agfa HealthCare, we support healthcare professionals across the globe to transform the delivery of care. Our focus is on providing Imaging IT software solutions that enable secure, effective and sustainable imaging data management.

## **Agitated Solutions, Inc..... 1910**

3510 Hopkins Place N.

Building 4

Oakdale, MN 55128

United States

Phone: 281-382-0523

**[AgitatedSolutions.com](http://AgitatedSolutions.com)**

Agitated Solutions, Inc. is a company dedicated to providing tools to advance medical imaging. ASI develops the Orbis™ device, a novel, enhanced micro-bubble generator that is designed to improve bubble study efficiency and improve image quality.



## **American Society of Echocardiography (ASE)..... 1721**

2530 Meridian Parkway, Suite 450

Durham, NC 27713

United States

Phone: 919-861-5574

**Email: [ASE@ASEcho.org](mailto:ASE@ASEcho.org)**

**[ASEcho.org](http://ASEcho.org)**

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. We advocate the use of ultrasound to provide an exceptional view of the cardiovascular system to enhance patient care. ASE membership is open to all echo enthusiasts. Join the most important voice in cardiovascular ultrasound!





## ASE's ImageGuideEcho Registry ..... 1729

2530 Meridian Parkway, Suite 450  
Durham, NC 27713  
United States  
Phone: 919-297-7174

**ImageGuideEcho.org**

ASE's ImageGuideEcho Registry provides quality improvement for you, your Institution and the field of echocardiography. Within the Registry, your institution will have the analytical tools to: track quality improvement; conduct detailed analysis into your own data; leverage continued alignment in quality with IAC; link to outcomes data; and examine data in the registry to conduct innovative research.

## Bristol Myers Squib ..... 1927

430 E. 29<sup>th</sup> Street  
14<sup>th</sup> Floor  
New York NY 10016  
United States  
Phone: 800-332-2056

**BMS.com**

Bristol Myers Squibb is a leading global biopharma company focused on discovering, developing and delivering innovative medicines for patients with serious diseases in areas including oncology, hematology, immunology, cardiovascular, fibrosis and neuroscience. Our employees work every day to transform patients' lives through science.

## Biodex Medical Systems, Inc., now part of Mirion ..... 2022

20 Ramsay Road  
Shirley, NY 11967  
United States  
Phone: 631-924-9000

**Biodex.com**

Biodex™ high-performance ultrasound tables are designed to meet the needs of today's sonographer, with options to suit your budget. Intuitive and ergonomic, our tables aid in image clarity, efficiency and staff comfort during ultrasound, echocardiography and vascular procedures – so you capture the clearest image, every time.

## CardiaLine..... 2027

1611 S. Utica Avenue #344  
Tulsa, OK 74104  
United States  
Phone: 844-366-1195

**Ergoline.com**

CardiaLine offers stress echocardiography beds, treadmills and ergometers. We specialize in ergonomic echo beds that are perfect for routine echocardiography and stress echocardiography.



## Bracco Diagnostics ..... 1607

259 Prospect Plains Road, Bldg. H  
Monroe Twp., NJ 08610  
Phone: 609-514-2343

**Braccolmaging.com/us-en**

Bracco Imaging offers products and solutions for all key diagnostic imaging modalities: X-ray (including Computed Tomography, Interventional Radiology, and Cardiac Catheterization), Magnetic Resonance Imaging, Contrast Enhanced Ultrasound, and Nuclear Medicine through radioactive tracers. This portfolio is complimented by a range of medical devices and advanced administration systems.

## Cardiovascular Credentialing International (CCI) ..... 1621

P.O. Box 30939  
Raleigh, NC 27622  
United States  
Phone: 919-861-4539

**CCI-Online.org**

Wholehearted Validation. For over 50 years, CCI has been the only credentialing body focused on credentialing those who work specifically with the heart and vascular systems. CCI continues to improve the quality of patient care through the wholehearted support of the education and career ambitions of our credential holders.



# EXHIBITOR DESCRIPTIONS



## **CIVCO Medical Solutions..... 2028**

2301 Jones Boulevard  
Coralville, IA 52241  
United States  
Phone: 319-248-6757

**CIVCO.com**

CIVCO Medical Solutions works to make image-guided procedures safer. CIVCO manufactures accessories and equipment for use in diagnostic and therapeutic imaging and interventional procedures, with a strong focus on ultrasound. CIVCO specializes in ultrasound viral barriers, including 100% gel-free Envision probe covers and scanning pads; ASTRA high-level disinfection systems for ultrasound transducers; Verza and Ultra-Pro needle guidance systems; and electromagnetic needle tracking. Visit CIVCO.com to learn more.

## **Core Sound Imaging..... 1809**

5510 Six Forks Road  
Raleigh, NC 27609  
United States  
Phone: 919-277-0636

**corestudycast.com**

Comprehensive image management and reporting solution: Streamlined and intuitive, the Studycast system provides a single workflow from exam to archive. View diagnostic-quality images and loops, quickly generate findings, digitally sign reports from any Internet-connected device. Then, securely share with colleagues/patients, route them to your EMR, archive them in the cloud.



## **DiA Imaging Analysis..... 2015**

HaEnergia 77  
Beer Sheva, HaDa 84102  
Israel  
Phone: 972-54-901-1134

**DiA-Analysis.com**

DiA Imaging Analysis is a leading provider of AI-based cardiac ultrasound software, serving thousands of users worldwide. DiA's LVivo automated software easily integrates with POCUS devices or Echo lab PACS viewers, analyzing every echo study 'behind-the-scenes' and generating key measurements like Strain, EF and RV with increased speed, efficiency and accuracy.

## **East End Medical ..... 1416**

10320 USA Today Way  
Miramar, FL 33025  
United States  
Phone: 954-507-7887

**SafeCrossDevice.com**

The SafeCross™ Transseptal RF Puncture and Steerable Balloon Introducer System. SafeCross™ is an all-in-one transeptal device featuring a compliant, atraumatic radiopaque and echogenic Positioning Balloon, intended to facilitate the accurate positioning and stability of the Steerable Introducer Sheath/RF Puncture Dilator assembly on the fossa ovalis prior and during transseptal puncturing.

## **EchoNous ..... 1407**

8310 154<sup>th</sup> Ave NE  
Suite 200  
Redmond, WA 98052  
United States  
Phone: 206-445-9125

**KosmosPlatform.com**

## **Elsevier ..... 2023**

1600 JFK Boulevard  
Suite 1600  
Philadelphia, PA 19103  
United States  
Phone: 215-239-3722

**US.ElsevierHealth.com**

Elsevier is a world-leading provider of information solutions that enhance the performance of science, health, and technology professionals, empowering them to make better decisions, and deliver better care.

## **Epsilon Imaging ..... 2021**

3330 Jackson Plaza, Suite 100  
Ann Arbor, MI 48103  
United States  
Phone: 513-235-0039

**Epsilon-Imaging.com**

Epsilon Imaging is transforming diagnostic workflow in echocardiography with Echolnsight, a vendor neutral, zero footprint software platform with strain imaging. Echolnsight makes it easy to incorporate strain imaging into clinical practice with its suite of applications designed specifically for managing a wide variety of indications across your echo program.



## **Esaote North America/Pie Imaging ..... 1921**

11907 Exit Five Parkway  
Fishers, IN 46037  
United States  
Phone: 219-629-5566  
**EsaoteUSA.com**

Esaote North America (a subsidiary of Esaote S.p.A.) is an Italian medical device company that provides a wide range of imaging solutions including Ultrasound and Healthcare IT. Esaote's headquarters are in Genoa, Italy with an international presence in 80 countries. Pie Medical, an Esaote company, develops software solutions for interventional cardiology, vascular surgery, and radiology for image analysis with intuitive workflows for improved outcomes. Esaote North America's robust and scalable ultrasound portfolio is equipped to help address a wide range of imaging needs across clinical applications.

## **European Association of Cardiovascular Imaging (EACVI) ..... 1828**

2035 Route des Colles  
Sophia Antipolis, 06903  
France  
Phone: +0033498972480  
**ESCardio.org/EACVI**

The EACVI, a registered branch of the ESC, is the world-leading network of CVI experts, welcoming over 8,000 CVI professionals including cardiologists, sonographers, nurses, basic scientists and allied professionals. The EACVI is a unified community gathering four imaging modalities under one entity (Echo, CMR, Nuclear & CT). The association is committed to maintaining high standards of professional excellence.



## **FUJIFILM Healthcare Americas Corporation ..... 2106**

81 Hartwell Avenue  
Lexington, MA 02421  
United States  
Phone: 203-858-5772



## **GE Healthcare ..... 1707**

500 W. Monroe  
Chicago, IL 60661  
United States  
Phone: 331-255-7264  
**GE.com**

As a leading global medical technology, pharmaceutical diagnostics and digital solutions innovator, GE Healthcare enables clinicians to make faster, more informed decisions through intelligent devices, data analytics, applications and services, supported by its Edison intelligence platform. With over 100 years of healthcare industry experience, the company operates at the center of an ecosystem working toward precision health, digitizing healthcare, helping drive productivity and improve outcomes for patients, providers, health systems and researchers around the world.

## **Gemini Imaging Group ..... 1617**

1745 Shea Center Dr.Parkway  
Suite 400  
Highlands Ranch, CO 80129  
United States  
Phone: 720-344-4867  
**GeminiImaging.net**

Gemini Imaging Group offers a licensing system. This concept will save you years off of your learning curve as a new or existing entrepreneur. Presenting you as a seasoned ultrasound business owner on your first day you hang out your shingle.

## **HeartLab Limited ..... 1409**

238 Khyber Pass Pass Road  
Grafton, Auckland 1023  
New Zealand  
**HeartLab.com**



# EXHIBITOR DESCRIPTIONS

## **Inozyme Pharma ..... 2026**

321 Summer Street  
Suite 400  
Boston, MA 02210  
United States  
Phone: 717-587-0845

**Inozyme.com**

Inozyme Pharma is a rare disease biopharmaceutical company developing novel therapeutics for the treatment of diseases of abnormal mineralization impacting the vasculature, soft tissue and skeleton.



## **Intersocietal Accreditation Commission (IAC) 2020**

6021 University Boulevard  
Suite 500  
Ellicott City, MD 21043  
United States  
Phone: 800-838-2110

**Intersocietal.org**

Visit IAC to learn about our accreditation programs for Diagnostic Imaging and Vascular/Cardiac Intervention. Representatives are available to discuss the Standards, application process and tools such as special topic webinars, a CE finder and the IAC Quality Improvement (QI) Self-Assessment Tool. Facilities use the QI Tool to assess case studies and final reports, receive a quantitative report targeting opportunities for continuous process improvement, and to satisfy the MIPS Improvement Activity and MOC. Explore how your facility can join the more than 14,000 facilities that have achieved the true mark of excellence in patient care by earning IAC accreditation.

## **Joint Review Committee on Education in Diagnostic ..... 1627**

6021 University Boulevard  
Suite 500  
Ellicott City, MD 21043  
United States  
Phone: 443-973-3251

**JRCDS.org**

The Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS) makes accreditation recommendations for diagnostic medical sonography (DMS) programs to the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Programmatic accreditation is awarded to programs who through a self-study and site visit demonstrate substantial compliance to published Standards and Guidelines specific to DMS.



## **Lantheus ..... 1915**

331 Treble Cove Road  
North Billerica, MA 01862  
United States  
Phone: 800-362-2668

**Lantheus.com**

Lantheus is an established leader and fully integrated provider committed to innovative imaging diagnostics, targeted therapeutics, and artificial intelligence solutions to Find Fight and Follow® serious medical conditions. For more information, please visit **Lantheus.com**.

## **Lucile Packard Children's Hospital Stanford.. 2128**

725 Welsh Road  
Palo Alto, CA 94304  
United States  
Phone: 650-497-9383

**Careers.StanfordChildrens.org**

## **Mayo Clinic ..... 2120**

200 First Street SW  
Rochester, MN 55902  
United States  
Phone: 507-273-4253

**CVEducation.mayo.edu**

Mayo Clinic Cardiovascular CME provides a variety of in-person and online learning opportunities designed and taught by Mayo Clinic experts. With destination and online CME courses, board reviews, podcasts, free video center, and our all-new mobile app, it's easier than ever to seamlessly integrate cardiology education into your busy schedule.

## **Medical Simulation Technologies ..... 2029**

Miechowska 5B/4, Krakow 30-055  
Poland  
Phone: +48 12 298 76 61

**MSTech.eu**

We are an advanced medical technologies company introducing to the market an innovative simulation system for cardiac examination and micro-invasive heart procedures based on datasets from real patients. MST is already present with its products on 4 continents and is constantly working on the best simulation solutions for cardiologists.



## **narnar LLC ..... 2017**

13424 Auburn Court  
Lake Oswego, OR 97035  
United States  
Phone: 503-442-9273  
**narnar.co**

Software for contrast enhanced ultrasound.



## **National Board of Echocardiography ..... 1722**

3739 National Drive  
Suite 202  
Raleigh, NC 27622  
United States  
Phone: 919-861-5582

**EchoBoards.org**

The National Board of Echocardiography, Inc. is a physician, volunteer-led not-for-profit corporation. Established in 1996 to develop and administer examinations in the field of Clinical Echocardiography. A board certification process has been developed to publicly recognize Diplomates of the National Board of Echocardiography. The following examinations are administered by the NBE: ASCeXAM, ReASCE, Advanced PTEeXAM, ReAPTE, BPTeXAM, ReBasic PTE and CCEeXAM. Visit our booth for a chance to win an exam!

## **Nova Signal ..... 2126**

2440 S Sepulveda Boulevard  
Los Angeles, CA 90064  
United States  
Phone: 415-271-8358

**NovaSignal.com**

NovaSignal is a medical technology and data company that is revolutionizing transcranial Doppler ultrasound through the application of robotics, artificial intelligence, and cloud computing.

## **Pediatric Medical Group ..... 1412**

1301 Concord Terrace  
Sunrise, FL 33323  
United States  
Phone: 854-643-1937

**Pediatric.com**

Our network of Pediatric pediatric cardiologists provides comprehensive pediatric cardiology care to a broad range of patients, including unborn babies, newborns, children and adolescents.



## **Pfizer Inc ..... 1507**

235 East 42nd Street  
New York, NY 10017-5703  
United States  
Phone: 212-733-6729

**Pfizer.com**

At Pfizer, we apply science and our global resources to bring therapies to people that extend and significantly improve their lives. We strive to set the standard for quality, safety and value in the discovery, development and manufacture of health care products, including innovative medicines and vaccines.



## **Philips ..... 1907**

222 Jacob Street  
Cambridge, MA 02141  
United States  
Phone: 949-228-3622

**USA.Philips.Com/Healthcare**

At Philips, we partner with you to unlock the benefits of connecting data, technologies and people. We are driven to cut through complexity to help provide safe and effective care across the care continuum so your patients can receive the right care, in the right place, at the right time. Visit us at **Booth 1907** to experience the powerful Philips ecosystem to help you realize your vision for delivering better heart care with greater efficiency.



# EXHIBITOR DESCRIPTIONS

## **Scimage, Inc. .... 1615**

4916 El Camino Real  
Suite 200  
Los Altos, CA 94022  
United States  
Phone: 650-694-4858

**Scimage.com**

PICOM365 is an intelligent, scalable, Cloud-centric platform that provides end-to-end diagnostic workflow for all imaging exams across the enterprise. Built-in customizable structured report templates for all Cardiology disciplines with automatic measurement capture, auto-population from flat files, and data parsing with database and report insertion. Access your Echocardiology workflow anytime, anywhere.

## **Sheehan Medical LLC..... 2116**

7835 85th Place SE  
Mercer Island, WA 98040  
United States  
Phone: 206-498-0776

**Sheehan-Medical.com**

What you've all been wishing for is available at Sheehan Medical: You can now load your own patient images into the TEE simulator! Bring a case to booth 2116 for a live demo (contact us at sheehan-medical.com for full instructions). Real Ultrasound™ is a unique line of echo and TEE simulators that display real patient images, in real-time, for a realistic scanning experience. The simulators provide trainees with feedback on their skill immediately after every image acquisition. Trainees progress self paced, saving faculty time for advanced coaching.



## **Siemens Healthineers ..... 1715**

40 Liberty Blvd  
Malvern, PA 19355  
United States  
Phone: 610-209-1851

**Siemens-Healthineers.com**

We pioneer breakthroughs in healthcare. For everyone. Everywhere. The innovative solutions offered by Siemens Healthineers are crucial for clinical decision-making and treatment pathways. With a team of 66,000 dedicated employees across more than 70 countries, passionately pushing the boundaries of possibilities in healthcare while helping improve people's lives globally.



## **Sound Ergonomics, LLC ..... 1906**

6930 NE Bothell Way  
Kenmore, WA 98028  
United States  
Phone: 206-940-7542

**SoundErgonomics.com**

Sound Ergonomics, LLC provides consulting services and ergonomic products for the prevention of occupational musculoskeletal disorders in ultrasound professionals. Our services include educational programs, worksite evaluations, accreditation compliance programs and the Sound Work Environments™ program. Our products include ergonomic chairs, arm support devices and a line of exam tables.

## **Surgical Science - Symbionix Simulators..... 1807**

23500 Mercantile  
Suite F  
Beachwood, OH 44122  
United States  
Phone: +972 3 9114416

**SurgicalScience.com**

## **Texas Children's Hospital..... 1716**

6621 Fannin Street  
Houston, TX 77030  
United States  
Phone: 832-824-2143

**TexasChildrens.org**



## **Ultromics ..... 1726**

625 Bedford Drive  
Richardson, TX 75080  
United States  
972-768-7138

**Ultromics.com**

Ultromics' AI-powered platform, EchoGo, is revolutionizing echocardiography. Proven to predict patient outcomes, this groundbreaking solution automates complex analysis through a secure cloud connection. With unprecedented accuracy and zero variability, Ultromics empowers providers with superior heart disease detection and risk stratification. Visit Ultromics at booth 1726.



## UW Medicine Heart Institute ..... 1508

University of Washington Medicine  
1959 NE Pacific Street  
Seattle, WA 98195  
United States  
Phone: 206-543-4535

**UWMedicine.org/heart**

UW Medicine's Heart Institute is at the forefront of cardiac imaging research, education and clinical practice. Our team provides comprehensive echocardiography, CT/MRI and stress test services, utilizing the latest technology. We are committed to performing quality exams and proud to serve patients at 6 locations across the Puget Sound region.



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605-2 Sheppard Avenue East  
Toronto, ON Canada M2N 5Y7  
United States  
Phone: 416-848-4156

**Ventripoint.com**

Ventripoint Diagnostics is a medical technology company that is primarily engaged in the development and commercialization of cardiac diagnostic tools. Ventripoint's flagship product VMS+ generates 3D models and cardiac MRI equivalent volumetrics from your Echo lab.

Product Video: EXPLORE VMS+ 3.0 | **Ventripoint.com/explore-vms-3-0**

## Visura Technologies..... 1908

3510 Hopkins Place N  
Building 4  
Oakdale, MN 55128  
United States  
Phone: 612-812-7477

**VisuraTechnologies.com**

Founded in 2015, Visura is a medical device company dedicated to delivering state-of-art visualization solutions to improve the quality of transesophageal echocardiogram probe intubations. Visura has developed the TEECAD System, the world's first, FDA-cleared, disposable camera that seamlessly connects to a TEE probe, providing physicians real-time visualization for more efficient and effective probe placement.

## West Coast Ultrasound Institute ..... 1629

3580 Willshire Boulevard  
4th Floor  
Los Angeles, CA 90010  
United States  
Phone: 888-315-4993

**WCUI.edu**

West Coast Ultrasound Institute (WCUI) is an accredited private College specializing in Diagnostic Medical Imaging. Currently WCUI offers two Cardiovascular Programs: Associate Degree in CardioVascular Sonography and Bachelor of Science in Adult and Pediatric Cardiac Sonography specializing in Congenital Heart Defects Contact: **www.wcui.edu** or call 310 289-5123 or (888) 315-4993.



# ASE2022

HYBRID

## ORIGINAL SCIENCE

The annual showcase of investigators from around the world presenting cutting-edge original research on the latest advances in cardiovascular ultrasound and cases illustrating evolutions in patient care is a highlight of ASE's Annual Scientific Sessions.

Please visit [ASEcho.org/2022Abstracts](https://ASEcho.org/2022Abstracts) to see all the original science abstracts, and visit the poster area in the Echo Expo to view all the posters and speak with the authors.

### CLINICAL CASES

- ✦ Adult Patient Cases
- ✦ COVID-19 Patient Cases
- ✦ Pediatric & Congenital Patient Cases
- ✦ Veterinary Medicine Cases

- ✦ Valvular Heart Disease: Aortic **NEW!**
- ✦ Valvular Heart Disease: Mitral **NEW!**
- ✦ Valvular Heart Disease: Tricuspid & Pulmonic **NEW!**
- ✦ Veterinary / Comparative Medicine

### ORIGINAL SCIENCE – DISEASE/PATHOLOGY-BASED

- ✦ Adult Congenital Heart Disease
- ✦ Athlete's Heart **NEW!**
- ✦ Cardio-Oncology
- ✦ COVID-19
- ✦ Diseases of the Aorta / Vascular Diseases
- ✦ Echocardiography in SOE / Arrhythmias / Atrial Function
- ✦ Echocardiography in Systemic Diseases (DM, HTN, Obesity) / Pericardial Disease
- ✦ Echocardiography in Myocardial Disease (HCM, Amyloidosis, Sarcoidosis, Chagas) **NEW!**
- ✦ Adult & Pediatric Heart Failure / Transplant / Other
- ✦ Ischemic Heart Disease
- ✦ Pediatric Congenital Heart Disease

### ORIGINAL SCIENCE – TECHNIQUE/PROCEDURE-BASED

- ✦ 3D Echocardiography
- ✦ Artificial Intelligence / Machine Learning
- ✦ Contrast Echocardiography
- ✦ Critical Care Ultrasound / Point of Care Ultrasound
- ✦ Doppler / Hemodynamics
- ✦ Intraprocedural Echocardiography (Operating Room and Interventional Lab) / TEE
- ✦ New Technology
- ✦ Quality / Practice Improvement / Education
- ✦ Ventricular Function / Myocardial Mechanics
- ✦ Value of Echocardiography (Quality & Cost) / Outcomes / Comparative Effectiveness



***ASE gratefully acknowledges the following individuals for their contribution to the 33<sup>rd</sup> Annual ASE Scientific Sessions as an Abstract Grader.***

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# **Congratulations to Arthur E. Weyman, MD, FASE and Jane Marshall, RDCS, FASE!**

MGH echocardiography section proudly recognizes Ned Weyman, MD, FASE, and Jane Marshall, RDCS, (AE/PE), FASE, for their many years of service, mentorship, and scientific contributions to the field of cardiovascular ultrasound. Congratulations to both of them on their well-deserved retirement. Thank you for your dedication to your patients, fellows, sonographers, and colleagues.



We will miss you. We wish you a happy and active retirement!



**Massachusetts General Hospital**  
Founding Member, Mass General Brigham





# Canadian Society of Echocardiography



[www.csecho.ca](http://www.csecho.ca)



@CSEchoCa



Dr. Davinder Jassal  
CSE President



Dr. Sharon Mulvagh, FASE  
CSE VP, Incoming President

CSE is proud to be an international partner of ASE, with whom we share a common mission of *commitment to excellence in cardiovascular ultrasound education, research and service.*

CSE is here to support our sonographers, trainees, staff and colleagues, and to extend our global collaborations. We heartily congratulate all the awardees recognized at the ASE Foundation Research Awards Gala!

The Canadian Society of Echocardiography is an Affiliate of



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de cardiologie





NATIONAL  
BOARD OF  
ECHOCARDIOGRAPHY, INC.



# **Congratulations to Dr. Arthur Labovitz**

## **2022 ASE Physician Lifetime Achievement Award Recipient**

The National Board of Echocardiography is delighted to recognize Arthur Labovitz, MD, FACC, FACP, FCCP, FASE, FAHA. Dr. Labovitz is a founding member of NBE, a member of the Board of Directors, and Chairs the CCEeXAM Writing committee, as well as both the ASCeXAM and CCEeXAM Certification committees. We celebrate his dedication to ASE and extend our sincerest appreciation for his years of service.

NBE shares ASE's continued dedication to quality in echocardiography.





NATIONAL  
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ECHOCARDIOGRAPHY, INC.



# **Congratulations to Dr. Neil Weissman**

## **2022 ASE Meritorious Service Award Recipient**

The National Board of Echocardiography is delighted to recognize NBE Board of Directors member Neil Weissman, MD, FACC, FASE. We applaud his contributions to the field of echocardiography and extend our congratulations on this well-deserved honor.

NBE shares ASE's continued dedication to quality in echocardiography.





# MedStar Health



## **30 years of academic leadership in cardiovascular ultrasound for clinical trials.**

The Cardiovascular Imaging Core Lab at MedStar Health Research Institute provides proven expertise in cardiac magnetic resonance imaging, computerized tomography, and ultrasound in a responsive, academic environment.

With three decades of leadership in cardiology research and clinical trials, we are proud to partner with ASE in the WASE Studies program since 2016.

To learn more about our work, visit  
[MedStarResearch.org](http://MedStarResearch.org)

**It's how we  
treat people.**



# All Things ASEF This Meeting!

## ASE Foundation Booth

Saturday, June 11 - Monday, June 13

*We've missed you. Stop by and see us!*



## Cardiovascular Challenge

Friday, June 10 - Monday, June 13

Log your exercise all weekend and compete for prizes! Track the competition at the ASE Foundation Booth.



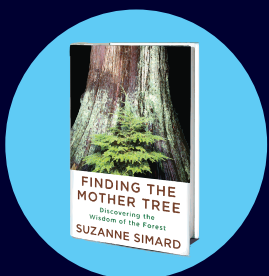
## Hearts All Around Us Photo Exhibit

Saturday, June 11 - Monday, June 13

Check out this year's display featuring heart shaped objects found in everyday life.

Photos available for purchase with donation in photographer's name.

On display at the ASE Foundation Booth.



## Suzanne Simard, PhD Book Signing

Sunday, June 12 from 9:00 - 10:00 AM

Outside Ballroom 6E

Purchase *Finding the Mother Tree* in advance at the ASE Foundation Booth. Limited copies available.



## 13th Annual Research Awards Gala

Sunday, June 12 from 7:00 - 11:00 PM

Grand Hyatt Seattle

Celebrate ASE's 2022 Award Winners and support cardiovascular ultrasound research!

*Advance tickets required.*



**ASE** Foundation

ASEF solely relies on donations for its activities. Donate today at [ASEFoundation.org](https://ASEFoundation.org)





# RESEARCH AWARDS GALA

CELEBRATING CARDIOVASCULAR  
ULTRASOUND RESEARCH

PRESENTED BY THE ASE FOUNDATION

Thank you to the evening's supporters

## **ADVOCATE TABLE LEVEL SUPPORTERS**

Federico Asch, MD, FASE for MedStar Health  
Research Institute

Judy Hung, MD, FASE

Amer Johri, MD, FASE and Sharon Mulvagh,  
MD, FASE for the Canadian Society of  
Echocardiography

Geoffrey Rose, MD, FASE for Atrium Health -  
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## **BENEFACTOR TABLE LEVEL SUPPORTER**

Samuel Siu, MD, SM, MBA, FASE

[ASEFoundation.org/Gala2022](https://ASEFoundation.org/Gala2022)

**SUNDAY, JUNE 12, 2022**  
**GRAND HYATT SEATTLE**  
**SEATTLE, WA**





ASE is the Society for Cardiovascular Ultrasound Professionals™. It is the largest global organization for cardiovascular ultrasound imaging serving physicians, sonographers, nurses, veterinarians, and scientists and as such is the leader and advocate, setting practice standards and guidelines for the field. The Society is committed to advancing cardiovascular ultrasound to improve lives. For more information about ASE, visit: [ASEcho.org](http://ASEcho.org) and follow us [@ASE360](https://twitter.com/ASE360).

## ASE MEMBERSHIP

ASE is an organization that is open to all echo enthusiasts. It serves its members in numerous ways by providing education, advocacy, research, practice guidelines, and a community for their profession. ASE membership includes over \$750 of FREE CME credits a year, in addition to discounts on all ASE educational courses and products. Members also receive a monthly subscription to the *Journal of the American Society of Echocardiography* (JASE), access to CASE, ASE's online case reports journal, assistance with coding and reimbursement issues, networking opportunities, and other career resources. If you are not already a member of ASE, visit the ASE Booth in the Echo Expo to join today or join online at [ASEcho.org/join](http://ASEcho.org/join).

## ASE COUNCILS AND SPECIALTY INTEREST GROUPS

ASE has four councils that provide members with an opportunity to be involved with one or more subspecialty group.

- ★ Council on Pediatric and Congenital Heart Disease
- ★ Council on Perioperative Echocardiography
- ★ Council on Cardiovascular Sonography
- ★ Council on Circulation & Vascular Ultrasound

Specialty Interest Groups (SIGs) support members who have a common interest in specialized areas with growth potential in cardiovascular ultrasound. There are currently six SIGs that members can join.

- ★ Cardio-Oncology
- ★ Critical Care Echocardiography (*transitioning to a council in July 2022*)
- ★ Emerging Echo Enthusiasts
- ★ Interventional Echocardiography (*transitioning to a Council in January 2023*)
- ★ Neonatal Hemodynamics TnECHO
- ★ Veterinary

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# BOARD, COUNCIL, AND COMMITTEE MEETINGS

## FRIDAY, JUNE 10<sup>TH</sup>

ASE Board of Directors	11:30 AM – 1:00 PM	<b>Sheraton</b>
Council on PCHD Steering Committee	2:00 – 3:30 PM	<b>212</b>
Emerging Echo Enthusiasts Specialty Interest Group	3:30 – 4:30 PM	<b>214</b>
Twitter Journal Club Sub Group	4:00 – 5:00 PM	<b>212</b>

## SATURDAY, JUNE 11<sup>TH</sup>

Finance Committee	11:00 AM – 12:00 PM	<b>212</b>
Council on CV Sonography Steering Committee	11:30 AM – 1:00 PM	<b>205</b>
Council on Perioperative Echocardiography Steering Committee	11:30 AM – 1:00 PM	<b>213</b>
JASE Editorial Board	12:00 – 1:30 PM	<b>201</b>
Veterinary Specialty Interest Group	1:00 – 2:00 PM	<b>214</b>
Echo Lab Medical and Technical Directors Leadership Forum	1:00 – 2:00 PM	<b>2A</b>
ImageGuideEcho Pediatric Registry Sub-Committee	1:30 – 2:30 PM	<b>205</b>
Governance & Compliance Committee Meeting	2:00 – 3:00 PM	<b>212</b>
ASEF Annual Appeal Committee	2:00 – 3:30 PM	<b>210</b>
CASE Editorial Board	2:30 – 4:00 PM	<b>201</b>
Leadership Academy	4:30 – 6:30 PM	<b>205</b>

## SUNDAY, JUNE 12<sup>TH</sup>

Council on Circulation and Vascular Ultrasound Steering Committee	7:00 – 8:00 AM	<b>212</b>
CoA-ACS	7:00 – 8:00 AM	<b>214</b>
Advocacy Committee	7:00 – 8:30 AM	<b>213</b>
Networking for VA Hospitals (sponsored by ASE SIGs)	7:30 – 8:30 AM	<b>205</b>
Awards Committee	9:00 – 9:45 AM	<b>205</b>

CME Committee Meeting	9:30 – 10:30 AM	<b>210</b>
Research Committee	9:30 – 11:00 AM	<b>213</b>
PR Committee Meeting	11:00 AM – 12:00 PM	<b>214</b>
Critical Care Echocardiography Council Steering Committee	11:00 AM – 12:30 PM	<b>205</b>
International Leadership Luncheon (Invitation Only)	11:30 AM – 1:00 PM	<b>201</b>
Education Committee	11:30 AM – 12:30 PM	<b>205</b>
ImageGuideEcho Research & Publications Committee	12:30 – 1:30 PM	<b>212</b>
Nominations Committee Meeting	12:45 – 1:30 PM	<b>205</b>
Membership Steering Committee	1:00 – 2:00 PM	<b>210</b>
Cardio-Oncology Specialty Interest Group	1:30 – 2:30 PM	<b>214</b>
FASE Training & Certification Advisory Committee	2:00 – 3:00 PM	<b>213</b>
Research Restructure Workgroup	2:00 – 3:30 PM	<b>212</b>

## MONDAY, JUNE 13<sup>TH</sup>

IRT Committee Mtg	10:00 – 11:00 AM	<b>2B</b>
ASE Foundation Board of Directors	10:30 AM – 12:30 PM	<b>212</b>
Guidelines & Standards Committee	11:45 AM – 1:15 PM	<b>210</b>
ImageGuideEcho Registry Committee	1:00 – 2:00 PM	<b>213</b>

## TUESDAY, JUNE 14<sup>TH</sup>

ASE/IEEE Hackathon	7:00 AM – 4:00 PM	<b>210</b>
2022 SS Program Committee	8:30 AM – 10:00 AM	<b>205</b>





This prestigious designation is only conferred upon a peer review of credentials specific to the field of cardiovascular ultrasound. ASE is proud to recognize these members for their dedication and accomplishments. Listed below are the 108 new FASE members who achieved this designation between June 2021 and April 2022. For a complete list of FASE, please visit [SeeMyHeart.org](https://www.seeMyHeart.org). Learn more about applying for FASE at [ASEcho.org/FASE](https://www.ASEcho.org/FASE).

## NEW FASE RECIPIENTS

### June 2021 - April 2022

Samah Ismael Abohamr, MD, M.Sc., MBBch, FASE  
 Tareq Abu Sharifeh, MD, FASE  
 Luis C. Afonso, MD, FASE  
 Ibraheem Humaid Alharbi, MD, FASE  
 Aws Almufleh, MD, FASE  
 Sinan Alo, DO, FASE  
 Amro Alsaid, MD, FASE  
 Sethabel Levi Alvarado, MD, FASE  
 Muhanad Al-Zubaidi, MBChB, FASE  
 Vidhu Anand, MBBS, FASE  
 Faisal D. Arain, MBBS, MD, FASE  
 John Joseph Wilbur Asheld III, DO, FASE  
 Wilbur Jeremiah Asheld, DO, FASE  
 Ravi Ashwath, MD, MBBS, FASE  
 Au Shek Yin, MBBS, FASE  
 Melissa Catherine Bailey, BS, RDCS, RDMS, RVT, FASE  
 Dorsey Ballow, RDCS, RDMS, FASE  
 Elvera L. Baron, MD PhD, FASE  
 Ashish Anil Bartakke MBBS, DA, FCPS, MD, EDAIC, FRCA(UK), EDRA, FASE  
 Brenton Scott Bauer, MD, FASE  
 Kiran Belani, MD, FASE  
 Jean Beresian, MD, FASE  
 Sujatha P. Bhandary, MD, FASE  
 Nomita Bhawal, MD, FASE  
 Caroline Bleakley, MD, FASE  
 Michael L. Boisen, MD, FASE  
 Laura T. Boone, BS, RDCS, RVT, RDMS, RT(R), FASE  
 Paula Jane Boucaut, FASE  
 Christopher Brockway, MS, RDCS, FASE  
 Dale Burkett, MD, FASE  
 Elvis Cami, MD, FASE  
 Sarah Ann Chambers Gurson, MD, FASE  
 Sindu Chandran, MD, FASE  
 Anne D. Cherry, MD, FASE

Kashyap B. Choksi, MD, PhD, RPVI, FASE  
 Jon M. Christensen, MD, FASE  
 John Landon Colquitt, MD, FASE  
 Michelle M Cordio MEd, ACS, RDCS, RVT, RDMS, FASE  
 Ian Crandall, BS, MS, RCS, FASE  
 Jacqueline Suk Danik, MD, DrPH, FASE  
 Garrett J. De Francis, BS, RDCS, FASE  
 Lorenzo De Marchi, MD, FASE  
 Doreen DeFaria Yeh, MD, FASE  
 John B. Dickey, MD, FASE  
 Chandler M. Dixon, RDCS, FASE  
 Tam Tan Huy Doan, MD, FASE  
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 Elliott Elias, MD, MPH, FASE  
 Hayley Engstrom, ACS, RDCS, FASE  
 Ifeoma Onuorah Ezenekwe, MD, FASE  
 Kristie Faust-Gomez, BS, ACS, RDCS, RVT, RT(R), FASE  
 Nadeen N. Faza, MD, FASE  
 Jared William Feinman, MD, FASE  
 Marie Ficociello, MA, RDCS, FASE  
 Francis D. Fleeson III, RCS, EMT, FASE  
 Michael Bernard Foth, CRCS, RCS, RDCS, FASE  
 Hetal A. Gandhi, MD, FASE  
 Lynette L. Gascoigne, BS, RCS, RVT, FASE  
 Raktim Kumar Ghosh, MD, FASE  
 Yasmeen Golzar, MD, FASE  
 David G. Goodwin, M.Ed, RDCS, FASE  
 Suzette Blondelle Graham-Hill, MD, FASE  
 Theresa Green, RDCS, FASE  
 Ihab Hamzeh, MD, FASE  
 Sachiyo Igata Hang, ACS, PhD, RDCS, FASE  
 Chari YT Hart, MD, FASE  
 Elise Hawes, BAS, ACS, RDCS, FASE  
 Sonia A. Henry, MD, FASE  
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 Kimberly Howard-Quijano, MD, MS, FASE  
 Lisa W. Howley, MD, FASE  
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Bharathi Upadhyaya, MD, FASE  
Lisa Vargas, RDCS, FASE  
Mani Vindhya, MD, FASE  
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Stephanie Ann Wells, BS, RDCS, RVT, RDMS, FASE  
Jacqueline Wheatley, DMS, RDCS (PE, AE), FASE  
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## ASE Foundation

The ASE Foundation (ASEF) is ASE's charitable arm, helping to assure the viability and visibility of cardiovascular ultrasound. Every dollar raised through the Foundation's Annual Appeal goes directly back into the field. The Foundation conducts an Annual Appeal each year soliciting individuals, companies, and foundations to support its efforts. The ASE Foundation met 121% of its \$200,000 fundraising goal for the 2021 Annual Appeal, raising \$241,292. All contributions to the Foundation received in 2022 will support the following initiatives:

- ✦ Global Health Outreach
- ✦ Patient Engagement
- ✦ Research
- ✦ Travel Grants & Scholarships

Stop by the ASE Foundation booth, located in the Atrium Lobby Level 4 to:

- ✦ Learn more about fundraising events being hosted in Seattle, such as the Annual Research Awards Gala, and the Cardiovascular Challenge.
- ✦ View the *Hearts All Around Us* photo exhibition
- ✦ Pick up your "I GAVE TODAY" badge
- ✦ Inquire about volunteer opportunities
- ✦ Purchase an ASEF bracelet

The Foundation booth will be open the following hours:

- ✦ Saturday, 9:00 AM – 5:00 PM
- ✦ Sunday, 9:00 AM – 5:00 PM
- ✦ Monday, 9:00 AM – 5:00 PM

Look for ASEF Annual Appeal Committee members with an "Ask Me" button, as they are dedicated donors who serve the organization by directly soliciting for donations from others. Donate today and help us to make a world of difference!

## CARDIOVASCULAR CHALLENGE

Get moving with the ASE Foundation Cardiovascular Challenge. Sign up to participate at the ASEF Booth in the Atrium Lobby Level 4, then record your miles logged every day and log them at the booth. The person with the most miles logged will receive a \$150 Amazon gift card, second place will receive a \$75 Amazon gift card, and the person with the third will receive a limited edition ASEF hat. The winners will be announced Monday, June 13, at 3:30 PM in the Echo Expo.



**Special thanks to our 2022 Cardiovascular Challenge sponsors:**



## HEARTS ALL AROUND US GALLERY

A special curated showcase of photographs will be on display from Saturday - Monday. This year's photo exhibit is *Hearts All Around Us* and will showcase photographs of heart-shaped things you have come across in nature, architecture, and everyday life. Many photos will be available to take home with a donation to the ASE Foundation. Stop by the ASE Foundation booth to see hearts all around.

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This list recognizes cumulative giving from individual donors as of December 31, 2021. Cumulative giving levels are updated annually at the conclusion of that year's Annual Appeal. These all-star donors deserve a round of applause for their support of cardiovascular ultrasound.

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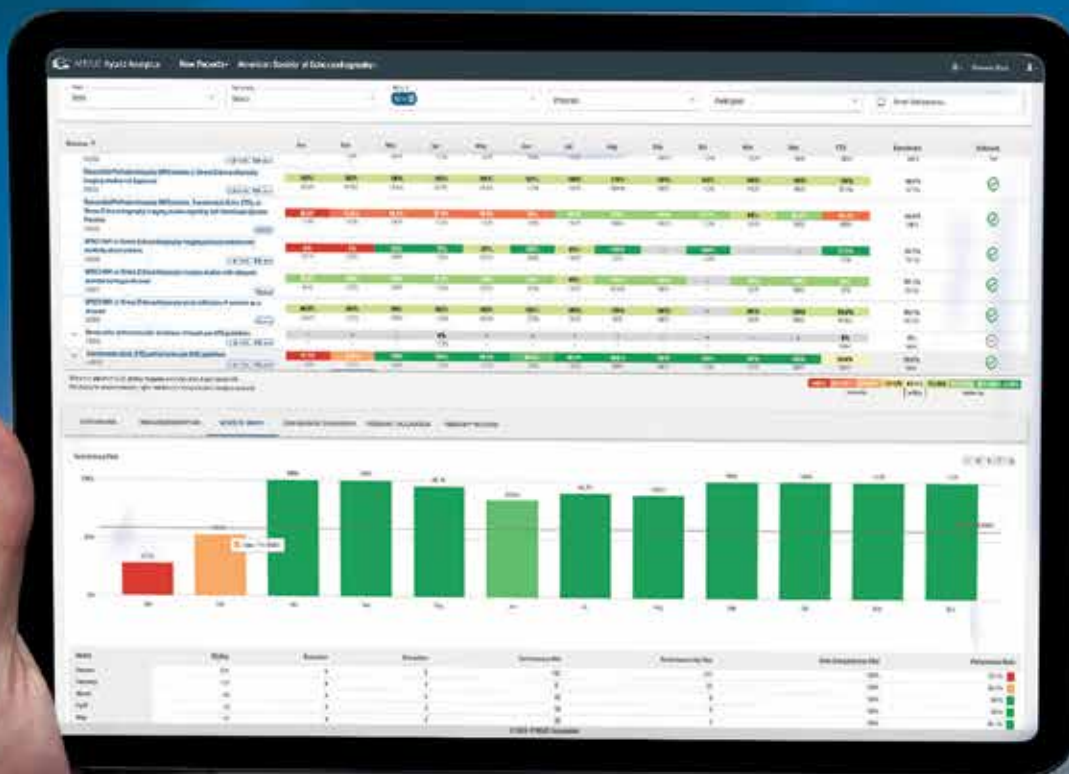
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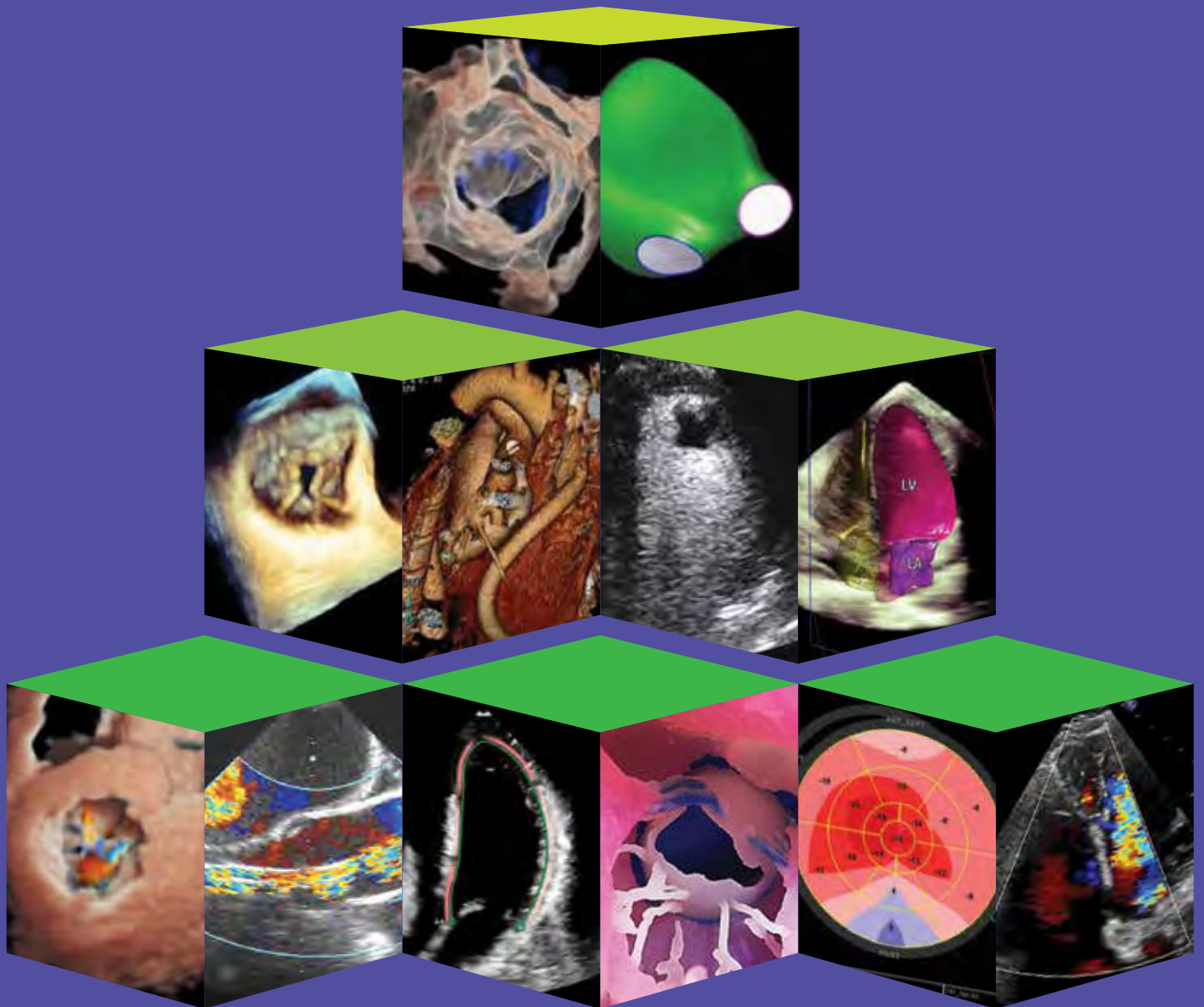
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