

American Society of Echocardiography

ASE 2019



30

**YEARS OF
INNOVATION**

**Scientific Sessions • June 21-25, 2019
Oregon Convention Center • Portland, OR**

**Wi-Fi: ASE2019
Password: IHeartEcho
#ASE2019 @ASE360**

ASEScientificSessions.org

FINAL PROGRAM

DEFINITY®

VIAL
FOR (Perflutren Lipid Microsphere)
INJECTABLE SUSPENSION

INDICATIONS

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.

CONTRAINDICATIONS

Do not administer DEFINITY® to patients with known or suspected hypersensitivity to perflutren.

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® 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-containing microsphere administration [see *Adverse Reactions (6)*]. The risk for these reactions may be increased among patients with unstable cardiopulmonary conditions [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 cardiopulmonary disease.

Please see brief summary of Prescribing Information, including boxed **WARNING** regarding serious cardiopulmonary reactions on subsequent pages. Please see full Prescribing Information at www.DEFINITYimaging.com.

Most¹
Used

Most
Studied²

Most
Trusted³

References:

1. © 2018 Millennium Research Group, Inc. All rights reserved. Reproduction, distribution, transmission or publication is prohibited. Reprinted with permission.
2. Embase and Medline Search, May 2018.
3. Data on file, Lantheus Medical Imaging, Inc.
4. Kurt, M, et al. *J. Am Coll. Cardiol* 2009;53:802-810

DEFINITY and corporate logo display are registered trademarks of Lantheus Medical Imaging, Inc.
©2018 Lantheus Medical Imaging, Inc. All rights reserved. DEF 059 November 2018

Making a Diagnostic Difference

DEFINITY®
improves cardiac diagnosis,
patient management and
cost-effectiveness
in echocardiography⁴



DEFINITY®



Unenhanced

To place an order:
1-800-299-3431
www.DEFINITYimaging.com



Lantheus
Medical Imaging®

BRIEF SUMMARY

Please see Full Prescribing Information available at www.definityimaging.com for additional information.

WARNING: SERIOUS CARDIOPULMONARY REACTIONS

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

- Assess all patients for the presence of any condition that precludes DEFINITY[®] administration [see *Contraindications*].
- 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.

DOSING AND ADMINISTRATION

Important Administration Instructions

- DEFINITY[®] is intended for administration only after activation in the VIALMIX[®] apparatus. Before injection, this product must be activated and prepared according to the instructions outlined below.
- 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 30-60 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 4.0 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 [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:

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 have occurred

in patients with no prior exposure to perflutren-containing microsphere products [see *Adverse Reactions*]. 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		
Back/renal pain	20	(1.2)
Chest pain	13	(0.8)
Central and peripheral nervous system disorder		
Headache	40	(2.3)
Dizziness	11	(0.6)
Gastrointestinal system		
Nausea	17	(1.0)
Vascular (extracardiac) disorders		
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-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 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

Anaphylactic reaction, anaphylactic shock, bronchospasm, throat tightness, angioedema, edema (pharyngeal, palatal, mouth, peripheral, localized), swelling (face, eye, lip, tongue, upper airway), facial hypoesthesia, rash, urticaria, pruritus, flushing, 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, tel. toll free: 800-299-3431
All Other Business: 800-362-2668

(For Massachusetts and International, call 978-667-9531)

DEFBS-0217

PROGRAM INFORMATION

Conference Overview	7
Welcome Message	9
ASE 2019 Program Committee	10
Scientific Program Tracks and Key.....	11
Registration Information	12
Claiming CME	13
Facility Information	14
Facility Map	15
Program Information and Regulations	16
Education Information	17
Disclosure Information	19

FRIDAY, JUNE 21ST

Schedule at a Glance	21
Friday Schedule.....	23

SATURDAY, JUNE 22ND

Schedule at a Glance	25
Saturday Schedule.....	27

SUNDAY, JUNE 23RD

Schedule at a Glance	35
Sunday Schedule	37

MONDAY, JUNE 24TH

Schedule at a Glance	49
Monday Schedule.....	51

TUESDAY, JUNE 25TH

Schedule at a Glance	59
Tuesday Schedule	61

SPECIAL EVENTS

Special Events and Networking Opportunities.....	69
ASE Foundation Awards and Grants	76

EXHIBITS

Exhibit & Poster Hall Floorplan.....	80
Exhibit & Poster Hall Hours.....	81
Science & Technology Theater Schedule	81
Exhibitor Assignments.....	89
Exhibitor Descriptions	91

GENERAL INFORMATION

About ASE.....	103
Officers and Board of Directors	104
Board, Council, and Committee Meetings	106
ASE Foundation	107
ASEF Contributors.....	108
2018 Annual Appeal Campaign Donors	110
Fellows of the American Society of Echocardiography (FASE).....	113



#ASE2019

- A**cquire valuable information
- S**hare experiences
- E**ngage all over the world
- C**ontribute to the conversation
- H**ear from top echo experts
- O**btain connections



CONFERENCE OVERVIEW

	FRIDAY, JUNE 21 ST	SATURDAY, JUNE 22 ND	SUNDAY, JUNE 23 RD	MONDAY, JUNE 24 TH	TUESDAY, JUNE 25 TH	
6:30 AM »						« 6:30 AM
7:00 AM »		Sessions				« 7:00 AM
7:30 AM »						« 7:30 AM
8:00 AM »		Sessions	Sessions	Sessions	Sessions	« 8:00 AM
8:30 AM »		30 th Annual Edler Lecture & Awards Presentation				« 8:30 AM
9:00 AM »					REGISTRATION	« 9:00 AM
9:30 AM »		Break	Exhibits open 9:00 AM-4:00 PM	Exhibits open 9:00 AM-4:00 PM	Break	« 9:30 AM
10:00 AM »						« 10:00 AM
10:30 AM »		Sessions	Sessions	Sessions	Sessions	« 10:30 AM
11:00 AM »						« 11:00 AM
11:30 AM »						« 11:30 AM
12:00 PM »	REGISTRATION	Lunch on Own	Lunch on Own	Lunch on Own		« 12:00 PM
12:30 PM »		S & T Theater Lantheus Medical Imaging, Inc.	S & T Theater Philips	S & T Theater Bracco Diagnostics Inc.		« 12:30 PM
1:00 PM »						« 1:00 PM
1:30 PM »		Sessions	Sessions	Sessions		« 1:30 PM
2:00 PM »						« 2:00 PM
2:30 PM »	REGISTRATION	Break				« 2:30 PM
3:00 PM »	Sessions		Exhibits open 9:00 AM-4:00 PM	Exhibits open 9:00 AM-4:00 PM		« 3:00 PM
3:30 PM »		Sessions				« 3:30 PM
4:00 PM »	Break		Sessions			« 4:00 PM
4:30 PM »				20 th Annual Feigenbaum Lecture & Weyman YIA Competition		« 4:30 PM
5:00 PM »	Sessions	Exhibits open 4:30-6:30 PM	Stump the Stars			« 5:00 PM
5:30 PM »		President's Reception in the Exhibit & Poster Hall		Closing Reception		« 5:30 PM
6:00 PM »						« 6:00 PM
6:30 PM »						« 6:30 PM
7:00 PM »	S & T Theater Hitachi Healthcare	S & T Theater Siemens Healthineers				« 7:00 PM
7:30 PM »			ASE Foundation 10 th Annual Research Awards Gala 7:30-11:00 PM			« 7:30 PM
8:00 PM »						« 8:00 PM
8:30 PM »						« 8:30 PM

THANK YOU ASE TWITTER CHAMPIONS

#ASE2019

Follow our ASE Twitter Champions as they provide LIVE UPDATES from the 11 Tracks at this year's Scientific Sessions. You can "attend" multiple sessions in real time using Twitter!

1 CIRCULATION
#ASECirculation

@AmerJohri
@DrMalissaWood

2 EARLY CAREER
#ASEEarlyCareer

@AkhilNarangMD
@LucySafi

3 IMAGING ESSENTIALS
#ASEEssentials

@BonitaEcho
@DDefariaYeh

4 INNOVATION/TECHNOLOGY
#ASEIT

@PPSengupta1
@Sugeng_Lissa

5 ISCHEMIA
#ASEIschemia

@AllanLKleinMD1

**6 MYOCARDIUM/
FUNCTION**
#ASEFunction

@Onco_Cardiology

7 PEDIATRIC
#ASEPeds

@DrDorfKidsHeart
@MelisWasserman
@ShelbyKuttyMD

8 PERIOPERATIVE
#ASEPeriop

@GB_Mackensen
@NicoA002

9 POCUS
#ASEPOCUS

@DRsonosRD

10 SPECIAL SESSIONS
#ASESpecialSessions

@SMcCartney31

11 VALVES
#ASEValves

@Hahn_RT
@NadeenFaza
@RajDoc2005
@TiffChenMD

ASE 2019



YEARS OF INNOVATION

CHAMPIONS-AT-LARGE

#ASE2019

@Ash71US

@DavidWienerMD

@DocStrom

@ErinMichos

@GWhalleyPhD

@HeartDocSharon

@IAmRitu

@PPibarat

DEAR COLLEAGUES & FRIENDS,

On behalf of the ASE Scientific Sessions Program Committee and the Board of Directors, we welcome you to the beautiful city of Portland to celebrate ASE's Scientific Sessions 30th anniversary!

The role of cardiovascular ultrasound has expanded rapidly and is at the core of modern, high-quality healthcare around the world. For this reason, the theme of this year's meeting, "30 Years of Innovation" is **overarching**, highlighting the complementary strengths of cardiovascular ultrasound at the intersection of imaging, physiology, physiopathology, interventional medicine, and surgery. We are bringing together healthcare providers of many specialties, not only cardiologists and sonographers, but also pediatricians, point of care clinicians, anesthesiologists, interventionalists, vascular specialists, surgeons, veterinarians, nurses, researchers, engineers, and more. Our program committee has created a cutting-edge educational scientific program featuring everything you have come to expect from a premier scientific meeting.

The program starts off on Friday afternoon with four popular workshops, the IAC Bootcamp, Adult Congenital Heart Disease, and Point of Care Ultrasound. This year we have added a special session **"How to Optimize Ultrasound Enhancing Agents in a Busy Echo Lab."**

This highly interactive workshop is designed for those who wish to add contrast ultrasound techniques to their practice or enhance their skills. The learning labs on 3D Cropping, 3D Volume/Function, and Myocardial Strain are always full so we have increased the **total number of learning labs to nine**. New options this year include **3D Printing** and **Virtual Reality**. Seats are limited for the learning labs, so if you haven't pre-registered, check at the registration desk for availability.

We have included content for all levels of training, with 117 sessions in 11 tracks over five days. In addition to Imaging Essentials, Circulation, Pediatric/Congenital, Perioperative, and Point of Care, we added five new tracks: **Early Career, Ischemia, Myocardium/Function, Innovation/Technology, and Valves**. There are also focused sessions on the growing field of interventional echocardiography. We have increased the number of **discussion-based interactive sessions**, with a return of the simulated valve teams and a new format of case-based sessions with a presenter, a discussant, and a panel of experts. To best customize your experience, sessions have been identified with their level of difficulty.

We welcome the **junior conference attendees** and all new members of ASE! Our brand-new **Early Career track** provides six intimate sessions designed just for you. This setting provides an opportunity to interact with our highly accessible leaders, to share your concerns, and to get personal advice directly from them.

State-of-the-art lectures will be given by renowned experts in the field. To cite a few, the 30th Annual Edler Lecture, "Time Flies When You Are Having Fun with Aortic Stenosis," will be presented by Past President **Vera Rigolin, MD, FASE**. **Sanjiv Shah, MD, FASE**, will deliver the 20th Annual Feigenbaum Lecture on "Echocardiography for Precision Medicine:

Digital Biopsy to Deconstruct Biology," and **Matt Bruce, PhD**, will give the Kalmanson Lecture on "Ultrafast Echo: Seeing More with Speed." This year, special guest **Dr. Barbara Natterson-Horowitz**, a *New York Times* bestselling author of the book *Zoobiquity*, will be here to deliver fascinating speeches on "Species-Spanning Echocardiography: Cardiovascular Insights for Humans and Other Animals" and "Not Uniquely Human" and she will be doing a **book signing on Sunday afternoon at the ASE Foundation booth**. Plan to buy this fascinating book and donate to ASEF at the same time!

Showcasing the groundbreaking research and the latest clinical developments remains a core of ASE Scientific Sessions and is featured in many different ways. From the Arthur E. Weyman Young Investigator's Award Competition and Brian Haluska Sonographer Research Award Competition, to our new "Best of CASE: Twitter Competition" and "Advancing the Echo Field: from Abstracts to JASE" presentations, and 476 selected research posters, there is no doubt one of these will amaze you.

If you want to know what the **future of cardiovascular ultrasound** looks like, or how innovation changes the outcomes of our field, then don't miss these sessions, **"Artificial Intelligence in Echocardiography," "Echo Innovation,"** and the popular **"Value Summit."** Two dedicated sessions for women's diseases are offered this year. The focus is on challenging clinical scenarios in women's diseases, such as pregnancy-related cardiovascular disease, spontaneous coronary artery dissection, and heart failure. To highlight our theme of "30 Years of Innovation" and show the full growth of the imaging field, we offer several sessions **focused on multimodality imaging**, including **"MRI for the Echocardiographer," "Ischemia Integration of Echo and Other Modalities," "Integration of Echo in Cardiac Imaging: Dilemmas in Valves and Devices,"** and **"Role of Multimodality in Cardiac Function."**

Last but not least, **Chalk Talks** are also worthy of being highlighted! They feature hot topics—Strain, Diastology, 3D, and Valve guidelines and **"How to Design and Implement a Research Project"** presented by Michael Picard, MD, FASE, Editor-in-Chief of JASE. These discussions will allow in-depth interactions with world-class experts.

The President's Reception on Saturday afternoon and the Closing Reception on Monday evening will be great opportunities for you to network with old and new friends alike. On Sunday evening, dress up for the 10th Annual Research Awards Gala to support the ASE Foundation!

It's a marathon with 520 lectures, 39 symposia, nine learning labs, three debates, five chalk talks, three joint sessions, six early career sessions, two value summit sessions, and more! So, dive into the sessions, soak up the speeches, roll up your sleeves at a workshop, and don't forget to save a little energy for some fun time!

Thank you to our supporters, exhibitors, partners, speakers, and conference attendees for your support and participation. Welcome to Portland!



ASE 2019 Program Chair
Marielle Scherrer-Crosbie, MD, PhD, FASE



ASE 2019 Sonographer Co-Chair
Lanqi Hua, RDCS, (AE/PE/FE), FASE

ASE 2019 PROGRAM COMMITTEE



Marielle Scherrer-Crosbie, MD, PhD, FASE
Chair



Lanqi Hua, RDCS (AE/PE/FE), MS, FASE
Sonographer Co-Chair



Sunil Mankad, MD, FASE
Past Chair



Jonathan Lindner, MD, FASE
President



Theodore Abraham, MD, FASE
Abstract Chair



Ricardo Benenstein, MD, FASE
Circulation & Vascular Council Representative Chair



Frederick Cobey, MD, FASE
Perioperative Council Representative Co-chair



Keith Collins, MS, RDCS, FASE
Member at Large



Brian Davidson, MD, FASE
Local Liaison



John Dent, MD, FASE
Member at Large



Harish Jarrett, MD
Member at Large



Megan Koivisto
Local Liaison



Arthur Labovitz, MD, FASE
Member at Large



Michael Lanspa, MD, FASE
Point of Care Representative



G. Burkhard Mackensen, MD, PhD, FASE
Perioperative Council Representative Chair



Michael Main, MD, FASE
Abstract Co-Chair



Sharon Mulvagh, MD, FASE
Member at Large



Sue Phillip, RCS, FASE
Cardiovascular Sonography Council Representative



Michael Puchalski, MD, FASE
PCHD Council Representative Chair



Jyothy Puthumana, MD, FASE
Member at Large



Ritu Sachdeva, MBBS, FASE
PCHD Council Representative Co-chair



Madhav Swaminathan, MD, FASE
President-Elect



James Thomas, MD, FASE
Presidential Liaison



Joel Turner, MD, MsC
Point of Care Representative



Matt Umland, ACS, RDCS, FASE
Member at Large



Bryan Wells, MD, FASE
Circulation & Vascular Council Representative Co-chair

CIRCULATION (C)

ASE's Council on Circulation & Vascular Ultrasound has put together a program that will provide attendees with an excellent overview, as well as advanced topics on vascular ultrasound of interest to the practicing cardiologist/sonographer.

EARLY CAREER (EC)

New for 2019, this track has been designed specifically for fellows in training, and early career physicians and sonographers. The focus will be career development with sessions geared toward helping you effectively navigate the formative years of practice while maximizing the skills you have obtained during your training.

IMAGING ESSENTIALS (E)

ASE's Council on Cardiovascular Sonography has created this track to instruct practitioners on techniques of assessment and quantitation. There are disease-based sessions that will help you improve your skills in imaging, measurements and quantification in a variety of disease states. In addition, there are practical sessions on lab management, diastology, myocardial perfusion, strain, and 3D echo that you can incorporate into your lab when you return home.

INNOVATION/ TECHNOLOGY (IT)

New for 2019, the Innovation/Technology Track has been designed to communicate recent advances that improve quality. Topics include clinically-relevant innovations that improve diagnostic accuracy, quantification, and workflow; and breakthrough cutting-edge technologies that will be used for treating the patients of tomorrow.

ISCHEMIA (I)

New for 2019, the Ischemia Track covers a diverse spectrum inclusive of obstructive and non-obstructive coronary diseases and stress echocardiography. Pericardial sessions have also been included. Sessions will address physiology, pathophysiology, diagnosis, and clinical management using echocardiography and multimodality imaging.

MYOCARDIUM/ FUNCTION (M)

New for 2019, 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)

ASE's Council on Pediatric and Congenital Heart Disease has created a program packed with cutting-edge science from fetus to adult that brings together cardiologists, PhDs, engineers, and sonographers with the unifying goal of improving care for those with heart disease. The program will take you on a journey of using echo to predict, diagnose, and treat heart disease by reviewing current standards, learning from experts, and exposing you to what is on the horizon.

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 on this highly valuable modality that is of critical importance as healthcare practitioners become skilled in the use of point of care ultrasound.

SPECIAL SESSIONS (S)

The 2019 Program Committee has designed the Special Sessions Track to introduce different learning formats to entertain and educate. Join us for the Great Debates, Stump the Stars, Echo Jeopardy, Lessons from the Legends, and more.

VALVES (V)

New for 2019, the Valve Track has been planned with the goal of bringing together the expertise of sonographers, cardiologists, cardiac anesthesiologists, and surgeons to share knowledge in the diagnosis and management of patients with both simple and complex valvular heart disease. The sessions will highlight the role of the newer echocardiography modalities in managing patients with valvular diseases, present and future of percutaneous aortic, mitral, and tricuspid valve therapies, and an overview of structural imaging to complement the perioperative track.

Sessions are identified with the following shapes to assist you in locating education aimed at your level of training.



BASIC



BASIC/INTERMEDIATE



INTERMEDIATE



INTERMEDIATE/ADVANCED



ADVANCED



BASIC/INTERMEDIATE/ADVANCED

REGISTRATION INFORMATION

ATTENDEE REGISTRATION

The ASE Registration Desk is located in the Pre-function C Lobby of the Oregon Convention Center. Attendees may pick up their conference materials and name badge at this location.

REGISTRATION HOURS

Friday, June 21 st	12:00 PM – 6:30 PM
Saturday, June 22 nd	6:30 AM – 5:00 PM
Sunday, June 23 rd	6:30 AM – 5:00 PM
Monday, June 24 th	6:30 AM – 5:30 PM
Tuesday, June 25 th	6:30 AM – 11:30 AM

NAME BADGES

Admission to the educational sessions, ASE Exhibit & Poster Hall, and Science & Technology Theater 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 Exhibit & Poster Hall or Science & Technology Theater. 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 Exhibit & Poster Hall 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 30th Annual ASE Scientific Sessions.

SPEAKER READY ROOM

Faculty name badges are available at the ASE Registration Desk during registration hours. The Speaker Ready Room is located in room B-116 on Level 1 and staffed with technicians to assist faculty with uploading and previewing presentations. It is open during the following times:

Friday, June 21 st	12:00 PM – 5:00 PM
Saturday, June 22 nd	6:00 AM – 4:30 PM
Sunday, June 23 rd	6:30 AM – 4:30 PM
Monday, June 24 th	6:30 AM – 4:30 PM
Tuesday, June 25 th	6:30 AM – 9:00 AM

NEWS MEDIA

For information regarding news releases, news conferences, and interviews, please visit the ASE Registration Desk located in the Pre-function C Lobby of the Oregon Convention Center. Copies of all news releases are also available on 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.



To claim your CME credit for the 30th Annual ASE Scientific Sessions, please follow these steps using Mozilla Firefox, Google Chrome, or Safari browsers. **Internet Explorer will not work.**

THE DEADLINE TO CLAIM CREDIT FOR THIS CONFERENCE IS **AUGUST 27, 2019.**

ASE Members:

1. Go to ASEcho.org and log on to the Member Portal with your username (email) and password.
 - a. If you forget your password, simply click "Retrieve" under the login.
2. Click on ASEUniversity and CME Credits. This will take you directly to your ASEUniversity account.

Nonmembers:

1. Go to ASEUniversity.org.
2. Log into your existing account or create a new one.

To Claim Credit:

3. On the ASEUniversity homepage, click My Account at the top right of the page.
4. Under My Account, click Add Access Code on the left sidebar and enter the code, **PORTLAND19**.
5. Verify your registration information. Please be sure to use the same information that you used to register for the event.
6. Once verified, click CE Information tab and Take Exam button to claim your CME credit. CME credits are not earned until the entire evaluation has been completed.
7. Your certificate will be available for immediate download and can also be found under My Account in the My Transcripts.

Remember to enter your board number and birthdate if you choose to have your CME credits transferred to accrediting boards. Credits will be transferred to ABIM, ABA, ABP, ARDMS, and CCI. There is a space for this information on the first page of the evaluation.

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/2oQyI3z>

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

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

1. Select "Vote and Ask" on the main screen to access the sessions.
2. Select the Session you are attending.
3. Select "Ask."
4. Enter your question and tap the red symbol in the bottom right corner of the screen.



MOBILE DEVICE USE

We encourage you to use your mobile device to download the new 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.

INTERNET ACCESS

Complimentary Wi-Fi is available in the Oregon Convention Center. Please use the following log-in information:

Network: **ASE2019**

Password: **IHeartEcho**

FACILITY INFORMATION

The Oregon Convention Center's physical address is:

**777 NE Martin Luther King Jr Blvd,
Portland, OR 97232**



GETTING AROUND PORTLAND DURING ASE 2019

This beautiful conference center is located across the river from downtown Portland and easily accessible by the MAX light rail. **All registered attendees of ASE 2019 will receive a FREE TriMet MAX Light Rail Pass to use when traveling around Portland.**

Make your way to the Oregon Convention Center when you arrive and pick up your pass at the Registration Desk in the Pre-function C Lobby. The Convention Center MAX Station stop on the corner of NE Holladay & Martin Luther King Jr. Boulevard is opposite the entrance to the Oregon Convention Center. The rail stop allows easy, safe access to the facility. Using the MAX light rail is the preferred method of travel for conference attendees located at any of the designated hotels in downtown Portland.

The free TriMet MAX Light Rail Pass will be valid Friday, June 21 through Tuesday, June 25. The free pass will expire at 11:59 PM on Tuesday, June 25. MAX Light Rail is Portland's safe, efficient train system that connects the metro area, Portland International Airport, and the downtown core. Visit TravelPortland.com/Plan-Your-Trip for more Portland details.

Please note your hotel's TriMet stop below:

- Courtyard by Marriott, Portland City Center – SW 6th & Pine Street (Green Line)
- Hilton Portland Downtown – Pioneer Square (Red or Blue Line)
- Paramount Hotel – Pioneer Square (Red or Blue Line)
- Portland Marriott City Center – Pioneer Square (Red or Blue Line)
- The Benson Hotel – SW 6th & Pine Street (Green Line)
- The Duniway Portland – Pioneer Square (Red or Blue Line)
- The Nines – Mall/SW 5th Avenue (Red or Blue Line)

FIRST AID

An emergency medical professional will be available during the hours of the ASE 2019 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.

LOST & FOUND

Questions regarding lost or found items can be directed to the ASE Registration Desk located in the Pre-function C Lobby of the convention center.

LUGGAGE STORAGE

Luggage storage will be available at the Oregon Convention Center Friday-Tuesday in room C-127.

SELF-SERVICE PRINTING CENTER

A self-service printing center is located next to Portland Ballroom 251 on Level 2 in the convention center. Services include computers with internet access and computer printing (both black and white and color, 8.5" x 11" paper only). Copying, faxing, and scanning services are not available onsite. The printing center is open during the hours of our event.

PRINTING AND SHIPPING SERVICES

The Oregon Convention Center does not provide any shipping services. The nearest shipping services are available at FedEx Office Print & Ship Center, located at 1605 NE 7th Avenue. The phone number is 503-284-2129. For more information and directions, please visit their website.

ATMs

You will find three ATMs conveniently located within the Convention Center:

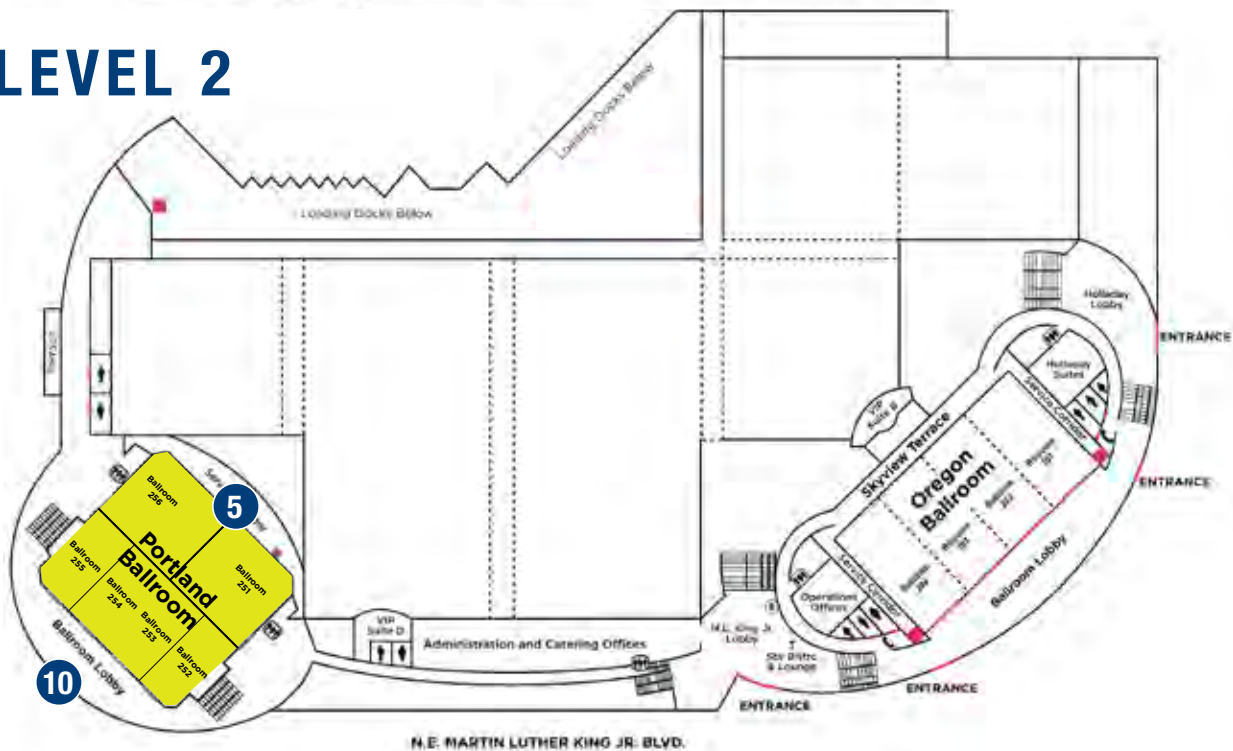
- Gingkobery Concourse, to the right of the entry doors
- Holladay Lobby, in the elevator alcove
- Exhibit Hall A Lobby

LEVEL 1



TRIMET
N.E. HOLLADAY ST.
MAX METROPOLITAN AREA RAPID TRANSIT

LEVEL 2



- | | | | | |
|-------------------------|--------------------------------|-----------------|----------------------|-----------------------|
| 1 Registration | 3 Science & Technology Theater | 5 Session Rooms | 7 Speaker Ready Room | 9 Committee Meetings |
| 2 Exhibit & Poster Hall | 4 ASE Foundation Booth | 6 FASE Lounge | 8 Learning Labs | 10 ASE Products Booth |

FOOD FUNCTIONS

ASE will provide continental breakfast in Pre-function A Lobby (Level 1) and Portland Ballroom Lobby (Level 2), from 6:30 – 7:30 AM daily. Morning and afternoon coffee breaks are available for registered attendees in the Exhibit & Poster Hall on Level 1 on Sunday, June 23 and Monday, June 24 and in Pre-function A Lobby (Level 1) and Portland Ballroom Lobby (Level 2), on Friday, June 21, Saturday, June 22, and Tuesday, June 25. Please refer to the Schedule at a Glance pages for the times of the daily breaks. For those attending the Science & Technology Theater, located in the Exhibit & Poster Hall on Level 1, ASE will provide boxed meals during each lunch session on a first come, first served basis (max. 350 participants). Various refreshments may also be available for the evening sessions. See page 81 of this program for a detailed Science and Technology Theater schedule.

INTERNET ACCESS

Complimentary Wi-Fi is available in the Oregon Convention Center. Please use the following log-in information:

Network: **ASE2019**

Password: **IHeartEcho**

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.

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 2019 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 2019 attendees may take photographs during 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 presenters' request. Use #ASE2019 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 during the main conference days and hours for the 2019 Scientific Sessions. Please visit the ASE Registration Desk 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.

There are two complimentary private nursing suites available at the Oregon Convention Center. These secure suites are located near the ASE Registration Desk on Level 1. The suites are ADA compatible and equipped with standard AC power outlets and USB charger ports.

CHILDREN RULES AND REGULATIONS

All children ages 16 and under must be accompanied at all times by their parent or guardian while in the Oregon 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 Exhibit & Poster Hall while under the supervision of a parent or guardian. However, please note that for their safety children are not



allowed in the Exhibit & Poster Hall 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.

TARGET AUDIENCE

The ASE 30th Annual Scientific Sessions 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 oral and poster research presentations offer a broad spectrum of educational opportunities in both large and small group settings. The curriculum is intended to enhance knowledge and performance for adult and pediatric cardiologists, cardiothoracic and vascular surgeons, cardiac anesthesiologists, 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, and also to take advantage of the opportunity to gain new expertise.

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

This activity is supported in part by educational grants from: Abbott, Boston Scientific, Edwards Lifesciences, GE Healthcare, Lantheus Medical Imaging, Inc., and Medtronic.

IN-KIND DONATIONS

This activity is supported in part by in-kind donations from: Canon Medical Systems, FUJIFILM Sonosite, GE Healthcare, Hitachi, Materialise, Inc., Oregon Health & Science University, Philips, Siemens Healthineers, University of Chicago Medicine.

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 guidelines 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:

- Utilize cardiac and vascular ultrasound for the comprehensive assessment and management of cardiovascular diseases including, but not limited to: valvular heart disease, coronary artery disease, cardiomyopathies, pericardial disease, congenital heart disease, peripheral artery disease, and effects of systemic disease on the heart.
- Incorporate new guideline recommendations into clinical practice.
- Recognize the recent advancements and future direction of cardiac and vascular ultrasound and the impact these advancements may have on patient care.
- Integrate the latest technical developments into clinical practice.
- Employ cardiac ultrasound in pre-procedural, intra-procedural, and post-procedural care of patients in the operating room and catheterization laboratory.
- Delineate how the new changes in the healthcare delivery system affect the private and hospital-based practice of cardiology and cardiovascular imaging.
- Improve quality and workflow in the echocardiography lab through practice-improvement measures.
- Define the role of echo specifically in the guidance of non-surgical procedures.
- Discuss best practices in education for sonographer and physician staff, cardiology fellows, and sonography students and management of echocardiographic laboratories.
- Describe the lab accreditation process and standards for clinical practice and quality improvement.
- Explain the primary uses of echocardiography in the areas of critical care and emergency medicine.
- Apply new technologies such as 3-D and stress echo for advanced assessment of valve disease.
- Integrate qualitative and quantitative echocardiography for better understanding of physiology and anatomy of cardiac surgical patients in order to optimize practice performance and patient outcomes.

ACCREDITATION AND DESIGNATION

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education 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 for physicians.

ASE is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. ASE designates the live activity for a maximum of 32.25 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

DAILY BREAKDOWN OF CME CREDITS:

June 21, 2019 = 4.0

June 22, 2019 = 8.75

June 23, 2019 = 8.5

June 24, 2019 = 7.5

June 25, 2019 = 3.5

Successful completion of this CME activity enables the participant to earn up to 32.25 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 the 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 21 MOC points in the American Board of Pediatrics' (ABP) Maintenance of Certification (MOC) program. 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 32.25 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.

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).

The European Union of Medical Specialists (UEMS)-European Accreditation Council for Continuing Medical Education (EACCME) has an agreement of mutual recognition of continuing medical education (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).

The National Board of Echocardiography[™] (NBE) requires 15 hours of echocardiography specific CME for both ReASCE[®] and RePTE[®] recertification. This activity contains 32.25 *AMA PRA Category 1 Credits*[™] that can be used toward recertification requirements.

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

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

The American Society of Echocardiography 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 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 19 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[®].



It is the policy of ASE to ensure balance, independence, objectivity, and scientific rigor in all of its educational activities. All speakers at the 30th Annual Scientific Sessions have agreed to the following:

- The information presented to the learner will be unbiased, scientifically balanced and based on best available evidence and best practices in medicine.
- All reasonable clinical alternatives will be presented when making practice recommendations.
- All scientific research referred to, reported, or used in support or justification of patient care recommendations will conform to the generally accepted standards of experimental design, data collection, and analysis.
- To disclose to the audience when products/services are not labeled for the use under discussion or when the products are still under investigation.
- To comply with patient confidentiality requirements as outlined in the Health Insurance Portability and Accountability Act (HIPAA) by removing any and all patient identifiers from presentations.
- Relationships with commercial interests will not influence or bias the presentations and/or planning of the activity.

ASE is committed to resolving all conflicts of interest issues, and its mandate is to retain only those speakers with financial interests that can be reconciled with the goals and educational integrity of the educational program. In accordance with these policies, the ASE implemented mechanisms during the planning and implementation of this CME activity to identify and resolve conflicts of interest for all individuals in a position to control content.

In accordance with this policy and the ACCME, all presenters have indicated whether or not they and/or their spouse/significant other have a relationship with a commercial interest which, in the context of their presentation, may be perceived by the audience as a real or apparent conflict of interest (e.g. ownership of stock, research grant, etc.). The ACCME defines a commercial interest as any proprietary entity producing healthcare goods or services consumed by, or used on patients, with an exception of nonprofit or government organizations and non-healthcare related companies.

The ACCME does not consider providers of clinical services directly to patients to be a commercial interest.

RELATIONSHIP CODES

1. SPEAKER/SPEAKERS' BUREAU
2. CONSULTANT, ADVISOR
3. STOCK OWNERSHIP (NOT INCLUDING STOCKS OWNED IN A MANAGED PORTFOLIO)
4. RESEARCH GRANT SUPPORT (INCLUDING GRANTS IN WHICH SPEAKER IS LISTED AS PI)
5. EMPLOYMENT AFFILIATION/SPOUSE EMPLOYMENT AFFILIATION
6. ROYALTY, PATENTS
7. CORPORATE RESEARCH COLLABORATION (INCLUDING TRIALS/ PRODUCT TESTING)
8. OTHER (EDUCATOR OR HONORARIA)
9. MEMBER DATA SAFETY AND MONITORING BOARD

Adams, D	Bay Labs (2); ESP Registry Review (1)
Altman, C	UpToDate (6)
Badano, L	GE Healthcare (2)
Banchs, J	Bay Labs (2)
Berrebi, A	Philips Healthcare (1); Edwards Lifesciences Surgical (1)
Bhatt, H	Neochord, LLC (2)
Billick, K	Lantheus Medical (2); Bay Labs (2)
Bourque, D	Lantheus Medical (1)
Brook, M	Siemens Ultrasound (4)
Chirinos, J	Sanifit (2); Microsoft (2), (4); Fukuda-Denshi (2), (4); BMS (2), (4); OPKO Healthcare (2); Ironwood (2); Pfizer (2), Akros Pharma (2); Merck (2); Edwards (2); Bayer (2);
Chow, C	Cardio Square Inc. (3); USquaresoft Inc. (3)
Choy, J	Philips Healthcare (1)
Clavel, M	Medtronic (4); Edwards Lifesciences (4)
Davis, A	Lantheus Medical Imaging (1)
DeMaria, A	ResMed Foundation (2); Bracco (4); Zoll (1)
Doukky, R	Astellas (4)
Douglas, P	Heartflow (4); Bay Labs (2); REAL TIMI 63B (2)
Galderisi, M	Bayer (2); Pfizer (2); SOBI (2)
Gladding, P	Theranostics Lab (6); HeartLab.AI (3)
Gorman, B	IAC (5)
Ferencik, M	AHA (4); NIH (4)
Han, Y	Gilead (4); GE (1); Bracco (2)
Hahn, R	Philips (2); Edwards (2); Medtronic (2); Abbott (2)
Hill, J	Phillips Healthcare (1)
Holt, B	Philips Medical (1)
Horton, K	NeoChord (2)
Howley, L	GE Healthcare (8)
Hung, J	Harpoon Medical Inc. Core Lab (8)
Jankowski, M	Bay Labs Inc. (2)
Kadian-Dodov, D	Janssen Pharmaceuticals (2)
Kaul, S	Bracco (2); Ultromics (2)
Kisslo, J	Philips Healthcare (1), (4); GE Healthcare (4); NovoNordisk (4)
Klein, A	Kiniksa (4); Sobi (2); Elsevier (6); Wolters Kluwer (6)
Knoll, M	Lantheus Medical Imaging (1)
Kruse, E	Lantheus Medical Imaging (2)
Lang, R	Philips Imaging Systems (2)
Leong-Poi, H	Lantheus Medical Imaging (1)
Lester, S	Philips (2); Myokardia (2)

ASE 2019 FACULTY DISCLOSURE INFORMATION

Liel-Cohen, N..... DIA (2)
 Linder, J..... Lantheus (4); GE Lifesciences (4)
 Lopez-Mattei, J..... Arterys (2)
 Luis, S..... Sobi (2)
 Park, M..... Lantheus Medical Imaging (1)
 Mangion, J..... Bracco, Inc. (2); GE Healthcare (4)
 Marcus, R..... Exeltis (2)
 McCarthy, P..... Edwards Lifesciences (2), (6); Abbott Vascular (2) Medtronic (1);
 AtriCure (1)
 Meece, R..... Philips Healthcare (1); Abbott Healthcare (1)
 Mitchell, C..... Davies Publishing (6); Elsevier (6); Wolters-Kluwer (6)
 W.L. Gore & Associates (4)
 Mor-Avi, V..... Bay Labs (2)
 Mulvagh, S..... NovoNordisk (2)
 Nakatani, S..... Canon Medical Co. (4); Hitachi Medical Co. (4)
 Nambi, V..... Roche (6); Merck (4); Dynamed Plus (2)
 Oh, J..... Medtronic (2)
 Orsinelli, D..... Medtronic (7); Edwards Lifesciences (7); Abbott (7)
 Pandian, N..... Lantheus (1); Canon (2); Siemens (2)
 Park, M..... Lantheus Medical (1), (2)
 Patel, A..... Alnylam (1); Astellas (1); Philips (4); GE (4); Arterys (2)
 Patel, A.R..... CCSF (2); Lantheus Medical (2); Lina Nova (2); Pfizer (2)
 Patel, P..... Edwards Lifesciences (1)
 Pereira, J..... Lantheus Medical Imaging (2)
 Pibarot, P..... Edwards Lifesciences (7); Medtronic (7)
 Pinto, N..... AHA (4)
 Poppas, A..... General Electric (3)
 Porter, T..... Bracco (4); Philips (4)
 Pruetz, J..... NIH (4); The Coulter Foundation (4); L.K. Whittier Foundation (4);
 Southern California Clinical and Translational Science Institute (4)
 Puthumana, J..... Abbott (1)
 Roberson, D..... Philips Medical (1)
 Salcedo, E..... Philips Medical (2)
 Saric, M..... Philips (1); Siemens (2); Medtronic (1)
 Scalia, G..... Abbott Vascular (1); GenesisCare (1)
 Schiller, N..... Cardiocore (2); HD Medical (2); Echonous (7); GE (7)
 Sengupta, P..... Heart Sciences (2); Ultromics (2); Kencor Health (2)
 Senior, R..... Bracco (1); Lantheus (1); Philips (1)
 Shah, S..... Actelion (4); AstraZeneca (4); Corvia (4); Novartis (4); Bayer (4)
 Shook, D..... Edwards (1), (2); Boston Scientific (1); Baylis Medical (1)
 Stone, M..... Butterfly Network Inc. (2)
 Strachan, M..... Lantheus (1)
 Sugeng, L..... Philips (2); Siemens Healthineers (1); Canon (7); Hitachi (1)
 Thomas, J..... Abbott (2); Edwards (2); GE (1); Bay Labs (2), (5)
 Tsang, W..... Philips (4); UptoDate (6)
 Tucay, E..... Siemens (1)
 Turner, J..... The EDE Course (1); CAE Healthcare (2)
 Vainrib, A..... Microinterventional Devices (2)
 Vannan, M..... Siemens (4), (8)
 Voigt, J..... GE (2); Philips (2); Siemens (2)
 Wei, K..... Bracco (1); GE (4)
 Weissman, N..... Baylabs (2); Edwards (4);
 Boston Scientific (4); Abbott (4); Medtronic (4)
 Wieggers, S..... Merck (3); Labcorp (3); Covance (5)
 Wong, P..... Sobi Inc. (1); Zogenix Inc. (2)
 Yamamoto, K..... Otsuka Pharmaceutical Co. Ltd. (1), (4); St. Jude Japan (4);
 Daiichi-Sankyo Co. Ltd. (4); Johnson & Johnson (4)
 Yu, A..... Glenmark Pharmaceuticals (2); BMS (2); Bayer (2)

NO FINANCIAL RELATIONSHIP

Abdelmoneim, S; Abraham, C; Abraham, T; Abuzaid, A; Adusumalli, S;
 Addetia, K; Afonso, L; Albers, A; Alfirevic, A; Allen, S; Anderson, B; Aragam,
 J; Armour, A; Arntfield, R; Aronson, L; Arora, B; Arya, B; Asch, F; Astbury, J;
 Aurigemma, G; Ayres, N; Barac, A; Barker, P; Beer, R; Benenstein, R; Ben-
 nett, C; Benson, M; Beroukhir, Bertrand, P; R; Bierig, M; Billick, K; Birk, E;
 Bolin, E; Border, W; Bremmer, M; Broberg, C; Bruce, M; Bughrara, N; Burba-
 no, N; Burgess, P; Cardim, N; Carlos, J; Chamsi-Pasha, M; Chen, M; Chen,
 T; Chetrit, M; Cho, G; Churchill, J; Cobey, F; Collins, K; Cohen, M; Cosyns,
 B; Dal-Bianco, J; Daniels, A; Davidson, B; Defaria Yeh, D; Dellling, F; Dent, J;
 Deo, R; Desai, M; Dillenbeck, A; Donal, E; Donofrio, M; Dorfman, A; D'Ovidio,
 A; Drake, D; Dragulescu, A; Dudzinski, D; Dversdal, R; Dvir, D; Edvardsen,
 T; Edwards, N; Eidem, B; Ensing, G; Ermakov, S; Fanola, C; Feigenbaum,
 H; Feinman, J; Ferrari, V; Fey, B; Finley, A; Flachskampf, F; Fleishman, C;
 Forsha, D; France, R; Freed, B; Freud, L; Friedberg, M; Frommelt, P; Fuss, C;
 Garcia, M; Garcia-Sayan, E; Gardin, Ghosal, S; J; Gill, E; Gillam, L; Giraud, G;
 Goldstein, S; Gopal, A; Gorcsan, J; Grewal, J; Grimm, R; Gutierrez-Fajardo,
 P; Ha, J; Hall, M; Harmon, P; Harrild, D; Hartsfield-Pugh, M; Hartzel, B; Hays,
 A; Heitner, S; Hersh, A; Hodovan, J; Hogan, W; Hosking, M; Hua, L; Hussain,
 A; Isselbacher, E; Jaber, W; Jackson, A; Jagasia, D; Janardhanan, R; Jarrett,
 H; Jewell, J; Joffe, D; Johnson, J; Johri, A; Jolley, M; Jone, P; Kadian-Dodov,
 K; Kane, B; Kane, G; Katz, W; Kebed, K; Khan, A; Khandheria, B; Kinsara,
 A; Kim, J; Kirkpatrick, J; Koliass, T; Kort, S; Koulogiannis, K; Kovalchin, J;
 Kramer, C; Kreeger, J; Kronzo, I; Kutty, S; Labovitz, A; Lai, W; Landeck, B;
 Lanspa, M; Layoun, M; Lefebvre, B; Levin, D; Little, S; Litwin, S; Liu, J;
 Liu, K; Lopez, L; Lu, J; Mackensen, G; Mahmood, F; Main, M; Malkowski,
 M; Mankad, R; Marcoff, L; Marek, J; Marshall, J; Marwick, T; Marx, G;
 Maskatia, S; Matsumoto, K; Mayer, S; McCartney, S; MCGovern, M; McLlwin,
 E; Medvedofsky, Mentee, JD; D; Menon, S; Mercandetti, J; Mertens, L;
 Michelfelder, R; Miller-Hance, W; Miller, F; Miller, S; Mohabir, P; Moon-Grady,
 A; Nagueh, S; Namasivayam, M; Nanda, N; Naqvi, T; Natterson-Horowitz,
 B; Narang, A; Narayan, H; Natarajan, S; Nesbitt, G; Nguyen, H; Nicoara, A;
 Nikravan, S; Nkomo, V; Oberhoffer, R; Ogunyankin, K; Okonoboh, P; Olivieri,
 L; Olson, J; Onishi, T; Orsinelli, M; Pai, S; Panebianco, N; Parashar, S; Parker,
 M; Parra, D; Parthiban, A; Passeri, J; Patil, P; Pearlman, A; Pearson, K;
 Pellett, A; Pellikka, P; Peyvandi, S; Phelan, D; Phillip, S; Picard, M; Playford,
 D; Pislaru, C; Pislaru, S; Poh, K; Powell, A; Prado, A; Prakash, A; Pressman,
 G; Puchalski, M; Quader, N; Quatomoni, N; Quiroz, R; Radhakrishnan, A;
 Rangarajan, V; Ranjo, C; Rapoport, L; Reisman, M; Rigolin, V; Riley, A; Rim,
 S; Ripley, B; Roberts, B; Roberts, M; Robinson, J; Rodrigues, A; Rodriguez,
 L; Roemer, S; Rose, G; Rose-Felker, K; Rosen, D; Rudski, L; Ryan, T; Rychik,
 J; Sable, C; Sachdeva, R; Sade, L; Sadeghpour, A; Safi, L; Sami, A; Sanborn,
 Sanchez, L; D; Schafer, M; Scherrer-Crosbie, M; Schweitzer, M; Scott, N;
 Sebag, I; Sengupta, S; Seward, J; Shah, S; Shamoun, F; Shea, E; Shen, I;
 Sherrid, Sheu, R; M; Shrivastava, S; Singh, D; Slesnick, T; Smiseth, O; Song,
 J; Song, H; Soni-Patel, N; Soslow, J; Spina, S; Srivastava, S; Stachura, M;
 Stainback, R; Statile, C; Stern, K; Stewart, W Stoddard, M; Strange, G; Strom,
 J; Swaminathan, M; Tacy, T; Tan, T; Tatum, G; Taub, C; Taylor, C; Taylor, M;
 Thamman, R; Thankavel, P; Thomas, L; Tison, G; Toptine, J; Umland, M; Van
 Houten, T; Verrier, E; Venkateshvaran, A; Vieira, M; Villanueva, F; Von Ramm,
 O; Vorsanger, M; Wahi, S; Wang, D; Wantz, M; Wasserman, M; Weinberg, P;
 Weiss, R; Welch, T; Wells, B; Weyman, A; Wharton, R; Wiener, D; Wiley, B;
 Win, S; Woo, A; Wood, M; Wright, R; Yamat, M; Young, L; Yucel, E; Zahr, F;
 Zhu, T; Zimmerman, K; Zoghbi, W

SCHEDULE AT A GLANCE

FRIDAY, JUNE 21ST

REGISTRATION OPEN: 12:00 – 6:30 PM				
ROOM	PORTLAND BALLROOM 251	PORTLAND BALLROOM 252	PORTLAND BALLROOM 253-254	PORTLAND BALLROOM 255
2:00 – 4:00 PM	I How to Optimize Ultrasound Enhancing Agents (Contrast) in a Busy Echo Lab*	E Adult Congenital – Pathology*	POC POCUS Extracardiac Imaging Workshop*	E IAC Echocardiography Boot Camp Part 1
4:00 – 4:15 PM	REFRESHMENT BREAK			
4:15 – 6:15 PM		E Adult Congenital Primer*	POC New Frontiers of POCUS*	E IAC Echocardiography Boot Camp Part 2
6:30 – 8:00 PM	SCIENCE & TECHNOLOGY THEATER: HITACHI HEALTHCARE			

* These are ticketed events and an additional fee is required. Please check at the registration desk for availability. For detailed information, please download the ASE Courses app.

CIRCULATION (C) **IMAGING ESSENTIALS (E)** **ISCHEMIA (I)** **PEDIATRIC/CONGENITAL (PC)** **POINT OF CARE (POC)** **VALVES (V)**
EARLY CAREER (EC) **INNOVATION/TECHNOLOGY (IT)** **MYOCARDIUM/FUNCTION (M)** **PERIOPERATIVE (P)** **SPECIAL SESSIONS (S)**

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



Born from artificial intelligence,
driven by outcomes*

Get updates on advances first

#Ultronics
ultronics.com



*Pending FDA 510(k) clearance, not available for sale in the United States.

© 2019 Ultronics Limited. All rights reserved.



Download the ASE Courses APP!

Stay up-to-date on ASE 2019 and all of ASE's live educational courses by downloading the **FREE ASE COURSES APP**. Use the app to create your event schedule and receive notifications of special activities and sessions while on-site.

Search "**ASE Courses**" in the Google Play or Apple Store to download.

Network: ASE2019
Password: IHeartEcho

Sponsored by: **SIEMENS Healthineers** 

2:00 PM – 4:00 PM

I How to Optimize Ultrasound Enhancing Agents (Contrast) in a Busy Echo Lab – Portland Ballroom 251 (Ticketed Event. Additional Fee Required)

Chairs: B. Davidson, S. Mulvagh, K. Wei

2:00 PM – 2:10 PM

Bubbles, Settings, and Protocols: What You Need to Know
M. Park

2:10 PM – 2:20 PM

Optimizing the Echo Image: Artifacts, Tips and Tricks
J. Hodovan

2:20 PM – 2:30 PM

Contrast Applications in the Echo Lab: Left Ventricular Opacification-Left Ventricular Ejection Fraction, Masses, Regional Wall Motion
S. Mulvagh

2:30 PM – 2:40 PM

Myocardial Perfusion 101 Bootcamp
K. Wei

2:40 PM – 2:50 PM

Contrast in Exercise and Pharmacologic Stress (Protocols and Physiology)
R. Senior

2:50 PM – 3:00 PM

Additive Value of Contrast: Worth the Time to Overcome Administrative Hurdles?
M. Main

3:00 PM – 3:15 PM

Break

3:15 PM – 4:00 PM

Hands-On Workshop: Left Ventricular Opacification, Myocardial Contrast Echocardiography

2:00 PM – 4:00 PM

E Adult Congenital: Pathology Workshop – Portland Ballroom 252 (Ticketed Event. Additional Fee Required)

Chairs: J. Kreeger, D. Defaria Yeh

2:00 PM – 2:20 PM

Basic Segmental Anatomy of Congenital Heart Disease
E. Shea

2:20 PM – 2:40 PM

Evaluation of Intracardiac Shunts
J. Kreeger

2:40 PM – 3:00 PM

Echocardiography in the Adult Congenital Heart Disease Patient with Tetralogy of Fallot
J. Churchill

3:00 PM – 3:20 PM

Echocardiographic Evaluation of Systemic Right Ventricle in Transposition of the Great Arteries: Congenitally Corrected Transposition of the Great Arteries, Senning and Mustard Procedure
D. Defaria Yeh

3:20 PM – 3:40 PM

Echocardiographic Evaluation of the Adult with Single Ventricle
R. Beroukhim

3:40 PM – 4:00 PM

Question & Answer

2:00 PM – 4:00 PM

POC POCUS Extracardiac Imaging Workshop – Portland Ballroom 253-254 (Ticketed Event. Additional Fee Required)

Chairs: M. Lanspa, J. Turner

Learning Lab Assistants: R. Arntfield, M. Benson, P. Boubert, N. Bughrara, R. Dversdal, S. Ghosal, A. Hersh, A. Hussain, A. Jackson, P. Mohabir, S. Nikravan, N. Panebianco, L. Rapoport, M. Stachura, M. Useinovic, B. Wiley

Abdominal Ultrasound
L. Rapoport

Lung Ultrasound
P. Mohabir

Vascular Ultrasound
M. Vorsanger

2:00 PM – 4:00 PM

E IAC Echocardiography Bootcamp - Part 1 – Portland Ballroom 255

Chairs: M. Bremer, P. Burgess, B. Gorman

4:15 PM – 6:15 PM

E Adult Congenital Primer – Portland Ballroom 252 (Ticketed Event. Additional Fee Required)

Chairs: R. Beroukhim, N. Soni-Patel

Learning Lab Assistants: R. Beroukhim, J. Churchill, J. Kreeger, E. Shea, N. Soni-Patel

4:15 PM – 4:45 PM

Scanning the Adult Congenital Patient: Where Do I Begin?
N. Soni-Patel

FRIDAY, JUNE 21ST SCHEDULE

4:45 PM – 6:15 PM

Live Scanning

4:15 PM – 6:15 PM

POC **New Frontiers of POCUS – Portland Ballroom**
253-254 (Ticketed Event. Additional Fee Required)

Chairs: B. Arya, J. Turner

4:15 PM – 4:25 PM

Differentiating POCUS From Conventional Echocardiography
B. Wiley

4:25 PM – 4:40 PM

Multimodality Ultrasound Assessment of Pulmonary Embolism
P. Okonoboh

4:40 PM – 4:50 PM

TEE as POCUS?
R. Arntfield

4:50 PM – 5:05 PM

Question & Answer

5:05 PM – 5:20 PM

OA-12: Focused Cardiac Ultrasound Training for Rural Providers Via Simulation
F. Sheehan

5:20 PM – 5:30 PM

Board Exam for Critical Care Echo: What Does That Mean?
R. Arntfield

5:30 PM – 5:45 PM

POCUS for Airway Assessment and Management
M. Benson

5:45 PM – 6:00 PM

POCUS in the Cardiology Clinic
N. Cardim

6:00 PM – 6:15 PM

Question & Answer

4:15 PM – 6:15 PM

E **IAC Echocardiography Bootcamp - Part 2**
– Portland Ballroom 255

Chairs: M. Bremer, P. Burgess, B. Gorman

Announcing the ASE Foundation's Strategic Plan!

The ASE Board of Directors conducted an in-depth analysis of the healthcare environment and recently created a strategic plan for the ASE Foundation, separate from that of ASE. The vision for the ASE Foundation is to be the driving force for improving health for all through the use of cardiovascular ultrasound. Three goals were established to move the Foundation towards the realization of this envisioned future. We hope you will join us in helping achieve these goals.

GOAL 1



Research: The quality and efficiency of healthcare delivery has improved through innovative research utilizing the application of cardiovascular ultrasound.

GOAL 2



Global Outreach: Healthcare workers worldwide have better access to tools and strategies for improvement of cardiovascular health standards through the use of ultrasound.

GOAL 3
































Foundation's Profile: The Foundation has been recognized as a key force in improving cardiovascular health and access to ultrasound worldwide.



SCHEDULE AT A GLANCE

SATURDAY, JUNE 22ND

REGISTRATION OPEN: 6:30 AM – 5:00 PM							
EXHIBIT & POSTER HALL OPEN: 4:30 – 6:30 PM							
ROOM	EXHIBIT HALL A	PORTLAND BALLROOM 251	PORTLAND BALLROOM 252	PORTLAND BALLROOM 253-254	PORTLAND BALLROOM 255	PORTLAND BALLROOM 256	ROOM C-120
7:00 – 7:45 AM		 Fetal Symposium: The Beat Goes On	 Endocarditis: A Multifaceted Disease	 Hemodynamics: Back to the Basics	 Adapting Novel Technologies and Fields to Clinical Practice	 Quantification of Left Ventricular Function: Is the End in Sight?	 MRI Basics: What the Echocardiographer Needs to Know
7:50 – 9:45 AM	 ASE AWARDS PRESENTATIONS, ANNOUNCEMENTS, FASE RECOGNITION, AND 30 TH ANNUAL EDLER LECTURE – EXHIBIT HALL A						
9:45 – 10:00 AM	REFRESHMENT BREAK						
10:00 – 11:30 AM	 Diastology: Lifting the Fog	 Path-Echo Correlations: Tricuspid Atresia	 Comprehensive Evaluation of the Aorta	 Quantitative Assessment of Valvular Disease	 Managing the Unstable Patient	 Aortic Valve Interventions in 2019	 Leadership Academy (Invitation Only)
10:00 AM – 12:00 PM	LEARNING LAB: 3D VOLUME/FUNCTION – B-119 (TICKETED EVENT. ADDITIONAL FEE REQUIRED)						
11:30 AM – 1:00 PM	SCIENCE & TECHNOLOGY THEATER: LANTHEUS MEDICAL IMAGING, INC.						
12:30 – 2:30 PM	LEARNING LAB: 3D CROPPING – B-119 (TICKETED EVENT. ADDITIONAL FEE REQUIRED)						
1:00 – 2:30 PM	 Echo Jeopardy	 Path-Echo Correlations: Double Outlet Right Ventricle	 Bad Things Happen to Good Aortas	 Stop the Struggles: Assessment of Right Heart	 Today's Innovations, Tomorrow's Practice of Medicine	 Current State of Percutaneous Mitral Valve Therapy	 Leadership Training (Open to Everyone)
2:30 – 3:00 PM	REFRESHMENT BREAK CHALK TALK: STRAIN IMAGING – C-123						
3:00 – 4:30 PM	 Mitral Regurgitation: Evolving Understanding	 Echo Jeopardy (PCHD Council Business Meeting)	 Pericardial Disease: A Forgotten Structure	 Imager's Role In Interventional Echocardiography	 Early Diagnosis of Disease by Myocardial Deformation Imaging (Joint ASE/EACVI Session)	 Perioperative Use of Echocardiography: Mechanical Support and Transplantation (COPE Business Meeting)	 Meet the ASE Sonographer Leaders
4:30 – 6:30 PM	PRESIDENT'S RECEPTION 						
6:30 – 8:00 PM	SCIENCE & TECHNOLOGY THEATER: SIEMENS HEALTHINEERS						

SATURDAY

CIRCULATION (C) IMAGING ESSENTIALS (E) ISCHEMIA (I) PEDIATRIC/CONGENITAL (PC) POINT OF CARE (POC) VALVES (V)
EARLY CAREER (EC) INNOVATION/TECHNOLOGY (IT) MYOCARDIUM/FUNCTION (M) PERIOPERATIVE (P) SPECIAL SESSIONS (S)

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

For detailed information, please download the ASE Courses app.

ANNOUNCING THE

E21 AWARDS

Research Grants for
Clinician-Scientist
and Engineering
Partnerships

*Three grants of up to
\$200,000 each are available*

Application opens:
April 10, 2019

Submission deadline:
June 30, 2019

Earliest start date:
October 1, 2019

Designed to support innovative approaches to major clinical problems in cardiovascular ultrasound imaging that can be solved through engineering solutions. Applications must involve research partnerships between clinician-scientists and engineering scientists.

Sponsoring Organizations:



Additional information at ASEFoundation.org/E21ResearchGrant

7:00 AM – 7:45 AM

PC **Fetal Symposium: The Beat Goes On – Portland Ballroom 251**

Chairs: M. Donofrio, A. Moon-Grady

7:00 AM – 7:15 AM

Too Slow
J. Pruetz

7:15 AM – 7:30 AM

Too Fast
A. Moon-Grady

7:30 AM – 7:50 AM

Challenging Cases
W. Hogan

7:00 AM – 7:45 AM

V **Endocarditis: A Multifaceted Disease – Portland Ballroom 252**

Chairs: L. Afonso, W. Katz

7:00 AM – 7:15 AM

Infectious Endocarditis
K. Kebed

7:15 AM – 7:30 AM

Noninfectious Endocarditis
M. Vieira

7:30 AM – 7:45 AM

Prosthetic Valve Endocarditis
L. Afonso

7:00 AM – 7:45 AM

E **Hemodynamics: Back to the Basics – Portland Ballroom 253-254**

Chairs: B. Anderson, D. Sanborn

7:00 AM – 7:15 AM

Principle of Cardiac Hemodynamics: Understanding Flow and Pressure
S. Miller

7:15 AM – 7:30 AM

Challenging Cases: When the Measurements Just Don't Add Up
B. Anderson

7:30 AM – 7:45 AM

High Gradient Puzzles for Prosthesis: Explain It!
K. Zimmerman

7:00 AM – 7:45 AM

IT **Adapting Novel Technologies and Fields to Clinical Practice – Portland Ballroom 255**

Chairs: S. Adusumalli, T. Koliass

7:00 AM – 7:15 AM

Using Strain Day-To-Day
J. Banchs

7:15 AM – 7:30 AM

Cardio-Oncology
A. Barac

7:30 AM – 7:45 AM

Incorporating 3D Echocardiography Into Clinical Practice
L. Sugeng

7:00 AM – 7:45 AM

M **Quantification of Left Ventricular Function: Is the End in Sight? – Portland Ballroom 256**

Chairs: M. Galderisi, S. Goldstein

7:00 AM – 7:15 AM

WASE: Worldwide Data to Improve Quantification
F. Asch

7:15 AM – 7:30 AM

Should I Be Using Strain and 3D Routinely?
F. Flachskampf

7:30 AM – 7:45 AM

Overcoming Pitfalls in Quantification
S. Goldstein

7:00 AM – 7:45 AM

IT **MRI Basics: What the Echocardiographer Needs to Know – C-120**

Chair: V. Ferrari, A. Patel

7:00 AM – 7:20 AM

Essential Physics
C. Broberg

7:20 AM – 7:35 AM

What to Order for What?
Y. Han

7:35 AM – 7:45 AM

Question & Answer

SATURDAY, JUNE 22ND SCHEDULE

7:50 AM – 9:45 AM

★ ASE Awards Presentations, Announcements, FASE Recognition, and 30th Annual Edler Lecture – Exhibit Hall A

Chair: J. Lindner

7:50 AM – 8:00 AM

State of ASE

J. Lindner

8:00 AM – 8:15 AM

Board of Directors Induction and Announcements

J. Lindner

8:15 AM – 8:30 AM

FASE Recognition

J. Lindner, G. Tatum

8:30 AM – 8:50 AM

Edler Lecture: Time Flies When You Are Having Fun with Aortic Stenosis

V. Rigolin

8:50 AM – 9:25 AM

ASE Award Presentations and Recognitions

J. Lindner

9:25 AM – 9:35 AM

ASE Foundation Award Presentations and Recognitions

J. Banchs

9:35 AM – 9:45 AM

Incoming President's Address

M. Swaminathan

10:00 AM – 11:30 AM

★ Diastology: Lifting the Fog – Exhibit Hall A

Chairs: G. Aurigemma, S. Nagueh

10:00 AM – 10:30 AM

Case 1: Review of the Guidelines (Different Degrees of Diastolic Dysfunction)

Presenter: L. Marcoff

Discussant: L. Gillam

10:30 AM – 11:00 AM

Case 2: When Guidelines Can't Guide (Discrepancies in Diastolic Indices, Indeterminates)

Presenter: A. Abuzaid

Discussant: J. Thomas

11:00 AM – 11:30 AM

Case 3: The Value of Diastolic Stress Test

Presenter: M. Chamsi-Pasha

Discussant: J. Oh

10:00 AM – 11:30 AM

△_{PC} Path-Echo Correlations: Tricuspid Atresia – Portland Ballroom 251

Chairs: C. Broberg, L. Young

10:00 AM – 10:20 AM

Pathology

P. Weinberg

10:20 AM – 10:35 AM

Comprehensive Prenatal Assessment

L. Freud

10:35 AM – 10:50 AM

Post-Natal Echo

D. Parra

10:50 AM – 11:05 AM

Echo-MRI Utility Mid and Long-Term

A. Prakash

11:05 AM – 11:20 AM

Long-Term Clinical Outcomes: Case-based

C. Broberg

11:20 AM – 11:30 AM

Question & Answer

10:00 AM – 11:30 AM

△_C Comprehensive Evaluation of the Aorta – Portland Ballroom 252

Chairs: C. Fuss, F. Shamoun

10:00 AM – 10:12 AM

Everything You Wanted to Know About the Aorta

E. Isselbacher

10:12 AM – 10:24 AM

Multimodality Imaging of the Aorta

C. Fuss

10:24 AM – 10:36 AM

Aortopathies (Marfan, Ehlers-Danlos, Loeys-Dietz Syndrome, Coarctation)

C. Fanola

10:36 AM – 10:48 AM

Vasculitis Involving the Aorta and Branches

F. Shamoun

10:48 AM – 11:00 AM

Pregnancy and the Aorta (Aneurysm and Aortopathies)

A. Albers

11:00 AM – 11:30 AM

Question & Answer

10:00 AM – 11:30 AM

**E Quantitative Assessment of Valvular Disease
– Portland Ballroom 253-254**

Chairs: M. Strachan, E. Yucel

10:00 AM – 10:15 AM

Quantitative Assessment of Mitral Regurgitation

B. Kane

10:15 AM – 10:30 AM

Quantitative Assessment of Mitral Stenosis

I. Sebag

10:30 AM – 10:45 AM

Quantitative Assessment of Aortic Stenosis

D. Bourque

10:45 AM – 11:00 AM

Quantitative Assessment of Aortic Regurgitation

M. Strachan

11:00 AM – 11:15 AM

Fresh Approach for Tricuspid Valve Assessment: 2D vs. 3D

M. Yamat

11:15 AM – 11:30 AM

Question & Answer

10:00 AM – 11:30 AM

**POC Managing the Unstable Patient – Portland
Ballroom 255**

Chairs: P. Mohabir, B. Wiley

10:00 AM – 10:20 AM

Volume Assessment and the Patient in Shock

M. Stone

10:20 AM – 10:35 AM

POCUS in the Neuro ICU

S. Ghosal

10:35 AM – 10:50 AM

To B or Not To B: Lung B-Lines in the Ill Patient

J. Turner

10:50 AM – 11:05 AM

POCUS Assessment for the Dyspneic/Hypoxemic Patient

S. Nikravan

11:05 AM – 11:20 AM

Using POCUS in Cardiac Arrest

N. Bughrara

11:20 AM – 11:30 AM

Question & Answer

10:00 AM – 11:30 AM

**P Aortic Valve Interventions in 2019 – Portland
Ballroom 256**

Chairs: H. Bhatt, A. Nicoara

10:00 AM – 10:10 AM

Starting with A Case: An Intermediate Risk Patient with Aortic Stenosis

H. Bhatt

10:10 AM – 10:25 AM

Preoperative Assessment of the Aortic Valve: Challenges When Applying the Guidelines

A. Patel

10:25 AM – 10:40 AM

Key Aspects of Echocardiographic Imaging During TAVR and TAVR Valve-In-Valve

G. Mackensen

10:40 AM – 10:55 AM

All I Need to Know About TAVR Valve-In-Valve for Degenerative Bioprosthetic Surgical Valves: VIVID Registry and Beyond

D. Dvir

10:55 AM – 11:10 AM

Imaging the Complications of TAVR, SAVR, and TAVR Valve-In-Valve

A. Nicoara

11:10 AM – 11:15 AM

Case Presentation: What Actually Happened?

H. Bhatt

11:15 AM – 11:30 AM

Question & Answer

10:00 AM – 11:30 AM

EC Leadership Academy (Invitation Only) – C-120

K. Pearson

SATURDAY, JUNE 22ND SCHEDULE

10:00 AM – 12:00 PM

Learning Lab: 3D Volume and Function – B-119

(Ticketed Event. Additional Fee Required)

Chairs: A. Gopal, L. Sugeng

12:30 PM – 2:30 PM

Learning Lab: 3D Cropping – B-119

(Ticketed Event. Additional Fee Required)

Chairs: J. Hung, E. Kruse, N. Pandian

1:00 PM – 2:30 PM

★ Echo Jeopardy – Exhibit Hall A

Chairs: J. Gorcsan, S. Mankad

Team 1: K. Billick, M. Saric

Team 2: A. Davis, L. Sugeng

Team 3: G. Aurigemma, J. Mercandetti

1:00 PM – 2:30 PM

◆ PC Path-Echo Correlations: Double Outlet Right Ventricle – Portland Ballroom 251

Chairs: A. Powell, I. Shen

1:00 PM – 1:20 PM

Pathology

P. Weinberg

1:20 PM – 1:35 PM

Comprehensive Prenatal Assessment

L. Howley

1:35 PM – 1:50 PM

Post-Operative Multimodality Imaging

A. Powell

1:50 PM – 2:05 PM

Virtual Surgical Planning and 3D Printing

L. Olivieri

2:05 PM – 2:20 PM

Surgical Correction: Some Easy, Some Hard: Case-based

I. Shen

2:20 PM – 2:30 PM

Question & Answer

1:00 PM – 2:30 PM

◆ C Bad Things Happen to Good Aortas – Portland Ballroom 252

Chairs: C. Fanola, J. Feinman, A. D'Ovidio

1:00 PM – 1:12 PM

Acute Aortic Syndromes

E. Isselbacher

1:12 PM – 1:24 PM

Cardiac Complications of Aortic Dissection

S. Goldstein

1:24 PM – 1:36 PM

Extension of Aortic Dissection to Branch Vessels

R. Quiroz

1:36 PM – 1:48 PM

Transesophageal for Acute Aortic Syndromes and Trauma

M. Hall

1:48 PM – 2:00 PM

Patient Selection for Surgical vs. Endovascular Aorta Repair

C. Abraham

2:00 PM – 2:30 PM

Question & Answer

1:00 PM – 2:30 PM

◆ E Stop the Struggles: Assessment of Right Heart – Portland Ballroom 253-254

Chairs: R. Meece, S. Spina

1:00 PM – 1:20 PM

The Algorithm of Right Ventricular Size and Function Assessment:

Guideline Approach

L. Hua

1:20 PM – 1:40 PM

How to Use Novel Technology to Assess Right Ventricular Function:

3D and Strain

D. Sanborn

1:40 PM – 2:00 PM

Contrast for the Right Ventricle

J. Pereira

2:00 PM – 2:20 PM

Echocardiographic Assessment for Pulmonary Hypertension: It's Not Just the Tricuspid Regurgitation

L. Rudski

2:20 PM – 2:30 PM

Question & Answer

1:00 PM – 2:30 PM

IT Today's Innovations, Tomorrow's Practice of Medicine – Portland Ballroom 255

Chairs: P. Sengupta, F. Villanueva

1:00 PM – 1:15 PM

Automation in Echo Analysis
R. Lang

1:15 PM – 1:30 PM

Hybrid Imaging
E. Salcedo

1:30 PM – 1:45 PM

Innovations for Sonographer Workflow and Safety
M. Orsinelli

1:45 PM – 2:00 PM

Artificial Intelligence and Echo: A Perfect Marriage
P. Sengupta

2:00 PM – 2:15 PM

Therapeutic Ultrasound in Cardiovascular Medicine
T. Porter

2:15 PM – 2:30 PM

Question & Answer

1:00 PM – 2:30 PM

V Current State of Percutaneous Mitral Valve Therapy – Portland Ballroom 256

Chairs: S. Pislaru, M. Reisman

1:00 PM – 1:15 PM

Present and Future of Percutaneous Mitral Therapy
J. Passeri

1:15 PM – 1:30 PM

MitraClip: Intra-Procedural Imaging Tips and Tricks and the Follow-Up Echo
S. Little

1:30 PM – 1:45 PM

Ischemic Mitral Regurgitation: Evaluation and Options (Post COAPT)
M. Reisman

1:45 PM – 2:00 PM

Percutaneous Valve-in-Native Valve, Valve-in-MAC, Valve-in-Ring
G. Mackensen

2:00 PM – 2:15 PM

Percutaneous Repair/Replacement of the Mitral Valve Other Than MitraClip
P. McCarthy

2:15 PM – 2:30 PM

Question & Answer

1:00 PM – 2:30 PM

EC Leadership Training (Open to Everyone) – C-120

Becoming a Perceptive Leader: The Need for Strategic Agility
K. Pearson

3:00 PM – 4:30 PM

★ Mitral Regurgitation: Evolving Understanding – Exhibit Hall A

Chairs: G. Nesbitt, D. Orsinelli

3:00 PM – 3:14 PM

Pathophysiology of Degenerative Mitral Regurgitation: New 3D Imaging Insights
L. Gillam

3:14 PM – 3:28 PM

Use of Cardiac Magnetic Resonance in Assessment of Valvular Regurgitation
M. Garcia

3:28 PM – 3:42 PM

Ischemic Mitral Regurgitation
J. Hung

3:42 PM – 3:56 PM

Timing of Intervention for Mitral Regurgitation and Contemporary Surgical Management for Mitral Regurgitation
P. McCarthy

3:56 PM – 4:10 PM

Strain Imaging to Help with Decision Making in Severe Mitral Regurgitation
F. Delling

4:10 PM – 4:30 PM

Question & Answer

3:00 PM – 4:30 PM

PC Echo Jeopardy (PCHD Council Business Meeting) – Portland Ballroom 251

Chairs: M. Brook, D. Harrild

Team 1: *S. Menon, S. Peyvandi, C. Taylor*

Team 2: *P. Jone, J. Soslow, K. Stern*

Team 3: *J. Johnson, R. Oberhoffer, P. Thankavel*

3:00 PM – 4:30 PM

**I Pericardial Disease: A Forgotten Structure
– Portland Ballroom 252**

Chairs: B. Hoit, A. Klein

3:00 PM – 3:15 PM

Anatomy and Physiology of the Pericardium

B. Cosyns

3:15 PM – 3:30 PM

Use of Cardiac Imaging to Guide Diagnosis and Management of Pericarditis

M. Desai

3:30 PM – 3:45 PM

Constrictive Pericarditis: Is Echo Sufficient to Diagnose?

T. Welch

3:45 PM – 4:00 PM

Who Needs the Cath Lab? Echo Guided Bedside Pericardiocentesis

G. Kane

4:00 PM – 4:15 PM

Recurrent Pericarditis: How to Treat, When to Refer

A. Klein

4:15 PM – 4:30 PM

Question & Answer

3:00 PM – 4:30 PM

**E Imager's Role In Interventional Cardiology
– Portland Ballroom 253-254**

Chairs: J. Dal-Bianco, K. Horton

3:00 PM – 3:15 PM

Guiding Septal Puncture for Left Atrial Appendage Occluder and MitraClip

J. Mercandetti

3:15 PM – 3:35 PM

Pre and Post TAVR Assessment

S. Roemer

3:35 PM – 3:55 PM

2D and 3D Guidance for MitraClip

J. Dal-Bianco

3:55 PM – 4:10 PM

Complications in Interventional Procedures

K. Horton

4:10 PM – 4:25 PM

2D and 3D Guidance for Interventional Therapy for Hypertrophic Obstructive Cardiomyopathy

D. Sanborn

4:25 PM – 4:30 PM

Question & Answer

3:00 PM – 4:30 PM

**★ Early Diagnosis of Disease
by Myocardial Deformation
Imaging (Joint ASE/EACVI
Session) – Portland Ballroom 255**



EACVI
European Association of
Cardiovascular Imaging

Chairs: L. Badano, J. Thomas

3:00 PM – 3:15 PM

Canary in the Coal Mine: Deformation as An Early Marker of Disease

M. Scherrer-Crosbie

3:15 PM – 3:30 PM

Strain in Valve Disease

J. Gorcsan

3:30 PM – 3:45 PM

Strain Imaging for Improved Detection of Ischemia in Coronary Artery Disease and Its Consequences

T. Edvardsen

3:45 PM – 4:00 PM

Strain in Hypertensive Disease, Hypertrophic Cardiomyopathy, and the Athlete's Heart

D. Phelan

4:00 PM – 4:15 PM

Deformation and Twist in Heart Failure with Normal Ejection Fraction

O. Smiseth

4:15 PM – 4:30 PM

Question & Answer

3:00 PM – 4:30 PM

**◆ Perioperative Use of Echocardiography:
Mechanical Support and Transplantation (COPE
Council Business Meeting) – Portland Ballroom 256**

Chairs: S. Pai Cole, P. Patel

3:00 PM – 3:15 PM

Council on Perioperative Echocardiography Business Meeting

A. Finley

3:15 PM – 3:30 PM

ECLS and Hybrid Support: What Is the Utility of Echo?

P. Patel

3:30 PM – 3:45 PM

Echo for Durable Ventricular Assist Devices (LVAD, TAH): What Should I Look for?

S. Pai Cole

3:45 PM – 4:00 PM

Temporary Mechanical Support: Do We Need TEE to Guide Placement?

M. Hall

4:00 PM – 4:15 PM

Role of Echo During Solid Organ Transplantation

A. Alfirevic

4:15 PM – 4:30 PM

Question & Answer

3:00 PM – 4:30 PM

E Meet the ASE Sonographer Leaders – C-120

Hosts: K. Collins, J. Marshall, E. McIlwain, C. Mitchell, M. Park, A. Pellet, S. Phillip, E. Shea, M. Strachan

Who makes ASE strong?

YOU

Recruit others to join and help make ASE even stronger.

YOU make ASE the largest voice in cardiovascular imaging in the world.

YOU know the value of membership and can share it with your colleagues.

YOU can encourage others to join ASE to maintain the influence of the echo community.



RECRUIT ONE new member and you **BOTH** receive an ASE branded PopSocket.



RECRUIT FIVE OR MORE new members and your 2020 ASE membership will be **FREE**.

For more information visit:
ASEcho.org/MemberReferralProgram

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, 2019. 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.

IAC's Seal of Approval Verifies the **Quality** Your Patients Deserve

For more than 25 years, IAC has been the leader in offering accreditation programs that ensure facilities are providing the highest level of quality patient care.



- **Comprehensive Case Review**

IAC is the only CMS-approved accrediting body that provides a clinical peer review of case studies (with pathology) for diagnostic quality, report accuracy and report completeness.

- **Quality Improvement Tool**

Facilities use the tool to assess their case studies and final reports and receive a quantitative report targeting opportunities for continuous process improvement. Physicians may use the IAC QI Tool to satisfy a component of MIPS performance measures under the improvement activity category.

- **Lower Cost**

IAC accreditation is a cost-effective solution for your facility, offering discounts and a single application for multi-site facilities. For details, visit intersocietal.org/iac/about/programs.htm.

What can **IAC** accreditation do for *your* facility?



Improving health care through accreditation®

VASCULAR TESTING . ECHOCARDIOGRAPHY . NUCLEAR/PET . MRI . CT . DENTAL CT
CAROTID STENTING . VEIN CENTER . CARDIAC ELECTROPHYSIOLOGY . CARDIOVASCULAR CATHETERIZATION

800.838.2110 . intersocietal.org

ABOUT IAC | The IAC is a nonprofit organization in operation to evaluate and accredit facilities that provide diagnostic imaging and procedure-based modalities, thus improving the quality of patient care provided in private offices, clinics and hospitals where such services are performed. Committed to its mission through a rigorous peer review process, the IAC has granted accreditation to more than 14,000 sites since its inception in 1991. IAC accreditation is widely respected within the medical community, as illustrated by the support of more than 40 national medical societies.

SCHEDULE AT A GLANCE

SUNDAY, JUNE 23RD

REGISTRATION OPEN: 6:30 AM – 5:00 PM							
EXHIBIT & POSTER HALL OPEN: 9:00 AM – 4:00 PM							
ROOM	EXHIBIT HALL A	PORTLAND BALLROOM 251	PORTLAND BALLROOM 252	PORTLAND BALLROOM 253-254	PORTLAND BALLROOM 255	PORTLAND BALLROOM 256	ROOM C-120
7:00 – 7:50 AM	I All Stressed Out: Challenging Stress Echo Cases	PC Echo Innovation	POC POCUS in Extreme Environments and Resource-Limited Countries	E 3D Echocardiography Fundamentals	V Comprehensive Assessment and Management of Mitral Stenosis	M Role of Multimodality in Cardiac Function	
8:00 – 9:30 AM	M Lessons from the Legends	PC Understanding Cardiac Mechanics Through Echo	V Guidelines Galore	E Adult Congenital Heart Disease for Adult Sonographers	C Games of Circulation Thrones! Debate	P Functional Mitral Regurgitation: The Challenge Continues	EC Developing Your Niche as an Early Career Echocardiographer
9:30 – 10:15 AM	REFRESHMENT BREAK AND VISIT EXHIBIT & POSTER HALL CHALK TALK: DIASTOLOGY – EXHIBIT & POSTER HALL						
9:30 – 11:30 AM	LEARNING LAB: 3D CROPPING – B-119 (TICKETED EVENT. ADDITIONAL FEE REQUIRED)						
10:15 – 11:30 AM	LEARNING LAB: VIRTUAL REALITY – C-124 (TICKETED EVENT. ADDITIONAL FEE REQUIRED)						
10:15 – 11:45 AM	V Simulated Heart Valve Team Meeting: Aortic Valve Interventions	PC Ultrasound in Detection of Subclinical Disease (Joint ASE/EACVI Session)	POC POCUS Training, Quality Assurance, and Accreditation	E Complex Adult Congenital Heart Disease for Adult Sonographers	M Hemodynamics and Physiology of Heart Failure with Preserved Ejection Fraction	P Challenges Surrounding the Left Ventricular Outflow Tract in 2019	S All You Need to Know About Registries
11:45 AM – 1:15 PM	SCIENCE & TECHNOLOGY THEATER: PHILIPS						
12:00 – 1:00 PM	MODERATED POSTERS – EXHIBIT & POSTER HALL						
1:00 – 3:00 PM	LEARNING LAB: MYOCARDIAL STRAIN BY SPECKLE TRACKING – B-119 (TICKETED EVENT. ADDITIONAL FEE REQUIRED)						
1:15 – 2:45 PM	IT Echo Technology at the Cutting Edge of Knowledge (Gardin Lecture)	PC Pediatric Cardio-Oncology	S Advancing the Echo Field: From Abstracts to JASE	E RELAX! It Is Just Diastology	M New Advances in Strain	V Functional Tricuspid Regurgitation: The Old and The New	S Best of CASE: Twitter Competition
2:45 – 3:30 PM	REFRESHMENT BREAK AND VISIT EXHIBIT & POSTER HALL CHALK TALK: HOW CAN POCUS SOCIETIES HELP YOU? – C-123 CHALK TALK: OUR PATIENTS ARE ACTIVE IN THE CYBER SPACE: ARE WE KEEPING UP – EXHIBIT & POSTER HALL						
3:30 – 5:00 PM	M Role of Imaging for Clinical Decision Making in Patients During and After Cancer Therapy	PC Echo Indices as Outcome Predictors in Congenital Heart Disease	I Stress Echo: Not Just for Coronary Artery Disease. Get with the Guidelines!	E The Brian Haluska Sonographer Research Award Competition	P Integration of Echo in Cardiac Imaging: Dilemmas in Valves and Devices	P Periprocedural Echocardiography in the Adult with Congenital Heart Disease	EC Early Career: Meet the Faculty 3:45 – 4:45 PM
3:30 – 5:00 PM	ImageGuideEcho™ EXPERIENCE ASE'S NEW REGISTRY – B-119 (REGISTRATION REQUIRED. NO ADDITIONAL FEE)						
5:00 – 6:30 PM	S STUMP THE STARS – EXHIBIT HALL A						
7:30 – 11:00 PM	ASE FOUNDATION 10 TH ANNUAL RESEARCH AWARDS GALA <i>This event requires a separate registration. Proceeds benefit the ASE Foundation's research activities. Tickets are not available on-site.</i>						

CIRCULATION (C) **IMAGING ESSENTIALS (E)** **ISCHEMIA (I)** **PEDIATRIC/CONGENITAL (PC)** **POINT OF CARE (POC)** **VALVES (V)**
EARLY CAREER (EC) **INNOVATION/TECHNOLOGY (IT)** **MYOCARDIUM/FUNCTION (M)** **PERIOPERATIVE (P)** **SPECIAL SESSIONS (S)**

BASIC BASIC/INTERMEDIATE INTERMEDIATE INTERMEDIATE/ADVANCED ADVANCED BASIC/INTERMEDIATE/ADVANCED



These sessions have been identified as sessions of interest to veterinarians.



Visit the GE Healthcare
booth 501 to learn about our
ultrasound imaging agent

SUNDAY

7:00 AM – 7:50 AM

I All Stressed Out: Challenging Stress Echo Cases – Exhibit Hall A

*Chairs: B. Anderson, T. Ryan
Panelists: P. Knoll, P. Pellikka*

7:00 AM – 7:15 AM

Ischemic Cases
G. Nesbitt

7:15 AM – 7:30 AM

Non-Ischemic Cases
P. Patil

7:30 AM – 7:45 AM

Contrast-Left Ventricular Opacification/Perfusion Cases
K. Koulogiannis

7:00 AM – 7:50 AM

PC Echo Innovation – Portland Ballroom 251

Chairs: A. Dragulescu, S. Kutty

7:00 AM – 7:15 AM

Why Is Echo Ripe for Artificial Intelligence?
G. Tison

7:15 AM – 7:30 AM

Machine Learning in Echo
S. Kutty

7:30 AM – 7:45 AM

From Star Wars to Clinical Imaging: Medical Holography
E. Birk

7:45 AM – 7:50 AM

Question & Answer

7:00 AM – 7:50 AM

POCUS in Extreme Environments and Resource-Limited Countries – Portland Ballroom 252

Chairs: L. Rapoport, R. Weiss

7:00 AM – 7:15 AM

POCUS in Resource Limited Countries
M. Stachura

7:15 AM – 7:30 AM

Military Applications of POCUS
A. Hersh

7:30 AM – 7:45 AM

POCUS in Space
J. Thomas

7:45 AM – 7:50 AM

Question & Answer

7:00 AM – 7:50 AM

E 3D Echocardiography Fundamentals – Portland Ballroom 253-254

Chairs: M. Bremer, J. Song

7:00 AM – 7:15 AM

How to Optimize 3D Imaging: Avoiding Artifacts
A. Daniels

7:15 AM – 7:30 AM

How to Assess Mitral Valve and Aortic Valve by 3D Echo?
R. Meece

7:30 AM – 7:45 AM

How to Assess the Right Ventricle and Tricuspid Valve by 3D Echo?
L. Badano

7:45 AM – 7:50 AM

Question & Answer

7:00 AM – 7:50 AM

V Comprehensive Assessment and Management of Mitral Stenosis – Portland Ballroom 255

Chairs: S. Sengupta, E. Tucay

7:00 AM – 7:15 AM

Cutting Edge in Rheumatic Mitral Stenosis
I. Sebag

7:15 AM – 7:30 AM

Role of Stress Echo in Mitral Stenosis
T. Chen

7:30 AM – 7:45 AM

Echo Guidance for Percutaneous Management of Mitral Stenosis
N. Quader

7:45 AM – 7:50 AM

Question & Answer

7:00 AM – 7:50 AM

M **Role of Multimodality in Cardiac Function
– Portland Ballroom 256**

Chairs: V. Ferrari, N. Nanda

7:00 AM – 7:15 AM

Non-Ischemic Cardiomyopathy: When Is MRI Needed?
A. Patel

7:15 AM – 7:30 AM

Multimodality Approach to the Right Ventricle
Y. Han

7:30 AM – 7:45 AM

Heart Failure: Can Novel Indices Be Helpful?
V. Ferrari

7:45 AM – 7:50 AM

Question & Answer

8:00 AM – 9:30 AM

M **Lessons from the Legends – Exhibit Hall A**

Chairs: A. DeMaria, J. Kisslo

8:00 AM – 8:10 AM

Diastology
P. Pellikka

8:10 AM – 8:20 AM

Digital Echo and Artificial Intelligence
H. Feigenbaum

8:20 AM – 8:30 AM

Contrast
S. Kaul

8:30 AM – 8:40 AM

3D
R. Lang

8:40 AM – 8:50 AM

Valves
L. Gillam

8:50 AM – 9:00 AM

Systolic Function
M. Picard

9:00 AM – 9:10 AM

Echo Research
P. Douglas

9:10 AM – 9:20 AM

Strengths and Challenges of Echo
J. Kisslo

9:20 AM – 9:30 AM

Question & Answer

8:00 AM – 9:30 AM

PC **Understanding Cardiac Mechanics Through
Echo – Portland Ballroom 251**

Chairs: M. Friedberg, P. Frommelt

8:00 AM – 8:15 AM

15 Rapid Fire Abstracts (1 Minute Each)

8:00 AM – 8:01 AM

P1-019: Right Ventricular Free Wall Strain Predicts Functional Capacity in Repaired Tetralogy of Fallot
H. Rodríguez Zanella

8:01 AM – 8:02 AM

P1-020: Impact of Age on Poor Reverse Right Ventricular Remodeling After Pulmonary Valve Replacement in Tetralogy of Fallot
C. Scott

8:02 AM – 8:03 AM

P1-021: Rapid Leaflet Expansion is the Main Adaptive Change to Maintain Tricuspid Valve (TV) Competency from Detrimental Remodeling: A Three-dimensional Echocardiography (3DE) Study in a Novel Chronic Right Ventricular (RV) Pressure and Volume Loaded Piglet Model
L. Lin

8:03 AM – 8:04 AM

P1-022: First-Phase Fractional Area Change is Affected by Ventriculo-Ventricular Interaction in Repaired Tetralogy of Fallot Patients
J. Christensen

8:04 AM – 8:05 AM

P1-023: Fetal Left Ventricular Strain Analysis: Are High Frame Rate Images Necessary?
A. M. Ferraro

8:05 AM – 8:06 AM

P1-024: Fetal Cerebrovascular Response to Maternal Hyperoxia: Effects of Cardiac Physiology
S. Peyvandi

8:06 AM – 8:07 AM

P1-025: Prenatal Features of Ductus Related Branch Pulmonary Stenosis in Fetal Pulmonary Atresia
D. Ngwezi

8:07 AM – 8:08 AM

P1-026: Decreased Pulmonary Artery Acceleration Time is Associated with Cord Blood Biomarkers of Angiogenesis
D. Ansah

8:08 AM – 8:09 AM

P1-027: Use of Tissue Doppler and Strain Imaging as Early Predictors of Fibrosis Development in Pediatric Patients with Hypertrophic Cardiomyopathy
M. Gaitonde

8:09 AM – 8:10 AM

P1-028: Aortic Arch Dimensions in Determination of Surgical Approach for Aortic Arch Hypoplasia with Coarctation
K. Parikh

8:10 AM – 8:11 AM

P1-029: Hemodynamic and Echocardiographic Predictors During Venous Extracorporeal Membrane Oxygenation Wean in Pediatric Patients - A Multicenter Investigation
R. Punj

8:11 AM – 8:12 AM

P1-030: Correlating Pulmonary Hypertension by Echocardiogram with Mortality in Premature Infants with Bronchopulmonary Dysplasia
R. Torok

8:12 AM – 8:13 AM

P1-031: Abnormalities of Atrial Mechanics in Fontan Patients
R. Loar

8:13 AM – 8:14 AM

P1-032: Integrated Sedation Strategy for Obtaining Echocardiograms in Young Pediatric Patients in a High Complexity Echocardiography Lab
J. Lipinski

8:14 AM – 8:15 AM

P1-033: Severity of Aortic Valve Disease Does Not Impact Echo-Derived Left Ventricular Systolic Deformation Indices Through Young Adulthood: Real Time Analysis During Routine Clinical Studies
J. Block

8:15 AM – 8:30 AM

Diastology: Where Is It Helpful
S. Lester

8:30 AM – 8:45 AM

Interventricular Dependence
M. Friedberg

8:45 AM – 9:00 AM

Vortex Imaging
S. Srivastava

9:00 AM – 9:15 AM

Assessing Systemic Vascular Resistance Using Ultrasonic Cardiac Output Monitors
J. Mentzer

9:15 AM – 9:30 AM

Question & Answer

8:00 AM – 9:30 AM

V **Guidelines Galore – Portland Ballroom 252**

Chairs: F. Asch, S. Little

8:00 AM – 8:15 AM

Native and Prosthetic Valve Regurgitation
W. Zoghbi

8:15 AM – 8:30 AM

Contrast Use
S. Mulvagh

8:30 AM – 8:45 AM

Aortic Stenosis
J. Hung

8:45 AM – 9:00 AM

Chagas
F. Asch

9:00 AM – 9:15 AM

Stress in Non-Ischemic Cardiomyopathy
P. Pellikka

9:15 AM – 9:30 AM

Question & Answer

8:00 AM – 9:30 AM

E **Adult Congenital Heart Disease for Adult Sonographers – Portland Ballroom 253-254**

Chairs: A. Sadeghpour, E. Shea

8:00 AM – 8:10 AM

Approaching the Adult with Suspected Congenital Heart Disease: A Basic Approach
A. Armour

8:10 AM – 8:30 AM

The Adult with Unrepaired Shunts (ASD/VSD/PDA)
J. Mercandetti

8:30 AM – 8:45 AM

Anomalous Coronary Artery
N. Soni-Patel

SUNDAY, JUNE 23RD SCHEDULE

8:45 AM – 9:05 AM

Ebstein Anomaly: A New Perspective

D. Defaria Yeh

9:05 AM – 9:25 AM

Tetralogy of Fallot in Adults: Common Complications

M. Cohen

9:25 AM – 9:30 AM

Question & Answer

8:00 AM – 9:30 AM

**C Games of Circulation Thrones! Debate –
Portland Ballroom 255**

Chairs: R. Quiroz, B. Wells

8:00 AM – 8:30 AM

“The King of the RAS:” Diagnosis of Renal Artery Stenosis: DUPLEX vs. CT/MRA

A. Harzand

8:00 AM – 8:30 AM

“The King of the RAS:” Diagnosis of Renal Artery Stenosis: DUPLEX vs. CT/MRA

D. Kadian-Dodov

8:30 AM – 9:00 AM

“Plaque’s Landing:” Ultrasound Plaque vs. Coronary Calcium Score for Cardiovascular Risk Stratification

V. Nambi

8:30 AM – 9:00 AM

“Plaque’s Landing:” Ultrasound Plaque vs. Coronary Calcium Score for Cardiovascular Risk Stratification

M. Ferencick

9:00 AM – 9:30 AM

“POCUS Is Coming:” POCUS for Cardiovascular Screening vs. Full TTE Ultrasound

A. Johri

9:00 AM – 9:30 AM

“POCUS Is Coming:” POCUS for Cardiovascular Screening vs. Full TTE Ultrasound

M. Lanspa

8:00 AM – 9:30 AM

**P Functional Mitral Regurgitation: The Challenge
Continues – Portland Ballroom 256**

Chairs: D. Drake, W. Jaber

8:00 AM – 8:10 AM

Starting with A Case Presentation

M. Hall

8:10 AM – 8:30 AM

Role of Echo in Understanding Mechanism and Grading Severity

J. Astbury

8:30 AM – 8:50 AM

Adjudicating the Data: Repair vs. Replace

D. Drake

8:50 AM – 9:10 AM

What Have We Learned From COAPT?

M. Reisman

9:10 AM – 9:20 AM

Case Presentation: What Actually Happened?

M. Hall

9:20 AM – 9:30 AM

Question & Answer

8:00 AM – 9:30 AM

**EC Developing Your Niche As An Early Career
Echocardiographer – C-120**

Chairs: C. Mitchell, C. Taub

8:00 AM – 8:12 AM

Becoming the Contrast Expert

H. Leong-Poi

8:12 AM – 8:24 AM

Tips for Success: Becoming An Effective Interventional Echocardiographer

R. Hahn

8:24 AM – 8:36 AM

Education: Can It Become My Main Pathway?

S. Wiegers

8:36 AM – 8:48 AM

Developing Your Research Potential

F. Villanueva

8:48 AM – 9:00 AM

Increasing Your Leadership and Administrative Role

J. Plana

9:00 AM – 9:30 AM

Question & Answer

9:30 AM – 11:30 AM

Learning Lab: 3D Cropping – B-119

(Ticketed Event. Additional Fee Required)

Chairs: J. Hung, E. Kruse, N. Pandian

10:15 AM – 11:45 AM

★ Simulated Heart Valve Team Meeting: Aortic Valve Interventions – Exhibit Hall A

Chairs: R. Hahn, G. Mackensen, M. Reisman

Panelists: V. Nkomo, P. Patel

10:15 AM – 10:45 AM

Case 1: Low Flow, Low Gradient Aortic Valve Stenosis: TAVR, SAVR, or No Intervention?

E. Gill

10:45 AM – 11:15 AM

Case 2: Severe Native Aortic Insufficiency and LVAD: TAVR, Percutaneous Occluder, or SAVR?

R. Sheu

11:15 AM – 11:45 AM

Case 3: Degenerated Bioprosthetic Aortic Valve: Percutaneous Options or REDO Surgery for SAVR?

S. Pislaru

10:15 AM – 11:45 AM



Ultrasound in Detection of Subclinical Disease (Joint ASE/EACVI Session) – Portland Ballroom 251

Chairs: R. Oberhoffer, M. Puchalski

10:15 AM – 10:35 AM

Focus on Cardiomyopathy

J. Kovalchin

10:35 AM – 10:50 AM

Arterial Stiffness: What Does It Mean?

R. Oberhoffer

10:50 AM – 11:05 AM

Optical Coherence Tomography in Kawasaki Disease and Transplant

M. Hosking

11:05 AM – 11:20 AM

Wave Intensity Analysis in Pulmonary Hypertension

M. Schafer

11:20 AM – 11:35 AM

OA-02: Altered Right Ventricle Pulmonary Arterial Coupling in Children with Pulmonary Hypertension: A Novel Approach to Cardiopulmonary Phenotyping in Pediatrics

P. Levy

11:35 AM – 11:45 AM

Question & Answer

10:15 AM – 11:45 AM



POCUS Training, Quality Assurance, and Accreditation – Portland Ballroom 252

Chairs: A. Labovitz, M. Lanspa

10:15 AM – 10:19 AM

ASE POCUS Training for the Medical Student

A. Johri

10:19 AM – 10:23 AM

ASE POCUS Training for the Practicing Physician

J. Kirkpatrick

10:23 AM – 10:27 AM

The Non-Cardiologist as the Teacher

N. Panebianco

10:27 AM – 10:31 AM

Online Education for POCUS

M. Stone

10:31 AM – 11:01 AM

WINFOCUS Training

A. Hussain

11:01 AM – 11:05 AM

Panel Discussion: Training

11:05 AM – 11:09 AM

POCUS Quality Assurance in Training

R. Dversdal

11:09 AM – 11:13 AM

POCUS Certification

R. Arntfield

11:13 AM – 11:17 AM

POCUS Accreditation

J. Dent

11:17 AM – 11:45 AM

Panel Discussion (QA, Certification, Accreditation)



EACVI
European Association of
Cardiovascular Imaging

10:15 AM – 11:45 AM

E **Complex Adult Congenital Heart Disease for Adult Sonographers – Portland Ballroom 253-254**

Chairs: J. Kreeger, D. Defaria Yeh

10:15 AM – 10:30 AM

How to Evaluate Post Transposition of the Great Arteries Repairs: Arterial Switch, Mustard/Senning Operation
J. Kreeger

10:30 AM – 10:45 AM

Common Complications of Post Transposition of the Great Arteries Repair in Adults (Case-based)
J. Churchill

10:45 AM – 11:05 AM

Fontan Procedure: Overview
M. Hartsfield-Pugh

11:05 AM – 11:20 AM

Complications of Post Fontan Procedure in Adults (Case-based)
D. Defaria Yeh

11:20 AM – 11:35 AM

CMRI Evaluation of Adult Congenital Heart Disease: Above and Beyond Echocardiogram
R. Beroukhim

11:35 AM – 11:45 AM

Question & Answer

10:15 AM – 11:45 AM

M **Hemodynamics and Physiology of Heart Failure with Preserved Ejection Fraction – Portland Ballroom 255**

Chairs: S. Mayer, A. Radhakrishnan

10:15 AM – 10:30 AM

Case
S. Win

10:30 AM – 10:45 AM

Pathophysiology of Diastolic Dysfunction: Hemodynamic Consequences
O. Smiseth

10:45 AM – 11:00 AM

OA-01: Assessment of Left Ventricular Filling Pressure with Exercise is Independently Associated with All-cause Mortality in a Cohort of 14,446 Patients
C. Luong

11:00 AM – 11:15 AM

New Methods to Diagnose Heart Failure with Preserved Ejection Fraction
S. Shah

11:15 AM – 11:35 AM

Debate: Brain Natriuretic Peptide and Ejection Fraction are Adequate to Diagnose Heart Failure with Preserved Ejection Fraction. Do We Need Advanced Echo?
G. Aurigemma, J. Chirinos

11:35 – 11:45

Question & Answer

10:15 AM – 11:45 AM

P **Challenges Surrounding the Left Ventricle Outflow Tract in 2019 – Portland Ballroom 256**

Chairs: A. Alfirevic, S. Shernan

10:15 AM – 10:35 AM

Left Ventricular Outflow Tract Obstruction in Mitral Valve Surgery
M. Taylor

10:35 AM – 10:55 AM

Avoiding Left Ventricular Outflow Tract Obstruction After Transcatheter Mitral Replacement (TMVR)
D. Wang

10:55 AM – 11:05 AM

Treating Hypertrophic Obstructive Cardiomyopathy: Surgical Myectomy Versus Septal Ablation
E. Verrier

11:05 AM – 11:25 AM

Measuring Gradients Across the Left Ventricular Outflow Tract in the Operating Room or the Cath Lab
F. Cobey

11:25 AM – 11:45 AM

Panel Discussion, Question & Answer

10:15 AM – 11:45 AM

S **All You Need To Know About Registries – C-120**

Chairs: A. Klein, D. Wiener

10:15 AM – 10:30 AM

The ImageGuide Registry: Growth and Capabilities for Nuclear Cardiology
R. Doukky

10:30 AM – 10:45 AM

How to Use Registries in Research
P. Douglas

10:45 AM – 11:00 AM

Registry: A European Experience
M. Galderisi

11:00 AM – 11:15 AM

ImageGuideEcho Registry: The New ASE Registry
S. Nagueh

11:15 AM – 11:30 AM

Connecting Imaging Registries to Outcome Data
D. Playford, G. Strange

11:30 AM – 11:45 AM

Question & Answer

10:15 AM – 11:45 AM

Learning Lab: Virtual Reality – C-124

(Ticketed Event. Additional Fee Required)
Chairs: R. Lang, A. Narang

1:00 PM – 3:00 PM

Learning Lab: Myocardial Strain by Speckle Tracking – B-119

(Ticketed Event. Additional Fee Required)
Chairs: B. Khandheria, S. Roemer
Learning Lab Assistants: E. Kruse, S. Miller, B. Roberts, M. Schweitzer, M. Strachan, T. Van Houten

1:15 PM – 2:45 PM



Echo Technology at the Cutting Edge of Knowledge – Exhibit Hall A

Chairs: F. Flachskampf, J. Lindner

1:15 PM – 1:18 PM

Introduction of Gardin Lecture
J. Lindner

1:18 PM – 1:38 PM

Gardin Lecture: Species-Spanning Echocardiography: Cardiovascular Insights for Humans and Other Animals
B. Natterson-Horowitz

1:38 PM – 1:53 PM

Echo as An Endpoint in Clinical Trials: Successes and Pitfalls
N. Weissman

1:53 PM – 2:08 PM

Harnessing Big Echo Data: Novel Methods
P. Sengupta

2:08 PM – 2:23 PM

Echo as A Tool for Hemodynamic Assessment
G. Cho

2:23 PM – 2:38 PM

Understanding of Congenital Heart Disease Through New Imaging Technology
T. Slesnick

2:38 PM – 2:45 PM

Question & Answer

1:15 PM – 2:45 PM



Pediatric Cardio-Oncology – Portland Ballroom 251

Chairs: W. Border, M. Chen

1:15 PM – 1:30 PM

What Is the Problem?
M. Chen

1:30 PM – 1:45 PM

How Do You Evaluate It?
W. Border

1:45 PM – 2:00 PM

Identify the Knowledge Gaps and How to Start Addressing the Problem
H. Narayan

2:00 PM – 2:15 PM

Can I Make A Difference?
K. Rose-Felker

2:15 PM – 2:30 PM

OA-04: Unique Challenges Associated with A Large Biorepository of Clinical Echocardiograms From A Multicenter Retrospective Cohort of Childhood Cancer Survivors: Lessons Learned From Central Core Lab Analysis
R. Sachdeva

2:30 PM – 2:45 PM

Question & Answer

1:15 PM – 2:45 PM



Advancing the Echo Field: From Abstracts to JASE – Portland Ballroom 252

Chairs: A. Pearlman, M. Picard

1:15 PM – 1:30 PM

Rapid Fire Abstracts : 2 Minutes Per Abstract, 7 Categories

1:15 PM – 1:17 PM

P1-100: Correlation of Internal Jugular and Subclavian Vein Diameter Variation on Bedside Ultrasound with Invasive Right Heart Catheterization
G. Vaidya

SUNDAY, JUNE 23RD SCHEDULE

1:17 PM – 1:19 PM

P1-182: Low Intensity Focused Ultrasound Combined with H2O2/PFP-Loaded Acoustic Phase-Change Nanoparticles for Porcine Coronary Artery Embolism Elimination
Q. Zhou

1:19 PM – 1:21 PM

P1-188: Prognostic Value of Cardiac Power Output in Patients with Normal Left Ventricular Ejection Fraction Referred for Stress Echocardiography
V. Anand

1:21 PM – 1:23 PM

P2-001: Prevalence of Clinically Important Abnormalities Found on Transthoracic Echocardiograms Ordered for Finding of Heart Murmur Found on Physical Exam
I. McClelland

1:23 PM – 1:25 PM

P2-065: Novel Concepts in Theranostics: Magnetic Nanoparticle Embedding Within Ultrasound Contrast Drug Carriers Allows Guidance by Multi-modality Imaging
C. Boswell-Patterson

1:25 PM – 1:27 PM

P2-094: Evaluation of a Deep-Learning Algorithm Designed to Aid Novice Scanners in Obtaining Diagnostic Quality Echocardiograms
A. Narang

1:27 PM – 1:29 PM

P2-107: Real-Time Myocardial Perfusion Echocardiography with an Ultrasound Enhancing Agent for the Assessment of Coronary Allograft Vasculopathy in Children and Young Adult Heart Transplant Patients
R. Huang

1:30 PM – 1:50 PM

How to Design A Research Paper: Strengths and Pitfalls
V. Mor-Avi

1:50 PM – 2:00 PM

Best Echo Articles of the Past Year: Basic Science
B. Hoit

2:00 PM – 2:10 PM

Best Echo Articles of the Past Year: Clinical Science
S. Litwin

2:10 PM – 2:30 PM

State of the JASE and Where to Next
M. Picard

2:30 PM – 2:45 PM

Question & Answer

1:15 PM – 2:45 PM

E RELAX! It's Just Diastology – Portland Ballroom 253-254

Chairs: J. Oh, M. Park

1:15 PM – 1:30 PM

New Guidelines Update: Key Points
A. Pellet

1:30 PM – 1:45 PM

Applying the Guideline (Case-based): the Devil Is in the Details
M. Jankowski

1:45 PM – 2:00 PM

Assessing Diastolic Function Is Challenging! Atrial Fibrillation, Bundle Branch Blocks, Post-Op, and More
A. Dillenbeck

2:00 PM – 2:15 PM

Do We Need to Assess Diastolic Function On Everybody? What Does That Mean to Them?
M. Park

2:15 PM – 2:30 PM

Assessing Diastolic Function By Stress Echo: How and When?
M. Bremer

2:30 PM – 2:45 PM

Question & Answer

1:15 PM – 2:45 PM

M New Advances in Strain – Portland Ballroom 255

Chairs: J. Gorcsan, A. Hays

1:15 PM – 1:30 PM

Strain for Function: Where Are We Headed? (New Technologies)
P. Sengupta

1:30 PM – 1:45 PM

Strain in Pre-Clinical Models: What They Have Taught Us
C. Pislaru

1:45 PM – 2:00 PM

OA-03: Global Longitudinal vs. Circumferential Strain to Identify Cardiotoxicity in Women with HER2+ Breast Cancer
M. Esmailzadeh

2:00 PM – 2:15 PM

GLS vs. Strain Rate: Which Is Preferred and When
E. Donal

2:15 PM – 2:30 PM

Standardizing Strain: Can We Unify the Vendors
J. Voigt

2:30 PM – 2:45 PM

Strain Outside the Left Ventricle (Right Ventricle, Atrial): Do We Need It?
T. Kolias

1:15 PM – 2:45 PM

V Functional Tricuspid Regurgitation: The Old and The New – Portland Ballroom 256

Chairs: J. Aragam, L. Sade

1:15 PM – 1:30 PM

Functional Tricuspid Regurgitation: Mechanism and Role of Imaging
L. Badano

1:30 PM – 1:45 PM

Imaging of the Tricuspid Valve for Procedural Guidance
A. Berrebi

1:45 PM – 2:00 PM

Functional Tricuspid Regurgitation: Repair, Replace, or Ignore
P. McCarthy

2:00 PM – 2:15 PM

Functional Tricuspid Regurgitation: Percutaneous Approaches to the Tricuspid Valve: Early Feasibility and Beyond
R. Hahn

2:15 PM – 2:30 PM

Pacemaker Mediated Tricuspid Regurgitation: Mechanisms and Cases
A. Narang

2:30 PM – 2:45 PM

Question & Answer

1:15 PM – 2:45 PM

S Best of CASE: Twitter Competition – C-120

Chairs: S. Mulvagh, M. Swaminathan

Judges: L. Rodriguez, R. Thamman, D. Wiener, K. Zimmerman

1:15 PM – 1:20 PM

Introduction of the Competition and the Judges
S. Mulvagh

1:20 PM – 1:30 PM

Echo Saves The Day: No Contrast Echocardiography Guided Emergency TAVR for Hemodynamic Rescue in Acute Pure Native Aortic Insufficiency
N. Hamid

1:30 PM – 1:35 PM

Question & Answer

1:35 PM – 1:45 PM

"I may have tugged a little too hard." A case of traumatic tricuspid valve injury following pacemaker lead extraction.
B. Anderson

1:45 PM – 1:50 PM

Question & Answer

1:50 PM – 2:00 PM

Giant Thrombotic Right Coronary Aneurysm in an Infant with Undiagnosed Incomplete Kawasaki Disease and Rapidly Progressive Cardiovascular Collapse
C. Ellepola

2:00 PM – 2:05 PM

Question & Answer

2:05 PM – 2:15 PM

Atypical Case of Epicardial Amyloid Mass Without Classical Features of Myocardial Infiltration
A. Iyer

2:15 PM – 2:20 PM

Question & Answer

2:20 PM – 2:30 PM

Echino? Echo, Yes!
H. Mir

2:30 PM – 2:35 PM

Question & Answer

2:35 PM – 2:45 PM

Recognition of Competition Finalists, Announcement of Winner
M. Swaminathan

3:30 PM – 5:00 PM



Role of Imaging for Clinical Decision Making in Patients During and After Cancer Therapy – Exhibit Hall A

Chairs: A. Barac, M. Scherrer-Crosbie

3:30 PM – 4:00 PM

Case 1: Cardiomyopathy with Trastuzumab: How to Follow, When to Treat
Presenter: A. Yu
Discussant: J. Plana

SUNDAY, JUNE 23RD SCHEDULE

4:00 PM – 4:30 PM

Case 2: Newer Therapies: Immunotherapy-Induced Myocarditis and TKI-Induced Left Ventricular Dysfunction: Is There a Role for Echo?

Presenter: *B. Lefebvre*

Discussant: *J. Liu*

4:30 PM – 5:00 PM

Case 3: Cardiomyopathy or Tumor: Role of MRI When Should We Order It?

Presenter: *J. Kim*

Discussant: *J. Lopez-Mattei*

3:30 PM – 5:00 PM

PC Echo Indices as Outcome Predictors in Congenital Heart Disease – Portland Ballroom 251

Chairs: *B. Eidem, B. Landeck*

3:30 PM – 3:50 PM

Year in Review

S. Maskatia

3:50 PM – 4:05 PM

Atrial Mechanics in Congenital Heart Disease

L. Mertens

4:05 PM – 4:20 PM

Do Pretty 3D Pictures Translate to Better Outcomes?

M. Jolley

4:20 PM – 4:35 PM

Ventricular Deformation in Congenital Heart Disease Outcomes

D. Forsha

4:35 PM – 4:50 PM

OA-05: Decreased Reliance on Right Atrial Contraction for Atrial Emptying Predicts Decreased Risk of Adverse Events in Pediatric Pulmonary Hypertension

B. Frank

4:50 PM – 5:00 PM

Question & Answer

3:30 PM – 5:00 PM

I Stress Echo: Not just for Coronary Artery Disease. Get with the Guidelines! – Portland Ballroom 252

Chairs: *G. Kane, A. Kinsara*

3:30 PM – 3:45 PM

Hypertrophic Cardiomyopathy

S. Heitner

3:45 PM – 4:00 PM

Valvular: Aortic

P. Bertrand

4:00 PM – 4:15 PM

Valvular: Mitral

S. Luis

4:15 PM – 4:30 PM

Diastolic

J. Ha

4:30 PM – 4:45 PM

Pulmonary Hypertension

B. Freed

4:45 PM – 5:00 PM

Question & Answer

3:30 PM – 5:00 PM

E Brian Haluska Sonographer Research Award Competition – Portland Ballroom 253-254

Judges: *T. Abraham, L. Hua, M. Main, S. Phillip*

3:30 PM – 3:35 PM

Welcome and Introduction of Judges

T. Abraham

3:35 PM – 3:45 PM

SIA-01: Real Time Myocardial Perfusion Stress Echocardiography: A Practice Implementation Pilot

D. McCullough

3:45 PM – 3:55 PM

SIA-02: Resting Global Myocardial Work Derived from Non-Invasive Left Ventricular Pressure-Strain Loops Discriminates Between True Positive and False Positive Exercise Stress Echocardiography

N. Edwards

3:55 PM – 4:05 PM

SIA-03: Left Ventricle Longitudinal Excursion in Children Following Heart Transplantation: Utility of Tissue Motion Annular Displacement Index

G. Kadiu

4:05 PM – 4:15 PM

SIA-04: Fetal Brain Resistance is Abnormal in Neonates with Coarctation of the Aorta Despite Antegrade Aortic Arch Flow
M. Clouse

4:15 PM – 4:20 PM

Introduction of Barbara Natterson-Horowitz, MD
T. Abraham

4:20 PM – 4:40 PM

Not Uniquely Human
B. Natterson-Horowitz

4:40 PM – 5:00 PM

Recognition of Competition Finalists, Announcement of Winner
T. Abraham

3:30 PM – 5:00 PM

P Integration of Echo in Cardiac Imaging: Dilemmas in Valves and Devices – Portland Ballroom 255

Chairs: W. Jaber, W. Stewart
Panelists: S. Kort, A. Patel, F. Zahr

3:30 PM – 4:00 PM

Case 1: Preparing and Guiding TAVR: Role of CT and Fusion Imaging
E. Gill

4:00 PM – 4:30 PM

Case 2: MitraClip and Valves-in-Valves from a Multimodality Standpoint
S. Mankad

4:30 PM – 5:00 PM

Case 3: Are Multimodalities Necessary in LVADs?
A. Vainrib

3:30 PM – 5:00 PM

P Periprocedural Echocardiography in the Adult with Congenital Heart Disease – Portland Ballroom 256

Chairs: A. Finley, W. Lai

3:30 PM – 3:50 PM

Unrepaired Defects: Unexpected Congenital Findings in the Operating Room
N. Burbano

3:50 PM – 4:10 PM

Repaired Defects: How to Best Assess Repaired Congenital Lesions in Adulthood
N. Burbano

4:10 PM – 4:30 PM

Repairing Defects: What Does A Surgeon Need to Know From Multimodality Imaging?
E. Verrier

4:30 PM – 4:50 PM

Repairing Defects: Procedural Image Guidance for Catheter-Based Interventions in Adult Congenital Disease
D. Joffe

4:50 PM – 5:00 PM

Question & Answer

3:30 PM – 5:00 PM

Learning Lab: ImageGuideEcho™ Experience ASE's New Registry – B-119

(Registration Required. No Additional Fee)

3:45 PM – 4:45 PM

EC Meet the Faculty – C-120

S. Adusumalli, P. Douglas, L. Gillam, J. Kirkpatrick, R. Lang, J. Lindner, J. Oh, M. Picard, V. Rigolin, M. Swaminathan

5:00 PM – 6:30 PM

S Stump the Stars – Exhibit Hall A

Chairs: S. Mulvagh, J. Thomas
Stars: P. Knoll, N. Pandian, N. Schiller
Case Presenters: E. Garcia-Sayan, M. Layoun, S. McCartney, M. Namasivayam, N. Quatromoni, S. Shah

ECHO FLORIDA

A N N U A L 8th



October 13 – 15, 2019

Preconference Learning Lab
Available October 12

Disney's Yacht & Beach Club Resorts
Walt Disney World®, FL

Course Director

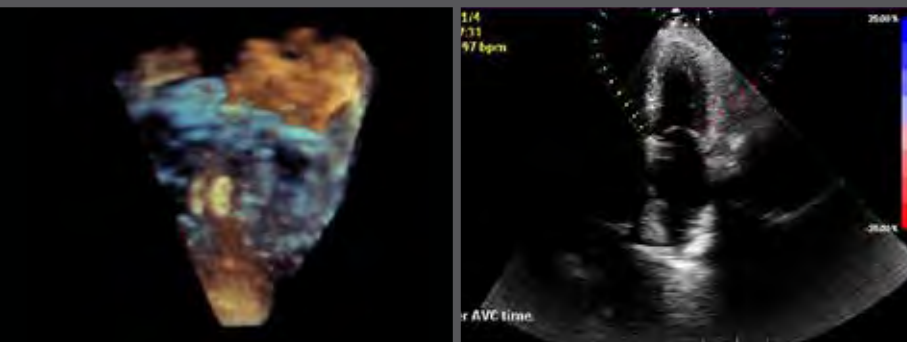
Gerard P. Aurigemma, MD, FASE
UMass Memorial Medical Center
Worcester, MA

Course Co-Director

Linda D. Gillam, MD, MPH, FASE
Past President, ASE
Morristown Medical Center
Morristown, NJ

Learning Lab Director

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



Register now at ASEcho.org/EchoFlorida



SCHEDULE AT A GLANCE

MONDAY, JUNE 24TH

REGISTRATION OPEN: 6:30 AM – 5:30 PM							
EXHIBIT & POSTER HALL OPEN: 9:00 AM – 4:00 PM							
ROOM	EXHIBIT HALL A	PORTLAND BALLROOM 251	PORTLAND BALLROOM 252	PORTLAND BALLROOM 253-254	PORTLAND BALLROOM 255	PORTLAND BALLROOM 256	ROOM C-120
7:00 – 7:50 AM	V Valvular Involvement in Systemic Disease	PC Cases: What the... TEE Mishaps	S Uses of Echo Around the World	E Strain: New Speckle Science for Sonographers	C Circulation in Women	I Cases: Pericardial Diseases	IT Understanding and Interpreting the Exercise of Stress Echocardiograms
8:00 – 9:30 AM	S Great Debates	PC Quality Improvement	IT Artificial Intelligence in Echocardiography: Friend or Foe?	E Many Faces of the Weak Heart	I Following the Ultrasound Enhancing Agents (Contrast) Guidelines: Break Out the Bubbles!	M 34 Million Patients: The Issue of Atrial Fibrillation	EC Career Development
8:00 – 10:00 AM	LEARNING LAB: 3D PRINTING – B-119 (TICKETED EVENT. ADDITIONAL FEE REQUIRED)						
9:30 – 10:15 AM	REFRESHMENT BREAK AND VISIT EXHIBIT & POSTER HALL						
10:15 – 11:30 AM	CHALK TALK: HOW TO DESIGN AND IMPLEMENT A RESEARCH PROJECT – EXHIBIT & POSTER HALL						
10:15 – 11:30 AM	LEARNING LAB: VIRTUAL REALITY – C-124 (TICKETED EVENT. ADDITIONAL FEE REQUIRED)						
10:15 – 11:45 AM	V Aortic Stenosis/ Aortic Regurgitation: Special Situations	PC Application of Echo to Improve Lives	S Value Summit: Quality and Efficiency in Today's Echo Lab	E Mechanical Assist Device: "MAD" for Echo	M Heart Failure Revisited (Joint ASE/JSE Session)	IT Applied Ultrasound Physics: What Clinicians Need to Know (Kalmanson Lecture)	E Everyday 3D: Applications in Pathology & Procedures for Sonographers
11:45 AM – 1:15 PM	SCIENCE & TECHNOLOGY THEATER: BRACCO DIAGNOSTICS INC.						
12:00 – 1:00 PM	MODERATED POSTERS – EXHIBIT & POSTER HALL						
1:00 – 3:00 PM	LEARNING LAB: 3D PRINTING – B-119 (TICKETED EVENT. ADDITIONAL FEE REQUIRED)						
1:15 – 2:45 PM	V Simulated Heart Valve Team Meeting: Mitral Valve Interventions	PC Valvular Regurgitation/ Stenosis: How to Quantify	S Value Summit: Preparing for the Echo Lab of the Next Decade	E Educator's Summit (Sonographer Council Business Meeting)	C The Journey of a Thrombus from Vein to Artery	M The Right Ventricle	EC Fireside Chat: Early Career Development
2:45 – 3:30 PM	REFRESHMENT BREAK AND VISIT EXHIBIT & POSTER HALL						
3:30 – 5:30 PM	CHALK TALK: HOW TO GET THE MOST OUT OF DOPPLER – EXHIBIT & POSTER HALL						
3:30 – 5:30 PM	ARTHUR E. WEYMAN YOUNG INVESTIGATOR'S AWARD COMPETITION AND 20TH ANNUAL FEIGENBAUM LECTURE – EXHIBIT HALL A						
5:30 – 6:30 PM	CLOSING RECEPTION – PRE-FUNCTION A LOBBY						

CIRCULATION (C) **IMAGING ESSENTIALS (E)** **ISCHEMIA (I)** **PEDIATRIC/CONGENITAL (PC)** **POINT OF CARE (POC)** **VALVES (V)**
EARLY CAREER (EC) **INNOVATION/TECHNOLOGY (IT)** **MYOCARDIUM/FUNCTION (M)** **PERIOPERATIVE (P)** **SPECIAL SESSIONS (S)**

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

For detailed information, please download the ASE Courses app.

ImageGuideEcho

A module under the **ImageGuideRegistry** platform

Registry Events at ASE 2019

Special Session

SUNDAY, JUNE 23

3:30 – 5:00 PM

ImageGuideEcho: Experience ASE's New Clinical Data Registry

Ballroom B-119

Booth Information Sessions

SUNDAY, JUNE 23

9:30 – 10:15 AM

ImageGuide Registry Overview and Q&A

2:45 – 3:30 PM

ImageGuideEcho & Data Collection:
How the Registry Captures and Uses
Data for Quality Improvement

MONDAY, JUNE 24

9:30 – 10:15 AM

Value of the ImageGuide Registry:
How Enrolling Will Positively
Impact Your Institution

2:45 – 3:30 PM

ImageGuide Registry Overview and
Q&A – Encore Presentation

**Visit Booth #415 in the Exhibit and Poster Hall
to learn more from the Registry experts.**

Info@ImageGuideEcho.org • ImageGuideEcho.org

GOLD SPONSOR



SILVER SPONSORS



ASE

American Society of
Echocardiography

7:00 AM – 7:50 AM

V Valvular Involvement in Systemic Disease – Exhibit Hall A

Chairs: J. Dent, M. Malkowski

7:00 AM – 7:15 AM

Valvular Disease in Connective Tissue Disease
R. Mankad

7:15 AM – 7:30 AM

Radiation Induced Valve Disease
J. Lopez-Mattei

7:30 AM – 7:45 AM

Carcinoid Valvular Disease
T. Tan

7:45 AM – 7:50 AM

Question & Answer

7:00 AM – 7:50 AM

PC Cases: What the... TEE Mishaps – Portland Ballroom 251

Chairs: W. Miller-Hance, I. Shen

7:00 AM – 7:15 AM

What Did I Miss?
W. Miller-Hance

7:15 AM – 7:30 AM

I Wish I Knew That Before
P. Wong

7:30 AM – 7:45 AM

Challenging Cases
D. Singh

7:45 AM – 7:50 AM

Question & Answer

7:00 AM – 7:50 AM

S Uses of Echo Around the World – Portland Ballroom 252

Chair: P. Sengupta, C. Taub

7:00 AM – 7:12 AM

Mexico
P. Gutierrez-Fajardo

7:12 AM – 7:24 AM

Brazil
A. Rodrigues

7:24 AM – 7:36 AM

Vietnam
H. Nguyen

7:36 AM – 7:50 AM

Experiences in Nepal, India and Ethiopia
N. Liel-Cohen

7:00 AM – 7:50 AM

E Strain: New Speckle Science for Sonographers – Portland Ballroom 253-254

Chairs: J. Hill, J. Plana

7:00 AM – 7:15 AM

The Speckle Science: Mechanism
J. Strom

7:15 AM – 7:30 AM

Strain Imaging: Optimization & Pitfalls
T. Van Houton

7:30 AM – 7:45 AM

Illustrative Cases: Cardio-Oncology, Infiltrative Diseases
L. Sanchez

7:45 AM – 7:50 AM

Question & Answer

7:00 AM – 7:50 AM

C Circulation in Women – Portland Ballroom 255

Chairs: T. Naqvi, M. Wood

7:00 AM – 7:15 AM

Spontaneous Coronary Artery Dissection
M. Wood

7:15 AM – 7:30 AM

Vasculitis
T. Naqvi

7:30 AM – 7:45 AM

Carotid Artery Fibromuscular Dysplasia and Risk of Stroke
D. Kadian-Dodov

7:45 AM – 7:50 AM

Question & Answer

MONDAY, JUNE 24TH SCHEDULE

7:00 AM – 7:50 AM

I **Cases: Pericardial Disease – Portland Ballroom 256**
Chairs: R. Grimm, S. Parashar

7:00 AM – 7:15 AM

Pericardial Cysts and Masses
R. Grimm

7:15 AM – 7:30 AM

Atypical (Post Coronary Artery Bypass Grafting) Tamponade
R. Wharton

7:30 AM – 7:45 AM

Differentiating Constriction From Restriction
R. Weiss

7:45 AM – 7:50 AM

Question & Answer

7:00 AM – 7:50 AM

IT **Understanding and Interpreting the Exercise in Stress Echocardiograms – C-120**

Chairs: P. Pellikka, T. Ryan

7:00 AM – 7:15 AM

Cardiorespiratory Response to Exercise in Health and Disease
G. Giraud

7:15 AM – 7:30 AM

Understanding and Interpreting the Exercise Data in Stress Echocardiograms
T. Ryan

7:30 AM – 7:45 AM

Question & Answer

8:00 AM – 9:30 AM

S **Great Debates – Exhibit Hall A**

Chairs: A. Pearlman, N. Schiller

8:00 AM – 8:15 AM

New Diastolic Guidelines: The Diagnosis Is Made: Pro
S. Nagueh

8:15 AM – 8:30 AM

New Diastolic Guidelines: The Fog Thickens: Con
J. Thomas

8:30 AM – 8:45 AM

Global Longitudinal Strain Should Always Be Added to Ejection Fraction in the Evaluation of Left Ventricular Function
T. Marwick

8:45 AM – 9:00 AM

Global Longitudinal Strain Is Not Needed in the Evaluation of Left Ventricular Function
N. Schiller

9:00 AM – 9:15 AM

Evaluation of Mitral Regurgitation: Echo Is All I Need: Pro
W. Zoghbi

9:15 AM – 9:30 AM

Evaluation of Mitral Regurgitation: Echo Is Not Enough: Con
L. Gillam

8:00 AM – 9:30 AM

PC **Quality Improvement – Portland Ballroom 251**
Chairs: A. Parthiban, R. Sachdeva

8:00 AM – 8:15 AM

Designing and Implementing Echo Quality Improvement Efforts
C. Statile

8:15 AM – 8:30 AM

Assuring Compliance with Quality Metrics
A. Parthiban

8:30 AM – 8:45 AM

Have Quality Improvement Metrics Made Your Lab Better?
S. Natarajan

8:45 AM – 9:00 AM

Multimodality Imaging in Congenital Heart Disease: Appropriate Use Criteria
R. Sachdeva

9:00 AM – 9:15 AM

OA-07: Serial Fetal Echocardiograms in Hypoplastic Left Heart Syndrome Fetuses: Does It Affect Immediate Post-Natal Care
B. Richards

9:15 AM – 9:30 AM

Question & Answer

8:00 AM – 9:30 AM

IT **Artificial Intelligence in Echocardiography: Friend or Foe? – Portland Ballroom 252**
Chairs: C. Chow, P. Sengupta

8:00 AM – 8:15 AM

Deciphering Artificial Intelligence: Machine Learning, Deep Learning, Neural Networks
C. Chow

8:15 AM – 8:30 AM

Data Driven Analytics to Improve Echo Understanding
S. Shah

8:30 AM – 8:45 AM

Image Recognition and Automated Interpretation
R. Deo

8:45 AM – 9:00 AM

Can AI Guide Acquisition?
G. Tison

9:00 AM – 9:15 AM

AI-Driven “Echo-Nomics.” Can We Better Utilize Our Resources?
P. Gladding

9:15 AM – 9:30 AM

Question & Answer

8:00 AM – 9:30 AM

E Many Faces of the Weak Heart – Portland Ballroom 253-254

Chairs: A. Prado, T. Zhu

8:00 AM – 8:15 AM

Chagas Disease Updates
B. Fey

8:15 AM – 8:30 AM

Arrhythmogenic Right Ventricular Dysplasia: Can Echo Detect It? What Are the Echo Features? What’s the Gold Standard?
B. Roberts

8:30 AM – 8:45 AM

Takotsubo Cardiomyopathy: A Mimicker of Coronary Artery Disease
K. Liu

8:45 AM – 9:00 AM

Non-Compaction Cardiomyopathy: Why Is the Diagnosis So Challenging?
M. Schweitzer

9:00 AM – 9:15 AM

Spontaneous Coronary Artery Dissection (SCAD): Ischemic Heart Disease in Healthy Woman?
M. Wood

9:15 AM – 9:30 AM

Infiltrative Disease: Comes in All Varieties
J. Hill

8:00 AM – 9:30 AM

I Following the Ultrasound Enhancing Agents (Contrast) Guidelines: Break Out the Bubbles! – Portland Ballroom 255

Chairs: M. Bierig, S. Kaul

8:00 AM – 8:15 AM

Applying the Ultrasound Enhancing Agents Guidelines
S. Abdelmoneim

8:15 AM – 8:30 AM

Optimizing Images for Left Ventricular Cavity Opacification and Myocardial Contrast Echocardiography: Contrast Settings, Bubble Behavior
J. Olson

8:30 AM – 8:45 AM

Every Day “Novel” Applications: Tumor, Thrombi, and Trouble Post Myocardial Infarction
M. Bierig

8:45 AM – 9:00 AM

Should I or Shouldn’t I? Safety, Pediatrics, and Pregnancy
S. Kutty

9:00 AM – 9:15 AM

Beyond Our Borders: Contrast Outside the Echo Lab
C. Bennett

9:15 AM – 9:30 AM

Question & Answer

8:00 AM – 9:30 AM

M 34 Million Patients: The Issue of Atrial Fibrillation – Portland Ballroom 256

Chairs: B. Khandheria, M. Saric

8:00 AM – 8:15 AM

Diastolic Assessment in Atrial Fibrillation
S. Lester

8:15 AM – 8:30 AM

Role of TEE Prior to Cardioversion
B. Khandheria

8:30 AM – 8:40 AM

OA-06: Immediate Recovery of Left Atrial Function is Associated with Maintenance of Sinus Rhythm After Electrical Cardioversion in Patients with Atrial Fibrillation and Atrial Flutter
A. Rabinovitz

8:40 AM – 8:55 AM

Role of Echo/TEE in Assessment of Stroke Risk
M. Stoddard

MONDAY, JUNE 24TH SCHEDULE

8:55 AM – 9:10 AM

Echo in Atrial Fibrillation Device Therapies
M. Saric

9:10 AM – 9:30 AM

Question & Answer

8:00 AM – 9:30 AM

EC Career Development – C-120

Chairs: J. Kirkpatrick, N. Weissman

8:00 AM – 8:15 AM

Should I Train in Multimodality Imaging or Is Echo Enough?
V. Ferrari

8:15 AM – 8:30 AM

New Requirements for Level III Training
T. Ryan

8:30 AM – 8:45 AM

BA, MPH, etc. What Do They Bring?
C. Taub

8:45 AM – 9:00 AM

Tips and Tricks for Finding A Job in Imaging
L. Rodriguez

9:00 AM – 9:15 AM

How to Best Develop Value as A New Hire
N. Weissman

9:15 AM – 9:30 AM

Question & Answer

8:00 AM – 10:00 AM

Learning Lab: 3D Printing – B-119

(Ticketed Event. Additional Fee Required)

Chairs: D. Levin, G. Mackensen

Learning Lab Assistants: S. Little, B. Ripley

10:15 AM – 11:45 AM

★ Aortic Stenosis/Aortic Regurgitation: Special Situations – Exhibit Hall A

Chairs: S. Kort, J. Puthumana

10:15 AM – 10:30 AM

Low Flow, Low Gradient Aortic Stenosis with Reduced Ejection Fraction
K. Poh

10:30 AM – 10:45 AM

Low Flow, Low Gradient Aortic Stenosis with Preserved Ejection Fraction
M. Clavel

10:45 AM – 11:00 AM

Bicuspid Aortic Stenosis: Anatomy, Evaluation, and Implications for Treatment with TAVR vs. SAVR
J. Puthumana

11:00 AM – 11:15 AM

Strain Imaging in Severe AI to Aid in Decision Making for Intervention
L. Sade

11:15 AM – 11:30 AM

Expanding Indications for TAVR: TAVR in Artificial Intelligence/TAVR for Prosthetic Valve Degeneration
M. Parker

11:30 AM – 11:45 AM

Question & Answer

10:15 AM – 11:45 AM

PC Application of Echo to Improve Lives – Portland Ballroom 251

Chairs: G. Ensing, C. Sable

10:15 AM – 10:30 AM

Handheld Devices: Extension of My Stethoscope
A. Riley

10:30 AM – 10:45 AM

Reaching Out to the Masses: Screening for Rheumatic Heart Disease
C. Sable

10:45 AM – 11:00 AM

Evolution of Remote Echo Reading
S. Shah

11:00 AM – 11:15 AM

Fetal Telemedicine: Advantages and Pitfalls
E. Bolin

11:15 AM – 11:30 AM

OA-08: Management of Pediatric Cardiology Cases in Developing Countries Utilizing Cardiac Point of Care Ultrasound Via A Telemedicine Platform: A Descriptive Study
R. Muhame

11:30 AM – 11:45 AM

Question & Answer

10:15 AM – 11:45 AM

S Value Summit: Quality and Efficiency in Today's Echo Lab – Portland Ballroom 252

Chairs: J. Kirkpatrick, R. Wright

10:15 AM – 10:30 AM

Business School for Echocardiographers: the Economics of Running A Lab
G. Rose

10:30 AM – 10:45 AM

Strategies to Limit Low Value Care
R. Stainback

10:45 AM – 11:00 AM

ACC/AHA/ASE New Requirements for Training Fellows: Improving the Quality of the Team
S. Wiegers

11:00 AM – 11:15 AM

How Board Certification, Sonographer Registry, and Lab Accreditation Promote Quality
J. Dent

11:15 AM – 11:30 AM

The ImageGuideEcho Registry: A Mechanism for Quality Improvement at Home and Nationally
A. Klein

11:30 AM – 11:45 AM

Question & Answer

10:15 AM – 11:45 AM

E Mechanical Assist Device: “MAD” for Echo – Portland Ballroom 253-254

Chairs: A. Armour, S. Rim

10:15 AM – 10:35 AM

Overview Ventricular Assist Devices
A. Armour

10:35 AM – 10:50 AM

Common Ventricular Assist Device Complications
B. Hartzel

10:50 AM – 11:05 AM

How to Do A Left Ventricular Assist Device Ramp Study
E. Kruse

11:05 AM – 11:20 AM

Impella: Echo Guidance for Lead Placement and Its Complications
A. Venkateshvaran

11:20 AM – 11:35 AM

ECMO: Bypass Lung, Bypass Heart
D. Dudzinski

11:35 AM – 11:45 AM

Question & Answer

10:15 AM – 11:45 AM

M Heart Failure Revisited (Joint ASE/JSE Session) – Portland Ballroom 255

Chairs: S. Nakatani, V. Rigolin



10:15 AM – 10:30 AM

Emerging Concepts in the Pathophysiology of Heart Failure
S. Nakatani

10:30 AM – 10:45 AM

Stress Echocardiography for Heart Failure: Conventional and Novel Methods (Acute Preload Stress)
K. Matsumoto

10:45 AM – 11:00 AM

Global Longitudinal Strain and Magnetic Resonance for Risk Stratification in Dilated Cardiomyopathy
T. Onishi

11:00 AM – 11:15 AM

Ultrasonographic Assessment of Non-Cardiac Organs in the Evaluation of the Severity of Heart Failure
K. Yamamoto

11:15 AM – 11:30 AM

Echo Imaging in Mechanical Circulatory Support
D. Jagasia

11:30 AM – 11:45 AM

Question & Answer

10:15 AM – 11:45 AM

IT Applied Ultrasound Physics: What Clinicians Need to Know – Portland Ballroom 256

Chairs: H. Leong-Poi, O. Von Ramm

10:15 AM – 10:30 AM

The Evolution of Echo Technology: From Edler & Hertz to Today
J. Kisslo

10:30 AM – 10:45 AM

Safety and Bio Effects of Ultrasound
F. Villanueva

10:45 AM – 11:00 AM

Kalmanson Lecture: Ultrafast Echo: Seeing More with Speed
M. Bruce

11:00 AM – 11:15 AM

Myocardial and Vascular Imaging of Tissue Composition
C. Mitchell

MONDAY, JUNE 24TH SCHEDULE

11:15 AM – 11:30 AM

Contrast Specific Imaging: Getting Signal From Bubbles
R. Senior

11:30 AM – 11:45 AM

Question & Answer

10:15 AM – 11:45 AM

E Everyday 3D: Applications in Pathology & Procedures for Sonographers – C-120

Chairs: W. Tsang, K. Collins

10:15 AM – 10:30 AM

3D vs. 2D Left Ventricular Volumes: Worth the Effort?
N. Edwards

10:30 AM – 10:45 AM

3D Explained What 2D Couldn't
J. Toptine

10:45 AM – 11:00 AM

3D Color Flow Imaging: For Mitral Regurgitation Quantification
K. Addetia

11:00 AM – 11:15 AM

3D Periprosthetic Leak and Closure Assessment
W. Tsang

11:15 AM – 11:30 AM

Optimizing 3D TEE: Tips and Tricks
K. Collins

11:30 AM – 11:45 AM

Question & Answer

10:15 AM – 11:30 AM

Learning Lab: Virtual Reality – C-124

(Ticketed Event. Additional Fee Required)

Chairs: R. Lang, A. Narang

1:00 PM – 3:00 PM

Learning Lab: 3D Printing – B-119

(Ticketed Event. Additional Fee Required)

Chairs: D. Levin, G. Mackensen

Learning Lab Assistants: S. Little, B. Ripley

1:15 PM – 2:45 PM

★ Simulated Heart Valve Team Meeting: Mitral Valve Interventions – Exhibit Hall A

Chairs: A. Nicoara, J. Passeri

Panelists: S. Mankad, D. Shook, H. Song

1:15 PM – 1:45 PM

Case 1: Failed Surgical Mitral Valve Repair - Percutaneous MitraClip, Valve-In-Ring or REDO Surgery and Replacement?
G. Scalia

1:45 PM – 2:15 PM

Case 2: Severe Mitral Stenosis and MAC: Transcatheter Valve-In-Native Valve or Surgical Replacement?
J. Mangion

2:15 PM – 2:45 PM

Case 3: Degenerated Bioprosthetic Mitral Valve and Paravalvular Leak: Percutaneous Options or REDO Surgery?
L. Safi

1:15 PM – 2:45 PM

▲ PC Valvular Regurgitation and Stenosis: How to Quantify – Portland Ballroom 251

Chairs: C. Altman, L. Lopez

1:15 PM – 1:30 PM

Echo Evaluation: Quantification of Right Heart Valves
J. Lu

1:30 PM – 1:45 PM

Echo Evaluation: Quantification of Left Heart Valves
L. Lopez

1:45 PM – 2:00 PM

MRI 4D Flow
J. Robinson

2:00 PM – 2:15 PM

What Do I Incorporate Into Daily Practice?
T. Slesnick

2:15 PM – 2:30 PM

OA-09: Effect of Pressure Recovery On Pressure Gradients in Congenital Stenotic Outflow Lesions in Pediatric Patients - Clinical Implications of Lesion Severity and Geometry: A Simultaneous Doppler Echocardiography and Cardiac Catheter Correlative Study
K. Mowers

2:30 PM – 2:45 PM

Question & Answer

1:15 PM – 2:45 PM

◆ S Value Summit: Preparing for the Echo Lab of the Next Decade – Portland Ballroom 252

Chairs: M. Main, M. Picard

1:15 PM – 1:30 PM

Update On U.S. Health Care Policy: Impact On Cardiac Imaging
D. Rosen

1:30 PM – 1:45 PM

Update On U.S. Health Care Policy: Impact On Cardiac Imaging
L. Aronson

1:45 PM – 2:00 PM

Role of Multimodality Imaging, POCUS, and Limited Echoes in A Value Based World—Where Do They All Fit In?
A. Johri

2:00 PM – 2:15 PM

Echo 2025: What Tomorrow's Echo Lab Will Look Like
S. Wieggers

2:15 PM – 2:30 PM

Getting to 2025: Change Management Strategies and Leadership in the Echo Lab
N. Weissman

2:30 PM – 2:45 PM

Predicting and Preventing Physician Burnout
J. Kirkpatrick

1:15 PM – 2:45 PM

E **Educator's Summit** (Sonographer Council Business Meeting) – **Portland Ballroom 253-254**
Chairs: K. Collins, E. Shea

1:15 PM – 1:35 PM

Council on Cardiovascular Sonography Business Meeting
E. Shea

1:35 PM – 1:55 PM

Sonographer Education Summit
M. Bremer

1:55 PM – 2:10 PM

Sonographer Career Pathways
M. Roberts

2:10 PM – 2:30 PM

Advanced Cardiovascular Sonographer: What's the Role? How to Implement?
M. Umland

2:30 PM – 2:45 PM

Sonographers Reaching Out to the World
D. Adams

1:15 PM – 2:45 PM

C **The Journey of a Thrombus from Vein to Artery** – **Portland Ballroom 255**
Chairs: R. Benenstein, B. Wells

1:15 PM – 1:27 PM

The Take-Off... Findings and Diagnosis of Lower Extremity DVT
M. Vorsanger

1:27 PM – 1:39 PM

The First Layover... Pulmonary Embolism and Right Ventricular Strain
R. Benenstein

1:39 PM – 1:51 PM

An Unexpected Stop... Cryptogenic Stroke/PFO Closure
K. Addetia

1:51 PM – 2:03 PM

A "Gut" Feeling... Mesenteric Ischemia: Splenic and Renal Infarct
B. Wells

2:03 PM – 2:15 PM

The End of the Journey... The 5 "P"s... Acute Arterial Thrombosis
F. Shamoun

2:15 PM – 2:45 PM

Question & Answer

1:15 PM – 2:45 PM

M **The Right Ventricle – Portland Ballroom 256**
Chairs: N. Schiller, S. Shrivastava

1:15 PM – 1:30 PM

Imaging the Right Ventricle: Quantification By 3D, Contrast, and Beyond
D. Medvedofsky

1:30 PM – 1:40 PM

Hemodynamic Assessment of the Right Ventricle: Pulmonary Artery Compliance/Vascular Resistance
P. Gutierrez-Fajardo

1:40 PM – 1:55 PM

OA-10: Right Ventricular Volumes, Ejection Fraction, and Longitudinal Strain Assessed by Three-Dimensional Speckle Tracking Echocardiography: Comparisons with Cardiac Magnetic Resonance Imaging
Y. Li

1:55 PM – 2:10 PM

Strain Echocardiography When Assessing the Right Ventricle
S. Wahi

2:10 PM – 2:30 PM

Echocardiographic Findings in Pulmonary Hypertension
S. Goldstein

2:30 PM – 2:45 PM

Question & Answer

MONDAY, JUNE 24TH SCHEDULE

1:15 PM – 2:45 PM

EC Fireside Chat: Early Career Development – C-120

Moderators: S. Adusumalli, T. Chen, H. Jarrett, A. Narang

1:30 PM – 1:45 PM

Adjusting to Faculty Life in Your Training Environment

E. Yucel

1:45 PM – 2:00 PM

Building A Social Media Presence

R. Thamman

2:00 PM – 2:15 PM

Early Career Transition Tips

L. Safi

2:15 PM – 2:30 PM

Job Search Tips and Tricks

D. Medvedofsky

2:30 PM – 2:45 PM

From Mentee to Mentor

S. Adusumalli

3:30 PM – 5:30 PM

★ Arthur E. Weyman Young Investigator's Award Competition and 20th Annual Feigenbaum Lecture – Exhibit Hall A

Chair: T. Abraham

Judges: T. Edvardsen, H. Leong-Poi, M. Main, S. Nakatani

3:30 PM – 3:35 PM

Welcome and Introduction

T. Abraham

3:35 PM – 3:50 PM

YIA-01: Cardiac Ultrasonic Fingerprinting: A Radiomics Approach for High-Throughput Feature Phenotyping of Dysfunctional Myocardium

N. Kagiya

3:50 PM – 4:05 PM

YIA-02: Molecular Imaging of Microvascular Endothelial Von Willebrand Factor and Platelet Adhesion in Myocardial Ischemia-Reperfusion Injury

K. Ozawa

4:05 PM – 4:20 PM

YIA-03: Deep Learning of Echocardiography to Identify Systemic Phenotypes and Unsupervised Learning of Clinical Measurements

D. Ouyang

4:20 PM – 4:35 PM

YIA-04: Comprehensive Evaluation of Tricuspid Regurgitation Location and Severity Using Vena Contracta Analysis: A Color Doppler 3-Dimensional Transesophageal Echocardiography Study

H. Utsunomiya

4:35 PM – 4:37 PM

Concluding Remarks

T. Abraham

4:37 PM – 4:40 PM

Introduction of the Feigenbaum Lecturer

J. Lindner

4:40 PM – 5:00 PM

Feigenbaum Lecture: Echocardiography for Precision Medicine: Digital Biopsy to Deconstruct Biology

S. Shah

5:00 PM – 5:05 PM

Recognition of Feigenbaum Lecturer, Presentation of Plaque, Concluding Remarks

H. Feigenbaum

5:05 PM – 5:07 PM

Introduction of ASE Foundation Research Lecturer

R. Lang

5:07 PM – 5:25 PM

ASE Foundation Research Lecture: WASE Study

F. Asch

5:25 PM – 5:25 PM

Concluding Remarks

R. Lang



















5:25 PM – 5:30 PM

Recognition of Competition Finalists, Announcement of Winner

SCHEDULE AT A GLANCE

TUESDAY, JUNE 25TH

TUESDAY

REGISTRATION OPEN: 6:30 AM – 11:30 AM						
ROOM	PORTLAND BALLROOM 251	PORTLAND BALLROOM 252	PORTLAND BALLROOM 253-254	PORTLAND BALLROOM 255	PORTLAND BALLROOM 256	ROOM C-120
7:00 – 7:50 AM	 Read with the Masters: Complex Cardiology	 Special Session: Echo in Women	 Contrast: Know Your Bubbles	 Rapid Fire Cases (Circulation & Vascular Council Business Meeting)	 How To Cases: Valves	 Multimodality: Ischemia Integration of Echo and Other Modalities
8:00 – 11:30 AM	LEARNING LAB: 3D ECHO IN CONGENITAL HEART DISEASE – B-119 (TICKETED EVENT. ADDITIONAL FEE REQUIRED)					
8:00 – 9:30 AM	 Diverse Dilemmas	 Hydrodynamics Bootcamp: Beyond the Basics in Doppler Quantitation	 Stress Echo: New Updates and More	 Law and Echo	 Strain Cases	 Controversies in Mitral Valve Disease
9:30 – 10:00 AM	REFRESHMENT BREAK CHALK TALK: VALVE GUIDELINES – C-123					
10:00 – 11:30 AM	 Decision Making for the Fetus & Neonate	 30+ Years of Perioperative Imaging of the Mitral Valve: Yesterday, Now, and Tomorrow	 Lab Leadership and Management Summit	 Hypertrophic Cardiomyopathy	 Systematic Approach to Evaluation of Prosthetic Valves	 Cardiomyopathies: Horses and Zebras

CIRCULATION (C) IMAGING ESSENTIALS (E) ISCHEMIA (I) PEDIATRIC/CONGENITAL (PC) POINT OF CARE (POC) VALVES (V)
 EARLY CAREER (EC) INNOVATION/TECHNOLOGY (IT) MYOCARDIUM/FUNCTION (M) PERIOPERATIVE (P) SPECIAL SESSIONS (S)

 BASIC
  BASIC/INTERMEDIATE
  INTERMEDIATE
  INTERMEDIATE/ADVANCED
  ADVANCED
  BASIC/INTERMEDIATE/ADVANCED

For detailed information, please download the ASE Courses app.

TUESDAY

American Society of Echocardiography

ASE 2019



30 YEARS OF INNOVATION

Scientific Sessions • June 21-25, 2019

Oregon Convention Center • Portland, OR

ASEScientificSessions.org

**EDUCATE YOUR STAFF YEAR-ROUND
WITH THE ASE ONLINE LIBRARY!**

	ON-SITE	POST CONFERENCE
<p>2019 ASE CONFERENCE ONLINE LIBRARY</p> <p>Includes unlimited online access indefinitely to the 2019 ASE Scientific Sessions</p>	\$199	\$299/\$399 ASE Member/Nonmember
<p>MULTI-YEAR ONLINE LIBRARY</p> <p>Includes unlimited online access indefinitely to the 2009-2019 ASE Scientific Sessions</p>	\$399	\$499/\$599 ASE Member/Nonmember
<p>2019 ASCeXAM/ReASCE REVIEW COURSE</p>	\$375/\$525 ASE Member/Nonmember	



Multiple user pricing for facilities is also available, see the Digitell rep on-site for pricing

To Order, Visit Us at the Digitell Booth Near Registration
Technical Support: 877-796-1325 Other Inquiries: 800-679-3646
ASEUniversity.org



7:00 AM – 7:50 AM

PC Read with the Masters: Complex Cardiology – Portland Ballroom 251

Chairs: N. Ayres, M. Brook, M. Cohen

7:00 AM – 7:20 AM

Case
R. France

7:20 AM – 7:40 AM

Case
M. Wasserman

7:40 AM – 7:50 AM

Question & Answer

7:00 AM – 7:50 AM

I Special Session: Echo in Women – Portland Ballroom 252

Chairs: R. Thamman, M. Wood

7:00 AM – 7:10 AM

Stress Testing to Diagnose Chest Pain
A. Poppas

7:10 AM – 7:20 AM

Acute Coronary Syndromes: Takotsubo, Spontaneous Coronary Artery Dissection, Myocardial Infarction with Non-obstructive Coronary Arteries
N. Scott

7:20 AM – 7:30 AM

Pregnancy: Physiology, Cardiomyopathy, Valves
A. Khan

7:30 AM – 7:40 AM

Vascular and Valves: Aortopathy, TAVR
N. Quader

7:40 AM – 7:50 AM

Heart Failure with Preserved Ejection Fraction
J. Kim

7:00 AM – 7:50 AM

E Contrast: Know Your Bubbles – Portland Ballroom 253-254

Chairs: M. Umland, K. Wei

7:00 AM – 7:10 AM

What Are My Options: Different Agents, Indications and Contraindications
J. Olson

7:10 AM – 7:25 AM

Image Optimization with Contrast
E. McIlwain

7:25 AM – 7:40 AM

Real Time Perfusion Imaging: Step By Step
J. Hodovan

7:40 AM – 7:50 AM

Question & Answer

7:00 AM – 7:50 AM

C Rapid Fire Cases (Circulation & Vascular Council Business Meeting) – Portland Ballroom 255

Chairs: R. Benenstein, A. Johri

7:00 AM – 7:10 AM

Council on Circulation & Vascular Ultrasound Business Meeting
R. Benenstein, A. Johri

7:10 AM – 7:20 AM

The Carotid Is Gloomg...Carotid Body Tumors
R. Benenstein

7:20 AM – 7:25 AM

COMPASS...The New GPS in Peripheral Arterial Disease: NOACS for Peripheral Arterial Disease
A. Johri

7:25 AM – 7:30 AM

Unmasking the Heart with Carotid Doppler: Doppler Waveforms
R. Quiroz

7:30 AM – 7:35 AM

The Aorta Is Bullying the Neighbors: Compression Syndromes
T. Naqvi

7:35 AM – 7:40 AM

Don't Blame the Cholesterol: Nonatherosclerotic Peripheral Arterial Disease
B. Wells

7:40 AM – 7:45 AM

Ultrasound Contrast in Peripheral Arterial Disease
B. Davidson

7:45 AM – 7:50 AM

Question & Answer

TUESDAY, JUNE 25TH SCHEDULE

7:00 AM – 7:50 AM

V **How To Cases: Valves – Portland Ballroom 256**

Chairs: A. Narang, G. Whalley

7:00 AM – 7:15 AM

Assess Valves Post MitraClip

V. Rangarajan

7:15 AM – 7:30 AM

Evaluate for Low Gradient and Normal Gradient Severe Aortic Stenosis

M. McGovern

7:30 AM – 7:45 AM

Prosthetic Valve Dysfunction

M. Jankowski

7:45 AM – 7:50 AM

Question & Answer

7:00 AM – 7:50 AM

I **Multimodality: Ischemia Integration of Echo and Other Modalities – C-120**

Chairs: M. Ferencik, R. Janardhanan

7:00 AM – 7:15 AM

CT and Stress Echo in Acute Chest Pain: Where Are We Now and Where Are We Going?

M. Ferencik

7:15 AM – 7:30 AM

Multimodality Post MI

A. Patel

7:30 AM – 7:45 AM

Fusion of CT and 3D Echo for Chest Pain

V. Mor-Avi

7:45 AM – 7:50 AM

Question & Answer

8:00 AM – 9:30 AM

PC **Diverse Dilemmas – Portland Ballroom 251**

Chairs: P. Barker, C. Fleishman

8:00 AM – 8:20 AM

Evaluating A New Patient with Poor Function: Is Echo Just the Start?

J. Soslow

8:20 AM – 8:40 AM

Anomalous Coronary Course: What Is the Data for Intervention When Asymptomatic?

A. Dorfman

8:40 AM – 9:00 AM

Unicuspid Aortic Valve: Valvuloplasty, Valvotomy, or Ross?

P. Barker

9:00 AM – 9:15 AM

OA-11: Exercise Stress Echocardiography in Children with Hypertrophic Cardiomyopathy

I. El-Assaad

9:15 AM – 9:30 AM

Question & Answer

8:00 AM – 9:30 AM

IT **Hydrodynamics Bootcamp: Beyond the Basics in Doppler Quantitation – Portland Ballroom 252**

Chairs: G. Girand, S. Shernan

8:00 AM – 8:15 AM

The Importance of Conservation Laws in Echocardiography: Mass, Momentum, and Energy

G. Girand

8:15 AM – 8:30 AM

Nuances in Aortic Stenosis: Low Flow, Pressure Recovery, Impact of Afterload

P. Pibarot

8:30 AM – 8:45 AM

Upping Your PISA Game: Flow Constraint, Contour Flattening, Impact of Orifice Shape

J. Thomas

8:45 AM – 9:00 AM

3D to the Rescue: Can 3D Doppler Be Quantitative?

M. Vannan

9:00 AM – 9:15 AM

Intracardiac Blood Flow: Vortex Imaging, Pressure Gradients, and Beyond

S. Nakatani

9:15 AM – 9:30 AM

Question & Answer

8:00 AM – 9:30 AM

E **Stress Echo: New Updates and More – Portland Ballroom 253-254**

Chairs: K. Wei, E. Yucel

8:00 AM – 8:15 AM

Guideline Updates for Ischemic Heart Disease: Key Points

M. Wantz

8:15 AM – 8:30 AM

How to Incorporate Strain, 3D in Stress Echo for Ischemic Heart Disease (Case-based)
E. Kruse

8:30 AM – 8:45 AM

How to Incorporate Real Time Myocardial Perfusion in Stress Echo for Ischemic Heart Disease (Case-based)
K. Wei

8:45 AM – 9:00 AM

Stress Echo NOT for Ischemic Heart Disease: Protocol and Workflow
P. Burgess

9:00 AM – 9:15 AM

Stress Echo for Low Flow, Low Gradient Aortic Stenosis: Protocol and Workflow
E. Yucel

9:15 AM – 9:30 AM

Question & Answer

8:00 AM – 9:30 AM

S Law and Echo – Portland Ballroom 255

Chairs: B. Davidson, J. Gardin

8:00 AM – 8:20 AM

Ethical Codes and Echocardiographers
J. Gardin

8:20 AM – 8:40 AM

Legal and Ethical Issues for the Cardiovascular Sonographer
M. Park

8:40 AM – 9:00 AM

Anatomy of A Malpractice Lawsuit
P. Cox, L. St. Clair

9:00 AM – 9:15 AM

Case 1 Panel Discussion of Case

9:15 AM – 9:30 AM

Case 2 Panel Discussion of Case

8:00 AM – 9:30 AM

★ Strain Cases – Portland Ballroom 256

Chairs: J. Gorcsan, T. Marwick

8:00 AM – 8:30 AM

Utility of Strain in Systolic Function
Presenter: S. Ermakov
Discussant: T. Abraham

8:30 AM – 9:00 AM

Strain and Diastolic Function
Presenter: M. Chetrit
Discussant: E. Donal

9:00 AM – 9:30 AM

Right Ventricle, Atrial Function, and Strain
Presenter: B. Arora
Discussant: J. Gorcsan

8:00 AM – 9:30 AM

V Controversies in Mitral Valve Disease – C-120

Chairs: R. Beerl, M. Malkowski

8:00 AM – 8:15 AM

3D vs. CMRI for Quantification of Mitral Regurgitation
R. Janardhanan

8:15 AM – 8:30 AM

Advanced Heart Failure with High Grade Mitral Regurgitation: Repair, Replace, Clip, or Transplant?
H. Song

8:30 AM – 8:45 AM

Mitral Valve Pathology and Mitral Regurgitation in Hypertrophic Cardiomyopathy
D. Phelan

8:45 AM – 9:00 AM

Morphologic Differences in Patients with MR Related to Atrial Fibrillation
J. Hung

9:00 AM – 9:15 AM

Evaluating Contractile Reserve and Strain in Mitral Valve Disease: Is It Useful?
F. Dellling

9:15 AM – 9:30 AM

Question & Answer

TUESDAY, JUNE 25TH SCHEDULE

8:00 AM – 11:30 AM

Learning Lab: 3D in Congenital Heart Disease – B-119

(Ticketed Event. Additional Fee Required)

Chair: D. Roberson

Speakers: G. Marx, A. Parthiban

10:00 AM – 11:30 AM

PC Decision Making for the Fetus & Neonate – Portland Ballroom 251

Chairs: E. Michelfelder, T. Tacy

10:00 AM – 10:15 AM

Changes in the Approach to Fetal Counseling Over 30 Years

T. Tacy

10:15 AM – 10:30 AM

Does 1st Trimester Screening Modify the Natural History of Congenital Heart Disease

J. Marek

10:30 AM – 10:45 AM

Shared Decision Making

N. Pinto

10:45 AM – 11:00 AM

Regionalized Care for the Highest Risk

J. Rychik

11:00 AM – 11:30 AM

Question & Answer

10:00 AM – 11:30 AM

P 30+ Years of Perioperative Imaging of the Mitral Valve: Yesterday, Now, and Tomorrow – Portland Ballroom 252

Chairs: F. Cobey, N. Pandian

10:00 AM – 10:15 AM

What Can Be Learned From the Early Innovators?

O. Von Ramm

10:15 AM – 10:30 AM

State of the Art of Mitral Valve Imaging: What Works and What Doesn't?

A. Berrebi

10:30 AM – 10:45 AM

Multimodality Imaging of the Mitral Valve: How Does It Inform Procedural Guidance?

D. Shook

10:45 AM – 11:00 AM

What Is the Potential of Virtual Reality and 3D Printing to Advance Patient Care?

F. Mahmood

11:00 AM – 11:30 AM

Panel Discussion About Innovation of Mitral Imaging

10:00 AM – 11:30 AM

E Lab Leadership and Management Summit – Portland Ballroom 253-254

Chairs: J. Marshall, C. Mitchell

10:00 AM – 10:15 AM

How to Enhance Lab Culture

M. Orsinelli

10:15 AM – 10:30 AM

How to Hire the Best Candidate

M. Bierig

10:30 AM – 10:45 AM

Teams Matter: Physician, Sonographer, and Nurse

C. Ranjo

10:45 AM – 11:00 AM

How to Maintain Competency: Ongoing Education

C. Mitchell

11:00 AM – 11:15 AM

How to Help Protect Staff: Radiation and Ergonomic Safety

J. Marshall

11:15 AM – 11:30 AM

Question & Answer

10:00 AM – 11:30 AM

M Hypertrophic Cardiomyopathy – Portland Ballroom 255

Chairs: D. Phelan, M. Sherrid

10:00 AM – 10:15 AM

Hypertrophic Cardiomyopathy vs. Athletes

D. Phelan

10:15 AM – 10:30 AM

Evaluation of Hypertrophic Cardiomyopathy/Hypertrophic Cardiomyopathy Mimickers

A. Woo

10:30 AM – 10:45 AM

Exercise Testing in Hypertrophic Cardiomyopathy

T. Abraham

10:45 AM – 11:00 AM

Multimodality and Hypertrophic Cardiomyopathy
J. Lopez-Mattei

11:00 AM – 11:15 AM

Emerging Concepts in Hypertrophic Cardiomyopathy Therapy
S. Heitner

11:15 AM – 11:30 AM

Question & Answer

10:00 AM – 11:30 AM

V Systematic Approach to Evaluation of Prosthetic Valves – Portland Ballroom 256

Chairs: J. Dent, W. Zoghbi

10:00 AM – 10:15 AM

ASE/ESC Guidelines for the Assessment of Prosthetic Valves
F. Miller

10:15 AM – 10:30 AM

Common Mistakes in the Evaluation of Prosthetic Valves
P. Burgess

10:30 AM – 10:45 AM

Distinguishing Prosthesis-Patient Mismatch From Dysfunction
P. Pibarot

10:45 AM – 11:00 AM

Bioprosthetic Mitral and Aortic Valve Degeneration Assessment in the Era of Valve-in-Valve
J. Dent

11:00 AM – 11:15 AM

Subacute Bioprosthetic Valve Thrombosis and Role of Imaging
S. Pislaru

11:15 AM – 11:30 AM

Question & Answer

10:00 AM – 11:30 AM

I Cardiomyopathies: Horses and Zebras – C-120

Chairs: J. Banchs, G. Pressman

10:00 AM – 10:15 AM

Amyloid
J. Banchs

10:15 AM – 10:30 AM

Hemochromatosis
A. Patel

10:30 AM – 10:45 AM

Hypereosinophilic Disease
R. Mankad

10:45 AM – 11:00 AM

Diabetic Cardiomyopathy
T. Marwick

11:00 AM – 11:15 AM

Chagas Disease
R. Marcus

11:15 AM – 11:30 AM

Question & Answer



Honorably Recognizing Dr. Weyman

The NBE is pleased to recognize Dr. Arthur E. Weyman as Past President of NBE, a Board member, Chair of the ASCeXAM Certification committee and for his numerous contributions to the field of echocardiography. We applaud his dedication and extend our sincerest gratitude for his years of service.

NBE shares ASE's continued commitment to quality in echocardiography.



NATIONAL
BOARD OF
ECHOCARDIOGRAPHY, INC.

Experts in the field
hold the designation of

FASE

SPECIAL EVENTS

Nidhish Tiwari, MD, FASE

Associate Director
North Central Bronx Hospital
Bronx, NY



**Cindy Laliberte,
RDGS, FASE**

Supervisor, Echo Lab
Akron Children's Hospital
Akron, OH



**Yvette Carvalho,
RDGS, RVS,
FASE**

Lead Cardiovascular
Songrapher
Overlook Medical Center
Summit, NJ



**Massimiliano
Meineri, MD, FASE**

Staff Anesthesiologist,
Director Perioperative TEE
Toronto General Hospital
Toronto, ON, Canada



**Melissa Tracy,
MD, FASE**

Associate Professor
of Medicine
RUSH University
Medical Center
Chicago, IL



Joshua D. Quick, MD, FASE

Cardiothoracic Anesthesiologist
VA Connecticut Healthcare System
West Haven, CT



**Alison White, BSc, MSc,
DMU (cardiac), AMS,
SFHEA, FASE**

Program Director and
Senior Lecturer
Griffith University
Brisbane, Queensland,
Australia



Want to achieve the FASE designation? All echo specialists, in addition to cardiologists, can apply for FASE at ASEcho.org/FASE.

Come to the ASE Exhibit Booth 409 to learn more about applying for FASE.



FASE LOUNGE

Level 1, B-114

Saturday, June 22 ... 9:00 AM – 4:00 PM

Sunday, June 23 9:00 AM – 4:00 PM

Monday, June 24 9:00 AM – 4:00 PM

Tuesday, June 25 9:00 AM – 11:00 AM

GOOD COMPANIES. GOOD WORKS.

*ASE would like to thank our
Industry Roundtable members.*

Visit our Industry Roundtable Partners
at ASE's 30th Annual Scientific Sessions.



LIFE FROM INSIDE

BOOTH #200

Canon

BOOTH #709



Edwards



BOOTH #501

HITACHI
Inspire the Next

BOOTH #400



BOOTH #509

PHILIPS

BOOTH #300

SIEMENS
Healthineers

BOOTH #800

ULTRONICS

FRIDAY, JUNE 21

SCIENCE & TECHNOLOGY THEATER

6:30 – 8:00 PM

EXHIBIT & POSTER HALL B

a lifetime of echocardiography

Presented by Hitachi Healthcare

Join us for an evening dinner, drinks, and music and experience ‘a lifetime of echocardiography.’ Learn how Hitachi is delivering **the next level of innovation** with presentations from leaders in Fetal, Pediatric, and Adult cardiology.

Refreshments are provided by Hitachi 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 30th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

SATURDAY, JUNE 22

ASEF CARDIOVASCULAR CHALLENGE

ASEF BOOTH, PRE-FUNCTION C LOBBY
LEVEL 1



Compete with your feet and get moving with the ASE Foundation Cardiovascular Challenge. Sign up to participate at the ASEF Booth in the Pre-function C Lobby on Level 1, then record your steps taken every day and log them at the booth. The person with the most overall steps will win a \$150 Amazon gift card, second place will receive a \$75 Amazon gift card, and the person with the third highest step count will receive a limited edition ASEF hat. The winners will be announced Monday, June 24th during the afternoon break in the Exhibit & Poster Hall.

Special thanks to our 2019 Cardiovascular Challenge sponsors, CAE Healthcare, Lantheus Medical Imaging, Inc., and TOMTEC Corporation.

TIE-A-KNOT FOR PEDIATRIC PATIENTS!

Stop by the ASEF booth to make a tie-knot blanket for pediatric patients at the Oregon Health & Science University Doernbecher Children’s Hospital! We’ll have pre-cut fabric that’s ready to be tied. Printed instructions will also be available - but you’ll get the hang of it quickly! Donate at least \$10 to the ASE Foundation and you can participate in this fun, creative, and rewarding activity. Put a smile on a child’s face with a blanket you made just for them! Money raised through this effort will be allocated to Patient Awareness projects in 2020.

IMAGES FROM THE HEART GALLERY

A special curated showcase of photographs will be on display from Saturday - Monday. View the world through the eyes and photos of ASE members taken while they traveled the world to participate in various medically-related outreach events. Many photos will be available

to take home with a donation to the ASE Foundation. Stop by the ASE Foundation booth to experience these awe-inspiring photos.

ASE AWARDS PRESENTATION AND 30th ANNUAL EDLER LECTURE

7:50 – 9:45 AM

EXHIBIT HALL A



ASE’s Immediate Past President, **Vera Rigolin, MD, FASE, Northwestern Medicine, Chicago, Illinois**, will present “Time Flies When You Are Having Fun with Aortic Stenosis” as the 30th Annual Edler Lecture on

Saturday morning, June 22, during the Awards Presentations and Edler Lecture Plenary Session. Dr.

Rigolin is a cardiologist at Northwestern Memorial Hospital and a Professor of Medicine at Northwestern University’s Feinberg School of Medicine. She specializes in echocardiography, valvular heart disease, and women’s heart health. She is also the current medical director of the echocardiography laboratory at Northwestern Memorial Hospital. Created in 1990, the annual Edler Lecture honors the founder of echocardiography, Dr. Inge Edler.

LIFETIME ACHIEVEMENT AWARDS

The 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.



Jae K. Oh, MD, FASE, Mayo Clinic, Rochester, Minnesota, has been named the 2019 Physician Lifetime Achievement Award recipient. Dr. Oh has helped make echocardiography an indispensable tool for understanding the complex hemodynamics of myocardial and pericardial diseases. He is generous

with his time and offers his expertise around the world to help educate others. He is a role model and mentor for trainees, always promoting early career scientists and clinical educators. This outstanding trait has been recognized with the Mayo Clinic College of Medicine Outstanding Teacher Award 1989-1992 and 1995-1996 and the Outstanding Mentor Award in 2013. Dr. Oh has published more than 440 peer-reviewed articles, eight books, and 40 book chapters. He is currently the principal investigator on a federal grant on Anastrozole in Pulmonary Arterial Hypertension funded by National Heart, Lung, and Blood Institute. He has served as principal investigator on eight completed federal grants and 21 other grants in his career. He has also accelerated echo education with the founding of the Asian-Pacific Association of Echocardiography (AAE).



Jane E. Marshall, RDCS, FASE, Massachusetts General Hospital, Boston, Massachusetts, has been named the 2019 Sonographer Lifetime Achievement Award recipient. Ms. Marshall is a distinguished leader, cardiac sonographer, and educator. She has a long career that started at the University of Indiana with Dr. Harvey Feigenbaum. After moving to Mass General, she worked with Dr. Arthur Weyman to lay the foundation for excellence in an echo lab. Ms. Marshall has 28 publications and 37 abstracts and one book chapter. She has been involved with ASE as a volunteer since 1992 serving on many committees and task forces including serving on the Board of Directors from 1993-1996 and as the sonographer co-chair of the 8th Annual ASE Scientific Sessions in 1997. Ms. Marshall currently serves on the editorial board for ASE's online case reports journal, CASE.

MERITORIOUS SERVICE AWARD



ASE is pleased to recognize **Mary Alice Dilday, American Society of Echocardiography, Durham, North Carolina**, as the 2019 recipient of the Meritorious Service Award that recognizes individual members for their substantial and generous efforts to the Society's betterment. Mary Alice currently serves as the Vice President of Internal Relations at ASE and is retiring in March 2020 after working at ASE since 1986. Mary Alice is the longest tenured staff member at ASE, and she also served as the Executive Director of the National Board of Echocardiography during its early years and currently serves as the Executive Director of the COA-ACS. Her chief responsibilities include management of the FASE program, volunteer management for committees and task forces, and planner for the ASE Foundation Research Awards Gala. She is recognized as the "go to" person at ASE for her historical knowledge of the Society and its members.

RICHARD POPP EXCELLENCE IN TEACHING AWARD



Recognized as a role model, mentor, and teacher who finds reward in seeing the success of his trainees and mentees more than his own personal achievements, **Steven J. Lester, MD, FASE, Mayo Clinic, Scottsdale, Arizona**, has been named the 18th annual recipient of the Richard Popp Excellence in Teaching

Award. Dr. Lester is an outstanding teacher who has impacted the lives of his colleagues/peers, medical students, residence and fellows, and most importantly his patients. This award is given in honor of ASE's second president, Richard L. Popp, MD, FASE, and recognizes physicians who epitomize the ideal qualities possessed by a mentor and role model.

COUNCIL ON PEDIATRIC AND CONGENITAL HEART DISEASE FOUNDERS' AWARD



Lindsey D. Allan, MD, FRCP, King's College Hospital (retired), London, United Kingdom, is being honored as the 16th recipient of the ASE Council on Pediatric and Congenital Heart Disease Founders' Award which recognizes continued major scholarly contributions to the field of pediatric echocardiography. Dr. Allan is a world-renowned fetal echocardiographer who has played a major role in revolutionizing the diagnosis of heart disease in utero. The views used on a routine basis to make a fetal diagnosis were primarily developed by her and her team. Dr. Allan has authored over 100 manuscripts and multiple textbooks. She has lectured all over the world and has taught at hundreds of courses.

OUTSTANDING ACHIEVEMENT IN PERIOPERATIVE ECHOCARDIOGRAPHY AWARD



Solomon Aronson, MD, MBA, FASE, Duke University Medical Center, Durham, North Carolina, has been named the 7th recipient of the Outstanding Achievement in Perioperative Echocardiography Award. Dr. Aronson's contributions to the field of perioperative echocardiography are extensive, but the most notable contribution is to the expansion of the National Board of Echocardiography. He served as the chairman of the Committee of Certification for Perioperative Echocardiography (PTEeXAM), which continues to serve as the standard by which perioperative echocardiographers test and demonstrate proficiency in echocardiography. He has served on a variety of ASE committees since 1993, was the chair of the Council from 2003-2005, and served on the Board of Directors from 2004-2006. 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.

MENTORSHIP AWARD



ASE recognizes **Neil J. Weissman, MD, FASE, MedStar Health Research Institute, Washington, DC**, as the 2019 Mentorship Award recipient. Dr. Weissman uses his unique leadership skills to develop mentoring programs that benefit both individuals and organizations. He conceived of, and implemented, the ASE Leadership Academy as a way of growing the future leadership of the Society and assuring that they develop the necessary skills to be effective leaders. This award recognizes a senior physician or sonographer who has demonstrated exceptional mentorship within ASE. Unlike other awards, the Mentorship Award specifically acknowledges individuals who helped younger members advance within the Society and thus cultivated ASE's future leaders.

SCIENCE & TECHNOLOGY THEATER

11:30 AM – 1:00 PM

EXHIBIT & POSTER HALL B

Enhanced Echocardiography: It's What You Don't See That Matters

Presented by Lantheus Medical Imaging, Inc.

Join expert faculty for an interactive panel discussion on enhanced echocardiography, followed by a moderated Q&A session.

Lunch is provided by ASE and is 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 30th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

CHALK TALK

2:30 – 3:00 PM

C-123

A wonderful opportunity to learn from Theodore Abraham, MD, FASE, discussing **Strain Imaging**.

TWEET UP

4:30 – 6:30 PM

EXHIBIT & POSTER HALL NEAR ASE
BOOTH #409

Are you active on Twitter and want to meet others who are actively using Twitter to share information? Join us for a Tweet Up during the President's Reception. Don't miss this opportunity to connect, in person, with the people you have met virtually through Twitter.

PRESIDENT'S RECEPTION

4:30 – 6:30 PM

EXHIBIT & POSTER HALL

All attendees are invited to celebrate ASE 2019 at the President's Reception, hosted by ASE President, Jonathan Lindner, 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. A commemorative cake-cutting ceremony will take place at 4:45 PM in the ASE headquarters booth #409. Nearly 60 exhibitors will be showcasing their products. Complimentary cocktails 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.

SCIENCE & TECHNOLOGY THEATER

6:30 – 8:00 PM

EXHIBIT & POSTER HALL B

Precision at the Speed of Life, Powered by AI *Presented by Siemens Healthineers*

Join us for cocktails and hors d'oeuvres as cardiovascular thought leaders discuss AI-powered ultrasound technology. Learn about the latest cardiovascular imaging AI capabilities and how knowledge-based automation can improve consistency, efficiency, and workflow. To reserve your spot, please register at siemens-healthineers.us/ase2019.

Refreshments are provided by Siemens Healthineers 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 30th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

2019 SOPE SYMPOSIUM, IN PARTNERSHIP WITH ASE

Intraoperative Echocardiography

7:30 – 10:00 PM

ALTABIRA CITY TAVERN, PORTLAND, OR

This meeting will provide a venue where networking among the members can occur before and after the symposium. There will be a dinner preceding the presentations and discussion. *This event is for SOPE members only.*



Society of Pediatric
Echocardiography

SUNDAY, JUNE 23

POSTER SESSION 1 (P1)

9:00 AM – 4:00 PM

EXHIBIT & POSTER HALL

Meet the Investigators 11:45 AM – 1:15 PM

MODERATED POSTER SESSION 1

12:00 PM – 1:00 PM

Cardio-OncologyPoster P1-001

Intraoperative Echocardiography
(Operating Room and
Interventional Lab) / TEEPoster P1-105

Valvular Heart Disease.....Poster P1-115

Doppler / HemodynamicsPoster P1-155

TOPIC

Cardio-Oncology P1-001 — P1-013

Adult Congenital
Heart Disease P1-014 — P1-020

Pediatric Heart Disease P1-021 — P1-067

Clinical Cases: Pediatric Patients..... P1-068 — P1-099

Critical Care Ultrasound/
Point of Care Ultrasound..... P1-100 — P1-104

Intraoperative Echocardiography
(Operating Room and
Interventional Lab) / TEE P1-105 — P1-114

Valvular Heart Disease P1-115 — P1-154

Doppler / Hemodynamics P1-155 — P1-166

Echocardiography in SOE/
Arrhythmias / Atrial Function..... P1-167 — P1-181

Ischemic Heart Disease P1-182 — P1-187

Ventricular Function /
Myocardial Mechanics..... P1-188 — P1-230

CHALK TALKS

9:30 – 10:15 AM AND 2:45 – 3:30 PM

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, Jae Oh, MD, FASE, will be available to answer all of your questions about **Diastology** in the Exhibit & Poster Hall. The afternoon break will feature two concurrent sessions. **How Can**

POCUS Societies Help You? with Renee Dversdal, MD, and Arif Hussain, MD, will take place in Room C-123; the other afternoon Chalk Talk is in the Exhibit & Poster Hall, titled **Our Patients are Active in the Cyber Space: Are We Keeping Up** with Joe Kreeger, ACS, RCCS, RDCS, FASE, Shabnam Peyvandi, MD, FASE, Akhil Narang, MD, and Burkhard Mackensen, MD, PhD, FASE.

IMAGEGUIDE REGISTRY INFORMATION SESSION

9:30 – 10:15 AM

EXHIBIT & POSTER HALL BOOTH #415

ImageGuide Registry

Overview and Q&A

*Rami Doukky, MD, MSc, FASE, FASNC and
Milind Desai, MD*

SCIENCE & TECHNOLOGY THEATER

11:45 AM – 1:15 PM

EXHIBIT & POSTER HALL B

Elevating the Role of Echo in Diagnosis, Treatment, and Management

Presented by Philips

Leading cardiovascular imagers, researchers, and professors will present on current and emerging solutions for more optimally addressing your patients using improved cardiac ultrasound visualization, new heart chamber scanning and quantification techniques and enhanced performance in structural heart interventions.

Lunch is provided by ASE and is 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 30th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

THE GARDIN LECTURE

1:15 – 2:45 PM

EXHIBIT HALL A



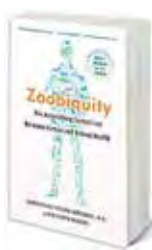
The ASE Foundation is proud to have *New York Times* best-selling author, **Dr. Barbara Natterson-Horowitz**, deliver the inaugural Gardin Lecture, “Species-Spanning Echocardiography: Cardiovascular Insights for Humans and Other Animals.” This annual lectureship was endowed to the ASE Foundation

through a generous long-term 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 BY BARBARA NATTERSON-HOROWITZ, MD

2:45 – 3:30 PM

ASE FOUNDATION BOOTH
PRE-FUNCTION C LOBBY



Dr. Natterson-Horowitz will be signing copies of her *New York Times* Bestseller, *Zoobiquity: The Astonishing Connection Between Human and Animal Health*. 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 tax-deductible donation to the ASE Foundation. Be sure to stop by and meet the author of this fascinating book!

IMAGEGUIDE REGISTRY INFORMATION SESSION

2:45 – 3:30 PM

POSTER & EXHIBIT HALL BOOTH #415

ImageGuideEcho & Data Collection: How the Registry Captures and Uses Data for Quality Improvement

Srinath Adusumalli, MD, MSc

RISING STAR NETWORKING RECEPTION

2:45 – 3:30 PM

C-120

Students, fellows, and 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. Representatives from the special interest councils, the Membership Steering Committee, and ASE leadership will share how ASE helped their careers.

BRIAN HALUSKA SONOGRAPHER RESEARCH AWARD COMPETITION

3:30 – 5:00 PM

PORTLAND BALLROOM 253-254

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.

Michele H. Clouse, RDCS, Seattle Children's Hospital, Seattle, WA – Fetal Brain Resistance is Abnormal in Neonates with Coarctation of the Aorta Despite Antegrade Aortic Arch Flow

Natalie Edwards, ACS, AMS, FASE, Prince Charles Hospital, Queensland, Australia – Resting Global Myocardial Work Derived

from Non-Invasive Left Ventricular Pressure-Strain Loops Discriminates Between True Positive and False Positive Exercise Stress Echocardiography

Gilda Kadiu, RDCS, FASE, Children's Hospital of Michigan, Detroit, MI – Left Ventricle Longitudinal Excursion in Children Following Heart Transplantation: Utility of Tissue Motion Annular Displacement Index

Daniel L. McCullough, RDCS, FASE, Mayo Clinic, Millville, MN – Real Time Myocardial Perfusion Stress Echocardiography: A Practice Implementation Pilot

ASE FOUNDATION 10TH ANNUAL RESEARCH AWARDS GALA

7:30 – 11:00 PM

HILTON PORTLAND DOWNTOWN
PAVILION BALLROOM

The premier annual fundraiser for the ASE Education and Research Foundation is the 10th Annual Research Awards Gala. The ASE Foundation is proud to host the "Black & White Gala" to celebrate cardiovascular ultrasound research and honor ASE's 2019 award recipients. Black tie is encouraged for this magical evening of entertainment, dinner, and dancing. Event proceeds support research activities that advance the progress and future of our field. Tickets are required. For more information and to pick up your table assignment for the event, visit the ASE Foundation booth, located in the Pre-function C Lobby on Level 1.

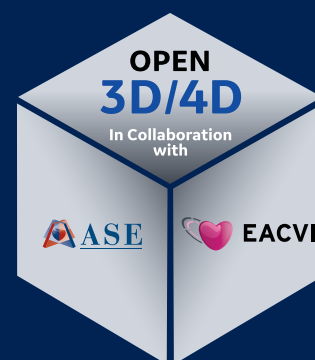
ASE and EACVI have partnered with echo companies to facilitate 3D/4D data connections and integrations across vendors.

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

Sunday: 9:30-10:15 AM

Monday: 9:30-10:15 AM

Visit Booth #106 in the Exhibit & Poster Hall



MONDAY, JUNE 24

POSTER SESSION 2 (P2)

9:00 AM – 4:00 PM

EXHIBIT & POSTER HALL

Meet the Investigators 11:45 AM – 1:15 PM

MODERATED POSTER SESSION 2

12:00 – 1:00 PM

2019 JSE YIA Winner.....Poster JSE-1

3D Echocardiography.....Poster P2-027

Diseases of the Aorta / Vascular DiseasePoster P2-052

New TechnologyPoster P2-066

TOPIC

Value of Echo..... P2-001 — P2-026

3D Echocardiography..... P2-027 — P2-051

Diseases of the Aorta / Vascular Disease ... P2-052 — P2-064

New Technology P2-065 — P2-093

Artificial Intelligence / Machine Learning ... P2-094 — P2-106

Contrast Echocardiography..... P2-107 — P2-121

Echocardiography in Systemic Disease
(DM, HTN, Obesity) / Pericardial Disease /
Primary Myocardial Disease P2- 122 — P2-151

Clinical Cases: Adult Patients..... P2-152 — P2-229

CHALK TALKS

9:30 – 10:15 AM AND 2:45 – 3:30 PM

EXHIBIT & POSTER HALL

Don't miss the opportunity to get your clinical questions answered by expert faculty. During the morning break, Michael Picard, MD, FASE, will discuss **How to Design and Implement a Research Project**.

The afternoon break will feature Natesa Pandian, MD, discussing **How to Get the Most Out of Doppler**.

IMAGEGUIDE REGISTRY INFORMATION SESSION

9:30 – 10:15 AM

EXHIBIT & POSTER HALL BOOTH #415

Value of the ImageGuide Registry: How Enrolling Will Positively Impact Your Institution

James Kirkpatrick, MD, FASE

2019 KALMANSON LECTURE

10:15 – 11:45 AM

PORTLAND BALLROOM 252



The ASE Foundation is honored to recognize **Matt Bruce, PhD, University of Washington, Seattle, Washington**, as the 2019 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. Bruce will present his lecture entitled "Ultrafast Echo: Seeing More with Speed" during the Applied Ultrasound Physics: What Clinicians Need to Know session.

VALUE OF ECHO SUMMIT

10:15 – 11:45 AM; 1:15 – 2:45 PM

PORTLAND BALLROOM 252

This special session will explore the changes in the healthcare system and provide expert opinions on how best to navigate and thrive in this new environment. There will be two sessions, **Quality and Efficiency in Today's Echo Lab** in the morning, and **Preparing for the Echo Lab of the Next Decade** in the afternoon. Both sessions will focus on helping the entire cardiovascular ultrasound community understand how their practice needs to implement change to provide quality patient care in the future.

SCIENCE & TECHNOLOGY THEATER

11:45 AM – 1:15 PM

EXHIBIT & POSTER HALL B

Optimal Imaging Modalities for Today's Practice in Ultrasound-Enhanced Echocardiography

*Presented by Northwest Imaging Forums, Inc.
Supported by an educational grant from Bracco Diagnostics Inc.*

Join our expert panel for a lunch and learn Symposium discussing the clinical use of Ultrasound Enhancing Agents (UEAs) in echocardiography, including low mechanical index imaging techniques and acoustic principles of UEAs. An interactive Q&A session with the expert panel will follow. Visit <https://nwifininvite.com/events/ase-lunch-cme-symposium-2019/> to pre-register.

Lunch is provided by ASE and is 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 30th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

IMAGEGUIDE REGISTRY INFORMATION SESSION

2:45 – 3:30 PM

EXHIBIT & POSTER HALL BOOTH #415

ImageGuide Registry Overview and Q&A – Encore Presentation

Sherif F. Nagueh, MD, FASE

ARTHUR E. WEYMAN YOUNG INVESTIGATOR'S AWARD COMPETITION AND 20TH ANNUAL FEIGENBAUM LECTURE

3:30 – 5:30 PM

EXHIBIT HALL A

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.

Nobuyuki Kagiya, MD, PhD, West Virginia University Heart and Vascular Institute Innovation Center, Morgantown, WV – Cardiac Ultrasonic Fingerprinting: A Radiomics Approach for High-Throughput Feature Phenotyping of Dysfunctional Myocardium

David Ouyang, MD, Falk Cardiovascular Research Center, Stanford Healthcare, Palo Alto, CA – Deep Learning of Echocardiography to Identify Systemic Phenotypes and Unsupervised Learning of Clinical Measurements

Koya Ozawa, MD, Oregon Health & Science University, Portland, OR – Molecular Imaging of Microvascular Endothelial Von Willebrand Factor and Platelet Adhesion in Myocardial Ischemia-Reperfusion Injury

Hiroto Utsunomiya, MD, Hiroshima University Hospital, Hiroshima, Japan – Comprehensive Evaluation of Tricuspid Regurgitation Location and Severity Using Vena Contracta Analysis: A Color Doppler 3-Dimensional Transesophageal Echocardiography Study

FEIGENBAUM LECTURER



Sanjiv Shah, MD, FASE, Northwestern University, Chicago, Illinois. Dr. Shah is a gifted and talented international expert and leader with outstanding clinical and echocardiography knowledge, renowned teaching capabilities, and research success. His research has focused on the use of quantitative echocardi-

ography to improve the understanding of the pathophysiology of heart failure, particularly heart failure with preserved ejection fraction. Heart failure with preserved ejection fraction is a challenging disorder to treat, and Dr. Shah has shown that echocardiography is a key tool for the management of patients with this disorder. He has published more than 250 peer-reviewed publications, and his work has been cited over 7,000 times. Based on this, he is a recognized

authority in heart failure, echocardiography, and pulmonary hypertension. Dr. Shah will present “Echocardiography for Precision Medicine: Digital Biopsy to Deconstruct Biology” as the 20th Annual Feigenbaum Lecture. This lecture was named in honor of the founder and first president of ASE, Harvey Feigenbaum, MD, FASE. This lectureship is awarded to a young investigator in recognition of their significant contributions to research in the field of echocardiography and their potential to continue at a high level of achievement.

WASE NORMAL VALUES STUDY

Are guidelines-recommended normative values applicable in every country or to people of different races?

Federico M. Asch, MD, FASE, Principal Investigator, will present the main findings from the initial analysis of over 1,700 individuals in the World Alliance Societies of Echocardiography (WASE) Normal Values Study. The WASE study entails the acquisition of complete 2D and 3D echocardiograms in 100 healthy individuals of both genders and across a wide range of ages in each of 19 centers in 15 countries. This presentation will focus on specific normal characteristics regarding LV systolic and diastolic function as well as LV size from patients in each country, to answer the main question of the study: *How are hearts of individuals from regions around the world different or similar?*

Roberto M. Lang, MD, FASE is also a WASE Principal Investigator on this study which was funded by the ASE Foundation and its donors, with generous in-kind support from sponsors TOMTEC Imaging Systems, Medidata, Medstar Health Research Institute, and University of Chicago.

CLOSING RECEPTION

5:30 – 6:30 PM

PRE-FUNCTION A LOBBY

All attendees are invited to this complimentary reception. Enjoy beverages and hors d'oeuvres while connecting with colleagues and friends. A world map will be on display for attendees to mark their home location. This is a great photo opportunity to share on social media with #ASE2019. There will also be promotional giveaways from Denver, Colorado, which is the location of the #ASE2020 Scientific Sessions. You won't want to miss this fun celebration.

TUESDAY, JUNE 25TH

CHALK TALK

9:30 – 10:00 AM

C-123

The final Chalk Talk of ASE 2019 will be given by William Zoghbi, MD, FASE, on **Valve Guidelines**.



ASE Foundation

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

2019 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 was selected by the Abstract Chairs based on the scientific merit of their research projects and awarded \$1,000 each from the ASE Foundation for travel expenses. The **Alan S. Pearlman Research Award**, established to honor Dr. Pearlman's ten years of service as *Journal of the American Society of Echocardiography* (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.

- **Alan S. Pearlman Research Award:** Tatsuya Miyoshi, MD, MedStar Health Research Institute, Washington, DC
- Vidhu Anand, MD, Mayo Clinic, Rochester, MN
- Christie Boswell-Patterson, BSCh, Cardiovascular Imaging Network at Queen's University, Kingston, ON, Canada
- Soham Dasgupta, MD, Children's Healthcare of Atlanta, Atlanta, GA
- Henrique Doria de Vasconcellos, MD, Johns Hopkins, Baltimore, MD and Federal University of Vale do Sao Francisco / School of Medicine, Recife, Brazil
- Iqbal El-Assaad, MD, Boston Children's Hospital, Boston, MA
- Benjamin Frank, MD, Children's Hospital Colorado, Aurora, CO
- Anahita Ghorbani, MD, MPH, University of Connecticut Health Center, Farmington, CT
- Waddy Gonzalez, MD, Montefiore Medical Center, Bronx, NY
- Cho Jung Sun, MD, PhD, Daejeon St. Mary Hospital, Daejeon, Republic of Korea and West Virginia University Heart & Vascular Institute, Morgantown, WV
- Ilya Karagodin, MD, University of Chicago, Chicago, IL
- Lily Lin, MD, University of Alberta, Edmonton, Alberta, Canada
- Isla McClelland, MD, University of Chicago, Chicago, IL
- Katie Mowers, MD, Washington University School of Medicine in St. Louis, St. Louis, MO
- Deliwé Ngwezi, MD, Stollery Children's Hospital & University of Alberta, Edmonton, AB, Canada
- Yogev Peri, MD, Tel Aviv Medical Center, Tel Aviv, Israel
- Alexander Ryu, MD, Mayo Clinic, Rochester, MN
- Hongning Song, MD, Massachusetts General Hospital, Boston, MA
- Marton Tokodi, MD, Heart & Vascular Center, Semmelweis University, Budapest, Hungary

- Marija Vukicevic, PhD, Houston Methodist Hospital, Houston, TX
- Brent White, MD, Northwestern Memorial Hospital, Chicago, IL
- Jun Yoshida, MD, Cedars Sinai Medical Center, Los Angeles, CA
- Yang Zhan, MD, Houston Methodist DeBakey Heart & Vascular Center, Houston, TX

2019 TOMTEC INNOVATOR RESEARCH TRAVEL GRANT

Jennifer Cohen, MD, Mount Sinai Medical Center, New York, NY is the recipient of the 2019 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 his/her work at the ASE Scientific Sessions.

2019 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 U.S. or by an equivalent Canadian or external ultrasound program. Also included with each scholarship award is complimentary registration to attend the Scientific Sessions and limited travel support. This year's recipients were chosen from a large number of students who were nominated by their program directors. The 2019 scholarship award recipients will be recognized during ASE's Annual Awards Presentation and Edler Lecture on Saturday, June 22, in Exhibit Hall A.

- **Parisa Abutalebi**, El Centro College, Dallas, TX
- **Andrea Baldick**, Yale New Haven Hospital DMS Cardiac Program, New Haven, CT
- **Hannah Barbry**, University of Arkansas for Medical Sciences, Little Rock, AR
- **Nicole Brewer**, Bellevue College, Bellevue, WA
- **Andrea Morgan Cole**, Clemson University Adult Echocardiography Program, Greenville, SC
- **Emily Deason**, Johns Hopkins Hospital School of Cardiac Sonography, Baltimore, MD
- **Sadie Dyer**, LSU Health Sciences Center, New Orleans, LA
- **Cassandra Ferriter**, St. Francis Hospital & Med. Ctr. School of Cardiac Ultrasound, Hartford, CT
- **Hannah Gouge**, Florida State College at Jacksonville, Yulee, FL
- **Lindsay Hammond**, Central Piedmont Community College, Charlotte, NC
- **Hannah Hoban**, Piedmont College, Gainesville, GA
- **Mi Jung Hwang**, Sentara College of Health Sciences, Chesapeake, VA

- **Shelby Lubowicki**, Clemson University, CV Imaging Leadership Concentration, Greenville, SC
- **Noweeda Mirza, PhD**, Mayo Clinic School of Health Sciences, Rochester, MN
- **Bradford Smith**, Central Piedmont Community College, Charlotte, NC
- **Brice Stettler**, Alvin Community College, Alvin, TX
- **Joseph Vasta**, South Hills School of Business and Technology, State College, PA

2019 ULTRA ECHO, LTD. CARDIOVASCULAR SONOGRAPHER STUDENT TRAVEL GRANT

This award, supported by a grant to the ASE Foundation, 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 annual Scientific Sessions or other ASE-sponsored educational courses. The 2019 student travel grant has been awarded to **Jamie Hatcher, Austin Community College Diagnostic Cardiovascular Sonography Program, Round Rock, TX**. This award will be recognized during the Council on Cardiovascular Sonography Business Meeting, on Monday, June 24 at 1:15 PM in Portland Ballroom 253-254.

2019 FEIGENBAUM CARDIOVASCULAR SONOGRAPHER STUDENT TRAVEL GRANT

This 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 *Journal of the American Society of Echocardiography* (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 2019 student travel grant has been awarded to **Christina Ferretti, Yale New Haven Hospital School of Diagnostic Ultrasound – Adult Echo, New Haven, CT**. This award will be recognized during the Council on Cardiovascular Sonography Business Meeting, on Monday, June 24 at 1:15 PM in Portland Ballroom 253-254.

2019 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 PEDIATRIC AND CONGENITAL HEART DISEASE TRAVEL GRANT AWARD RECIPIENTS

- **Allison Black, MD**, UPMC Children's Hospital of Pittsburgh, Pittsburgh, PA
- **Simone Jhaveri, MD**, Cleveland Clinic, Cleveland, OH

COUNCIL ON CIRCULATION & VASCULAR ULTRASOUND TRAVEL GRANT AWARD RECIPIENTS

- **Salwa Nihal, MBBS**, Queen's University, Kingston, ON, Canada
- **Nidhal Patel, MD**, University of South Florida, Tampa, FL

COUNCIL ON PERIOPERATIVE ECHOCARDIOGRAPHY TRAVEL GRANT AWARD RECIPIENTS

- **Yoko Kagemoto, MD**, Massachusetts General Hospital, Boston, MA
- **Richard Thalappillil, MD**, Tufts University, Medford, MA

COUNCIL ON CARDIOVASCULAR SONOGRAPHY TRAVEL GRANT AWARDS

- **Colin Dunbar II, RDCS**, Duke Children's Hospital, Durham, NC
- **Bryana Levitan, RDCS, FASE**, University of Kentucky, Lexington, KY

KATANICK SCHOLARSHIP AWARD

The 2019 Katanick Scholarship Award will be awarded to **Natalie Terhark, BS, Mayo Clinic School of Health Sciences, Rochester, MN**. 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 IAC after over 25 years of service to the field.

ADAMS GLOBAL SERVICE AWARD

The Adams Global Service Award is awarded to **Suzanne Snow, BSc, DMU, Auckland District Health Board, Auckland, New Zealand**. This \$1,500 travel grant award is presented on an annual basis to one new sonographer outreach volunteer, in honor of David B. Adams, ACS, RCS, RDCS, FASE. Mr. Adams has contributed to the success of the ASEF global health outreach events with his international mission experience, clinical skills, and leadership abilities.

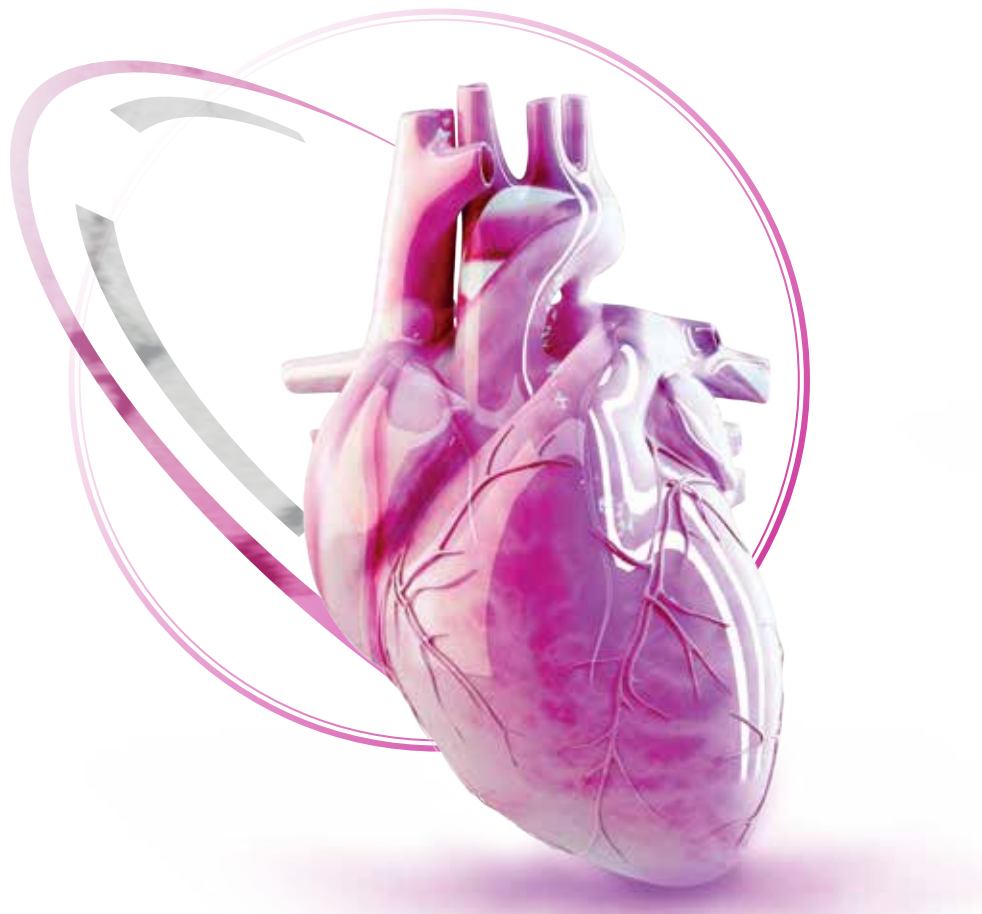


EACVI
European Association of
Cardiovascular Imaging

EuroEcho 2019

THE LEADING ECHOCARDIOGRAPHY CONGRESS

4-7 | **Vienna**
December | AUSTRIA



REGISTER BY
30 SEPTEMBER

Become an EACVI Silver Member
Save up to **360€**
on your registration fee*

23rd Annual Congress of the EACVI
www.escardio.org/EACVI



ESC

European Society
of Cardiology

* Early fee for EACVI Silver Members (Young and Allied professionals) compared to standard early fee for non-members

New Products for 2019



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

ASE Headquarters Booth #409

Saturday June 22 4:30 – 6:30 PM
 Sunday, June 23 9:00 AM – 4:00 PM
 Monday, June 24 9:00 AM – 4:00 PM

ASE Products Sales Booth – Portland Ballroom Lobby

Friday, June 21 12:00 – 6:15 PM
 Saturday, June 22 6:30 AM – 4:30 PM
 Sunday, June 23 6:30 AM – 5:00 PM
 Monday, June 24 6:30 AM – 3:30 PM
 Tuesday, June 25 6:30 – 11:30 AM

ASE products will also be for sale on Monday during the Member Reception.



Order Products Online at ASEMarketPlace.com

EXHIBITS

EXHIBIT & POSTER HALL HOURS

SATURDAY, JUNE 22ND

President's Reception4:30 – 6:30 PM

SUNDAY, JUNE 23RD 9:00 AM – 4:00 PM

MONDAY, JUNE 24TH 9:00 AM – 4:00 PM

EXHIBIT & POSTER HALL BREAK SCHEDULE

SUNDAY, JUNE 23RD

**Coffee Breaks 9:30 – 10:15 AM
2:45 – 3:30 PM**

Lunch Break..... 11:45 AM – 1:15 PM

MONDAY, JUNE 24TH

**Coffee Breaks 9:30 – 10:15 AM
2:45 – 3:30 PM**

Lunch Break.....11:45 AM – 1:15 PM

SCIENCE & TECHNOLOGY THEATER SCHEDULE

EXHIBIT HALL B

ASE will provide boxed meals during each lunch session on a first come, first served basis (max. 350 participants). Various refreshments may also be available for the evening sessions. These refreshments are included in all Scientific Sessions registration fees, but space and food are on a first come, first served basis.

FRIDAY, JUNE 21ST

6:30 – 8:00 PM

a lifetime of echocardiography

Presented by Hitachi Healthcare

SATURDAY, JUNE 22ND

11:30 AM – 1:00 PM

ENHANCED ECHOCARDIOGRAPHY: IT'S WHAT YOU DON'T SEE THAT MATTERS

Presented by Lantheus Medical Imaging, Inc.

6:30 – 8:00 PM

PRECISION AT THE SPEED OF LIFE, POWERED BY AI

Presented by Siemens Healthineers

SUNDAY, JUNE 23RD

11:45 AM – 1:15 PM

ELEVATING THE ROLE OF ECHO IN DIAGNOSIS, TREATMENT AND MANAGEMENT

Presented by Philips

MONDAY, JUNE 24TH

11:45 AM – 1:15 PM

OPTIMAL IMAGING MODALITIES FOR TODAY'S PRACTICE IN ULTRASOUND-ENHANCED ECHOCARDIOGRAPHY

Presented by Northwest Imaging Forums, Inc. Supported by an educational grant from Bracco Diagnostics Inc.

These sessions are not part of the official ASE 30th Annual 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 Exhibit & Poster Hall, on Level 1 of the 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 #409

As the largest organization representing the cardiovascular ultrasound community, ASE is a vibrant and progressive organization. Visit the ASE Headquarters booth #409 to find comprehensive information on all of 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 into ASEUniversity or used Connect@ASE, come by for a tutorial. While you are there, pick up your complimentary USB drive loaded with all the ASE guidelines.

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 FACE

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 #409 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 22ND

4:30 – 5:00 PM

Meet ASE President

Jonathan R. Lindner, MD, FASE

4:30 – 5:30 PM

ASE Tweet Up

Learn How to Use Twitter to Advance Your Career

*Sharon Mulvagh, MD, FASE and David Wiener, MD, FASE
Public Relations Committee Members*

Getting the Most Out of Your Member Benefits

*Dallas Lyons, ASE Associate Manager, Member Services and
Natalya Read, ASE Director of Membership*

SUNDAY, JUNE 23RD

9:30 – 10:15 AM

Face to FASE – Learn How to Achieve the FASE Designation

*Jennifer Warmsecker, RDCS, BS, FASE, FASE Advisory
Committee Co-Chair*

Jimmy Lu, MD, FASE, FASE Advisory Committee Member

12:00 – 1:00 PM

Face to FASE – Learn How to Achieve the FASE Designation

Maureen McDonald, FASE Advisory Committee Member

2:45 – 3:30 PM

Face to FASE – Learn How to Achieve the FASE Designation

Gregory Tatum, MD, FASE, FASE Advisory Committee Chair

Anitha Parthiban, MD, FASE, FASE Advisory Committee Member

MONDAY, JUNE 24TH

9:30 – 10:15 AM

Face to FASE – Learn How to Achieve the FASE Designation

*Jennifer Warmsecker, RDCS, BS, FASE, FASE Advisory
Committee Co-Chair*

Jimmy Lu, MD, FASE, FASE Advisory Committee Member

Getting the Most Out of Your Member Benefits

Suzanne Morris, Membership Recruitment Manager

12:00 – 1:00 PM

Face to FASE – Learn How to Achieve the FASE Designation

Gregory Tatum, MD, FASE, FASE Advisory Committee Chair

2:45 – 3:30 PM

Learn more about ASE's case reports journal CASE

*Karen Zimmerman, BS, ACS, RDCS (AE, PE), RVT, FASE,
Co-Editor of CASE*

Face to FASE – Learn How to Achieve the FASE Designation

Gregory Tatum, MD, FASE, FASE Advisory Committee Chair

Anitha Parthiban, MD, FASE, FASE Advisory Committee Member

EXHIBIT & POSTER HALL

3:15 PM

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



CLUE GAME! A FUN INTERACTIVE GAME WITH EXHIBITORS

The mystery game you love to solve again and again! Experience CLUE with a twist at ASE 2019. CLUE cards will be distributed to each attendee in their conference bag. The CLUE card will include “clues” provided by participating exhibitors. When you find the exhibitor and answer the exhibitor’s question correctly, you will receive a red ticket. Deposit one half of your ticket (keeping the other half to redeem) into the raffle bin located at the ASE Headquarters Booth #409. All tickets will be entered into a drawing on Monday, June 24 during the afternoon break in the Exhibit & Poster Hall. Must be present to win.

First prize package includes:

- Complimentary full meeting registration for 2020 ASE Scientific Sessions
- ASE membership through December 31, 2020
- Hotel accommodations during 2020 ASE Scientific Sessions
- Prize is transferable, but all elements of the prize must be utilized by the same individual.
- VALUE OVER \$1550!

Second Prize: Choice of: 2nd Edition, Cardiovascular Sonographer Registry Review Guide, Advanced Cardiac Sonographer Registry Review Guide, or Essentials for Proficiency in Basic Cardiovascular Ultrasound

Third Prize: Comprehensive TTE Scanning Maneuvers and TTE Protocol Pocket Guide Set and Echocardiography Formula Review Guide: Native Valves and Intracardiac Pressures

ECHO AROUND THE WORLD

Located at the ASE Headquarters booth #409, visit Echo Around the World and explore literature, courses, and information from echocardiography societies worldwide. Learn about ASE’s International Alliance Partners and their upcoming activities.



ASE proudly recognizes our International Alliance Partners (listed alphabetically)

Argentine Society of Cardiology
Argentinian Federation of Cardiology
ASEAN Society of Echocardiography
Asian-Pacific Association of Echocardiography
Australasian Sonographers Association
British Society of Echocardiography
Canadian Society of Echocardiography
Cardiac Society of Australia and New Zealand, Imaging Council
Chinese Society of Echocardiography
College of Anaesthesiologists, Singapore
Cuban Society of Cardiology, Echocardiography Section
Department of Cardiovascular Imaging of the Brazilian Society of Cardiology
European Association of Cardiovascular Imaging
Indian Academy of Echocardiography
Indian Association of Cardiovascular Thoracic Anaesthesiologists
Indonesian Society of Echocardiography
InterAmerican Association of Echocardiography
Iranian Society of Echocardiography
Israel Working Group on Echocardiography
Italian Association of Cardiothoracic Anaesthesiologists
Japanese Society of Echocardiography
Korean Society of Echocardiography
Mexican Society of Echocardiography and Cardiovascular Imaging
National Association of Cardiologists of Mexico, A.C.
National Society of Echocardiography of Mexico A.C.
Philippine Society of Echocardiography
Saudi Arabian Society of Echocardiography
Thai Society of Echocardiography
Venezuelan Society of Cardiology, Echocardiography Section
Vietnamese Society of Echocardiography

The definition of the word “alliance” is a *pact, coalition or friendship between two or more parties, made in order to advance common goals and to secure common interests*. The goal of the ASE International Alliance Partners program is to share knowledge, expand thought leadership, and enhance standards and practices based on the best thinking worldwide for improved patient care.

IMAGING INSIDERS 2019

ASE SCIENCE AND TECHNOLOGY THEATER

HITACHI HEALTHCARE PRESENTS

...a lifetime of echocardiography

Friday
June 21st
6:30pm



JOIN US FOR AN EVENING OF EDUCATIONAL PRESENTATIONS, DINNER, DRINKS, AND MUSIC

the next level
of innovation
for the fetus, child
and adult

HITACHI
Inspire the Next

Hitachi Healthcare Americas
1995 Summit Commerce Park
Twinsburg, OH 44087
www.hitachihealthcare.com

ADVANCED TECHNOLOGY IN THE
ASSESSMENT OF THE FETAL CIRCULATION

Dr. James Huhta

Pediatric Cardiology Associates

FINALLY A SOLUTION THAT PUTS
PEDIATRIC PATIENTS FIRST

Dr. Devyani Chowdhury

Cardiology Care for Children

ECHOCARDIOGRAPHIC ISSUES
IN THE ELDERLY

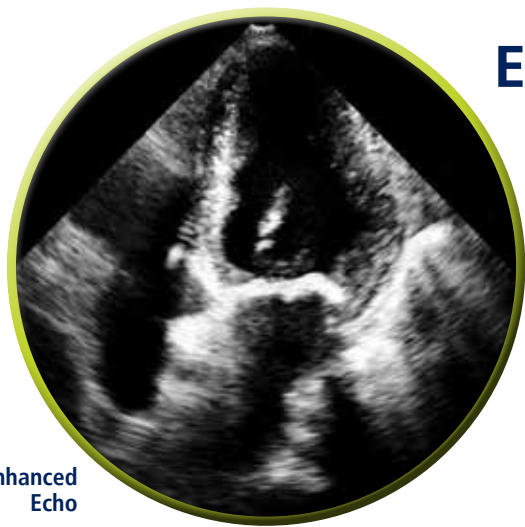
Dr. Anthony DeMaria

University of California San Diego

Science & Technology Theater sessions are not part of the official ASE Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE

Booth #400

Lantheus Medical Imaging invites you to a Lunch Symposium



ENHANCED ECHOCARDIOGRAPHY: IT'S WHAT YOU DON'T SEE THAT MATTERS

Unenhanced
Echo

Come see what you may be missing!

Join expert faculty for an interactive panel discussion on enhanced echocardiography, followed by a moderated Q&A session. See the benefits that enhanced echocardiography has on diagnostic outcomes, patient management, and cost effectiveness across multiple care settings. Gain practical insight into the implementation and administration of an ultrasound enhancing agent.

Lunch is provided by ASE and is included in all Scientific Sessions registration fees. Space and boxed lunches are first-come, first served.



Ben Lin MD, PhD

Director, Interventional Echocardiography
Yale New Haven Hospital
New Haven, CT



Theresa Green RDCS

Echocardiography Advanced Coordinator
Piedmont Hospital
Atlanta, GA



Sean McMahon MD, FACC

Associate Director, Echocardiography Laboratory
Hartford Hospital
Hartford, CT

Saturday, June 22, 2019 • 11:30 a.m. – 1:00 p.m.

**Science and Technology Theater • Exhibit Hall B
Oregon Convention Center • Portland, OR
Lunch provided • SDMS credit available**

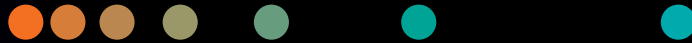
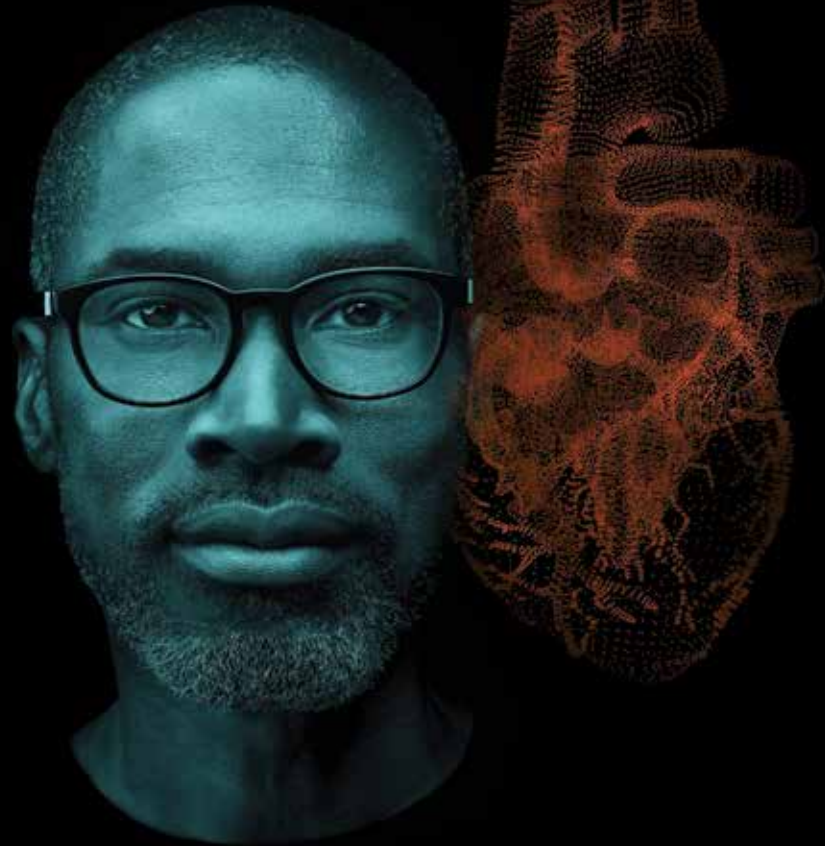
Register at Lantheus.com/rsvp



Join us

Precision at the Speed of Life, Powered by AI

Science & Technology Theater
Sponsored by Siemens Healthineers



Saturday, June 22, 2019
6:30 p.m.–8:00 p.m.
Oregon Convention Center
S&T Theater

Learn about tomorrow's technology today and how knowledge based automation can expand precision medicine and improve consistency, efficiency and workflow!

Join us for cocktails and hors d'oeuvres as leaders in the field discuss AI-powered Ultrasound technology.

Register for the event by visiting our website.

siemens-healthineers.us/ase2019

This activity is not a part of the official ASE 30th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.





PHILIPS

Ultrasound

Join us for a **Science & Technology Theater Event**

Elevating the role of echo in diagnosis,
treatment and management

Leading cardiovascular imagers, researchers, and professors will present on current and emerging solutions for more optimally addressing your patients using improved cardiac ultrasound visualization, new heart chamber scanning and quantification techniques and enhanced performance in structural heart interventions.

Sunday June 23
11:45 a.m. – 1:15 p.m.
Exhibit & Poster Hall

Co-Chairs

Roberto M. Lang, MD, FASE,
FACC, FESC, FAHA, FRCP
University of Chicago Medicine
Chicago

Alexandra Gonçalves, MD,
PhD, MMSc, FESC
Sr. Medical Director – Philips
Global Cardiology Ultrasound
Andover, MA

*Science & Technology Theater sessions
are not part of the official ASE 30th
Annual Scientific Sessions, as planned
by the Program Committee, or in any way
endorsed by or affiliated with ASE.*

CME LUNCH SYMPOSIUM

OPTIMAL IMAGING MODALITIES FOR TODAY'S PRACTICE IN ULTRASOUND-ENHANCED ECHOCARDIOGRAPHY

MONDAY, JUNE 24TH, 2019 - 11:45 AM TO 1:15 PM
OREGON CONVENTION CENTER - SCIENCE AND TECHNOLOGY THEATER

This activity is not a part of the official ASE 30th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE. CME credit must be claimed separately through Northwest Imaging Forums/IMS. This Symposium is open to ASE Annual Meeting Attendees.



Thomas R. Porter, MD, FACC, FASE
Professor of Medicine
Theodore F. Hubbard Distinguished Chair of Cardiology
University of Nebraska Medical Center
Division of Cardiovascular Medicine - Omaha, Nebraska



Sanjiv Kaul, MD, FACC, FASE, FAHA, FRCP
Ernest C. Swigert Endowed Chair of Cardiology
Professor of Medicine and Radiology
Oregon Health And Science University
Portland, Oregon



Michelle Bierig, PhD, ACS, RDMS, RCS, CPHQ, FSDMS, FASE, AACCC
Director, Cardiovascular at Hillcrest South
Hillcrest Healthcare System
Tulsa, OK

Symposium Agenda

- 11:45 am Ballroom Opens & Symposium Overview
- 12:00 What are the ASE Guidelines and Recommendations on the Use of Imaging Modalities with UEAs? - *Thomas R. Porter, MD, FACC, FASE*
- 12:20 Putting it to Practice: Comparison of Different Low-Mechanical Index Imaging Techniques
- *Michelle Bierig PhD, ACS, RDMS, RCS, CPHQ, FSDMS, FASE, AACCC*
- 12:40 Acoustic Principles of UEA
- *Sanjiv Kaul, MD, FACC, FASE, FAHA, FRCP*
- 1:00 Discussion and Conclusions
- 1:15 pm End of Symposium

Program Learning Objectives

1. Discuss Clinical Use of Ultrasonic Enhancing Agents (UEAs) in Echocardiography
2. Describe UEAs and Low Mechanical Index Modalities
3. Discuss Optimal Imaging Techniques of UEAs in Ultrasound

Register for ASE 2019



Accreditation

Program Description / Statement of Need:

Clinicians have shown a growing interest in CEUS for diagnostic use and treatment monitoring in the clinical setting, due to new indications and the expansion of CEUS subjective and objective analytical capabilities. Therefore, there is a need to provide up to date information to clinicians on Clinical use of Ultrasonic Enhancing Agents (UEAs) in Echocardiography. Additionally, UEAs and Low Mechanical Index techniques will be explored with emphasis on how to implement these techniques in everyday practice.

Target Audience:

The content of this CME/SDMS Symposium is intended for healthcare professionals including Cardiologists, Echocardiographers and Other Physicians, Sonographers, Imaging Nurses, Administrators, Researchers, and Others.

Accreditation and CME Credit Statements:

This CME activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education thru the joint providership of The Institute for Medical Studies (IMS) and Northwest Imaging Forums, Inc. IMS is accredited by the ACCME to provide continuing medical education for physicians. The Institute for Medical Studies designates this live activity for a maximum of 1.0 *AMA PRA Category 1 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Nurses may claim credit for activities approved for *AMA PRA Category 1 Credits™* in most states, for up to 50% of the nursing requirement for recertification. This activity is designated for up to 1.0 *AMA PRA Category 1 Credits™*.

This program has been submitted for approval of 1.0 hours of SDMS CME Credit Category AE by the Society of Diagnostic Medical Sonographers (SDMS).

Faculty and Planner Disclosures:

As an accredited provider of continuing medical education, it is the policy of The Institute for Medical Studies (IMS) to ensure balance, independence, objectivity, and scientific rigor in all of its live activities. In accordance with this policy, faculty and planners must disclose any financial relationships with commercial interests germane to program content. Additionally, in the event a conflict of interest (COI) does exist, it is the policy of IMS to ensure that the COI is resolved in order to ensure the integrity of the CME activity. The planner has nothing to disclose.

EXHIBITOR LOCATIONS LISTED ALPHABETICALLY

Company	Booth
3D/4D Open Echo Interoperability	106
3D Systems Symbionix	312
Abbott	516
Actelion	109
The Alliance for Physician Certification and Advancement™ (APCA™) & and The American Registry for Diagnostic Medical Sonography® (ARDMS®)	513
American Society of Echocardiography (ASE)	409
ASCEND Health Information Technology	208
Biodex Medical Systems, Inc.	313
Bracco Diagnostics Inc.	200
Butterfly Network, Inc.	100
CAE Healthcare	418
Canon Medical Systems USA, Inc.	709
Cardiovascular Credentialing International (CCI)	710
Cardiovillage, University of Virginia	805
Children's Hospital & Medical Center	111
CIVCO Medical Solutions	613
CS Medical, LLC	316
DiA Imaging Analysis	115
Diagnostic & Interventional Cardiology	311
Digisonics	209
Elsevier	708
Epsilon Imaging	803
Esaote North America	401
European Association of Cardiovascular Imaging (EACVI)	410
Fujifilm Medical Systems USA, Inc.	500
GE Healthcare	501

Company	Booth
Heritage Medical Products, Inc.	417
Hitachi Healthcare	400
ImageGuide Registry	415
Infinity Massage Chairs	807
Intersocietal Accreditation Commission (IAC)	616
JRC - DMS	614
Lantheus Medical Imaging, Inc.	509
Mayo Clinic Cardiovascular Education	309
MDocHaus	817
MedAxiom, an ACC Company	811
Medical Positioning, Inc.	612
Medical University of South Carolina	113
My Custom Tailor	914
National Board of Echocardiography (NBE)	317
Oregon Institute of Technology	210
Oxford University Press	215
Philips	300
ScImage, Inc.	813
Sheehan Medical, LLC	207
Siemens Healthineers	800
Sound Ergonomics, LLC	204
Studycast by Core Sound Imaging, Inc.	609
Texas Children's Hospital	408
TOMTEC Corporation	308
Ultraling Healthcare Solutions, Inc.	117
Valley Children's Hospital	212
Ventripoint Diagnostics Ltd.	214
West Coast Ultrasound Institute	416
Wolters Kluwer	405

EXHIBITOR LOCATIONS LISTED NUMERICALLY

Company	Booth
Butterfly Network, Inc.	100
3D/4D Open Echo Interoperability	106
Actelion	109
Children's Hospital & Medical Center	111
Medical University of South Carolina	113
DiA Imaging Analysis	115
Ultraling Healthcare Solutions, Inc.	117
Bracco Diagnostics Inc.	200
Sound Ergonomics, LLC	204
Sheehan Medical, LLC	207
ASCEND Health Information Technology	208
Digisonics	209
Oregon Institute of Technology	210
Valley Children's Hospital	212
Ventripoint Diagnostics Ltd.	214
Oxford University Press	215
Philips	300
TOMTEC Corporation	308
Mayo Clinic Cardiovascular Education	309
Diagnostic & Interventional Cardiology	311
3D Systems Symbionix	312
Biodex Medical Systems Inc.	313
CS Medical, LLC	316
National Board of Echocardiography (NBE)	317
Hitachi Healthcare	400
Esaote North America	401
Wolters Kluwer	405
Texas Children's Hospital	408
American Society of Echocardiography (ASE)	409

Company	Booth
European Association of Cardiovascular Imaging (EACVI)	410
ImageGuide Registry	415
West Coast Ultrasound Institute	416
Heritage Medical Products, Inc.	417
CAE Healthcare	418
Fujifilm Medical Systems USA, Inc.	500
GE Healthcare	501
Lantheus Medical Imaging, Inc.	509
The Alliance for Physician Certification and Advancement™ (APCA™) & and The American Registry for Diagnostic Medical Sonography® (ARDMS®)	513
Abbott	516
Studycast by Core Sound Imaging, Inc.	609
Medical Positioning, Inc.	612
CIVCO Medical Solutions	613
JRC - DMS	614
Intersocietal Accreditation Commission (IAC)	616
Elsevier	708
Canon Medical Systems USA, Inc.	709
Cardiovascular Credentialing International (CCI)	710
Siemens Healthineers	800
Epsilon Imaging	803
Cardiovillage, University of Virginia	805
Infinity Massage Chairs	807
MedAxiom, an ACC Company	811
ScImage, Inc.	813
MDocHaus	817
My Custom Tailor	914



3D/4D Open Echo Interoperability..... 106

2530 Meridian Parkway, Suite 450
 Durham, NC 27713
 United States
 Phone: 919-297-7176
 Email: mmorovati@ASEcho.org

ASE and EACVI have partnered with echo companies to facilitate 3D/4D data connections and integrations across vendors. Join these vendors alongside leaders from ASE and EACVI for the first ever public demonstration of interoperable 3D/4D data and see how we are working together to provide seamless access. Demonstrations will take place during the morning breaks on Sunday and Monday.

3D Systems Symbionix 312

5381 South Alkire Circle
 Littleton, CO 80127
 United States
 Phone: 303-273-5344
symbionix.com

Experience a hands on demo of the Symbionix U/S Mentor cross-specialty simulator for ultrasound examinations and interventions. The U/S Mentor offers a multidisciplinary, realistic hands-on training for the ever-growing utilization of ultrasound in medicine especially at point of care (POC) setting. Request a demo at healthcare@3dsystems.com or www.symbionix.com.

Abbott 516

3200 Lakeside Drive
 Santa Clara, CA 95054
 United States
 Phone: 408-462-3141
abbott.com

Abbott is a global healthcare leader that helps people live more fully at all stages of life. Our portfolio of life-changing technologies spans the spectrum of healthcare, with leading businesses and products in diagnostics, medical devices, nutritionals and branded generic medicines. Our colleagues serve people in more than 160 countries.

Actelion..... 109

5000 Shoreline Court, South
 San Francisco, CA 94080
 United States
 Phone: 650-624-6900
actelion.us

We are the leaders in PAH therapy and, with our PAH products, we will continue to lead well into the future.

The Alliance for Physician Certification and Advancement™ (APCA™) and The American Registry for Diagnostic Medical Sonography® (ARDMS®) 513

1401 Rockville Pike, Suite 600
 Rockville, MD 20852
 United States
 Phone: 240-386-1604 (APCA); 800-541-9754 (ARDMS)
apca.org
ardms.org

The Alliance for Physician Certification and Advancement™ (APCA™), established in 2016, exclusively serves the physician community of over 21,000 physicians in support of their enduring commitment to continual learning and providing high-quality and compassionate patient care through certification. For more information, visit APCA.org.

The American Registry for Diagnostic Medical Sonography® (ARDMS®), founded in 1975, administers examinations and awards credentials in the areas of diagnostic medical ultrasound. With over 85,000 credentialed professionals worldwide, ARDMS is considered the global standard of excellence in sonography. ARDMS is part of the non-profit Inteleos family of councils.

American Society of Echocardiography (ASE)..... 409

2530 Meridian Parkway, Suite 450
 Durham, NC 27713
 United States
 Phone: 919-861-5574
 Email: ASE@ASEcho.org
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!

EXHIBITOR DESCRIPTIONS

ASCEND Health Information Technology 208

801 Warrenville Road, Suite 200
Lisle, IL 60532
United States
Phone: 844-413-2610
ascendhit.com

ASCEND HIT is a leader in developing innovative cardiovascular reporting, data and imaging solutions that span procedure types and modalities to systematically improve workflow, outcomes and ROI. Our deep clinical knowledge and dedication to the cardiovascular discipline drives us to solve today's, and anticipate tomorrow's, data accessibility and usability challenges.

Biodex Medical Systems, Inc 313

20 Ramsey Road
Shirley, NY 11967
United States
Phone: 631-924-9000
Biodex.com/ultrasound

Biodex exhibits the latest in Ultrasound technology with adjustable, "Sonographer Friendly" tables. Ergonomically correct positions help avoid user pain/injury. One of these tables - the Echo/Vasc Pro™ is the logical choice for performing vascular scanning and echocardiography. Use with our Sonography Chair that assures musculoskeletal alignment. Visit Biodex Booth #313.



Bracco Diagnostics Inc 200

259 Prospect Plains Road, Building H
Monroe Township, NJ 08831
United States
Phone: 609-514-2200
braccoimaging.com/us-en

Bracco Diagnostics Inc. is a leader in innovative contrast imaging agents and offers a product and solution portfolio for all key diagnostic imaging modalities including ultrasound contrast, X-Ray Imaging, MRI, and Nuclear Medicine. Please visit imaging.bracco.com/us-en.

Butterfly Network 100

530 Whitfield Street
Guilford, CT 06437
United States
Phone: 941-536-2845
butterflynetwork.com

Butterflynetwork.com Butterfly iQ is the world's first handheld whole-body ultrasound system, democratizing healthcare and providing global access to medical imaging. The device connects directly to a smartphone and will soon offer AI interpretation and AR tele-guidance to enhance patient care.



CAE Healthcare 418

6300 Edgelake Drive
Sarasota, FL 34240
United States
Phone: 941-536-2845
cae.com

CAE Healthcare delivers simulation-based healthcare training solutions worldwide. Visit our booth to learn about our patient, imaging and interventional simulators, including the new CAE Luna neonatal simulator, our CAE LucinaAR childbirth simulator with Microsoft HoloLens, the CAE Ares emergency care manikin, and the CAE Juno clinical skills manikin.



Canon Medical Systems USA, Inc..... 709

2441 Michelle Drive
Tustin, CA 92780
United States
Phone: 800-621-1968
us.medical.canon

Canon Medical Systems USA, Inc., headquartered in Tustin, Calif., markets, sells, distributes and services radiology and cardiovascular systems, including CT, MR, ultrasound, X-ray and interventional X-ray equipment. For more information, visit Canon Medical Systems' website at <https://us.medical.canon>.

Cardiovascular Credentialing International (CCI) 710

1500 Sunday Drive, Suite 102
Raleigh, NC 27607
United States
Phone: 919-861-4539
cci-online.org

Since 1968, CCI has administered credentialing examinations as an independent credentialing agency. Examinations for ECG and rhythm analysis technicians, invasive/cath lab professionals, cardiac and vascular sonographers, phlebology sonographers, and electro-physiology professionals. CCI administers the only advanced level credential for sonographers, the Advanced Cardiac Sonographer (ACS). Visit CCI at booth #710.

CardioVillage, University of Virginia 805

1415 Jefferson Park Avenue
Charlottesville, VA 22908
United States
Phone: 434-924-8394
cardiovillage.com

CardioVillage provides top-quality accredited online cardiovascular education. CardioVillage is designed to accommodate your busy schedule by providing easy access to meaningful and easily consumable content. Our mobile-friendly, relevant, and engaging learning focuses on Practicing Cardiovascular Medicine, Echocardiography, New Topics and Trends, and Fundamentals.



Children's Hospital & Medical Center 111

8200 Dodge Street
Omaha, NE 68114
United States
Phone: 402-955-5746
childrensomaha.org

Children's Hospital & Medical Center, in affiliation with the University of Nebraska College Of Medicine, is Nebraska's only full-service pediatric specialty health center. Children's is home to a Level IV NICU and Level II trauma center; a regional heart center, it offers expertise in pediatric heart transplantation and ACHD.



CIVCO Medical Solutions 613

2301 Jones Boulevard
Coralville, IA 52241
United States
Phone: 800-445-6741
civco.com

CIVCO is prepared to meet the growing need for effective infection control compliance in the ultrasound transducer reprocessing market. Visit us at ASE booth #613 to learn more about ASTRA, our latest offering in automated high-level disinfection for endovaginal, endorectal and TEE ultrasound probes.

CS Medical, LLC 316

2179 E. Lyon Station Road
Creedmoor, NC 27522
United States
Phone: 919-255-9472
csmedicalllc.com

CS Medical LLC is a leader in developing, manufacturing, and marketing medical devices that are designed to provide high-level disinfection of ultrasound TEE probes. Our products are engineered and developed with one single objective in mind: to minimize the potential of patient exposure to improperly reprocessed TEE ultrasound probes.

Diagnostic and Interventional Cardiology (DIAC) 311

3030 W. Salt Creek Lane
Arlington Heights, IL 60005
United States
Phone: 847-391-1000
Dlcardiology.com

"The Trusted Resource for Technology and Clinical Applications in Diagnostic & Interventional Cardiology," DAIC showcases the latest technology, device and service solutions. Edited for cardiologists, interventional cardiologists, cardiology administrators, sonographers, cath lab personnel, IT professionals and business administrators in hospitals and heart centers. Visit us for a free copy.

DiA Imaging Analysis..... 115

77 HaEnergia Street
Beer Sheva, HaDarom 84102
Israel
Phone: 972-77-7648318

dia-analysis.com

DiA Imaging Analysis provides advanced AI-based ultrasound analysis technology that makes ultrasound accessible to all. DiA's automated tools deliver fast and accurate clinical indications to support the decision-making process and offer better patient care. Using DiA's tools provides automated and objective AI tools, helps reduce variability among users and increases efficiency. It allows clinicians with various levels of experience to quickly and easily analyze ultrasound images.

Digisonics 209

3701 Kirby Drive
Houston, TX 77098
United States
Phone: 800-940-3240

digisonics.com

Digisonics cardiovascular information system solutions (CVIS) combine high performance image review, integrated clinical database, the most comprehensive measurements and calculations package and structured reporting for all cardiovascular study types. Key applications are complemented with interfaces to information systems and 3rd party vendors, providing facilities with a seamless, efficient clinical workflow.

Elsevier 708

1600 John F. Kennedy Boulevard, Suite 1800
Philadelphia, PA 19103
United States
Phone: 215-239-3900

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 803

1100 Victors Way, Suite 10
Ann Arbor, MI 48108
United States
Phone: 743-369-5100

epsilon-imaging.com

Epsilon Imaging is transforming cardiac diagnostic workflow with a vendor neutral suite of visualization and analysis applications designed for echocardiography. EchoInsight provides applications for improved quantification of the heart with clinical strain imaging. Applications assist clinicians to enhance, standardize, and streamline interpretation and monitoring of echo studies.

Esaote North America 401

11907 Exit Five Parkway
Fishers, IN 46037
United States
Phone: 317-813-6000

esaoteusa.com

Esaote North America, Indianapolis is part of the Esaote Group, a global leader in research, production and marketing diagnostic medical equipment. Among the largest manufacturers of ultrasound systems worldwide, Esaote prides itself in achieving superior price and performance over competitors through focused ultrasound and office-based MRI imaging. Visit us at www.esaoteusa.com.



EACVI
European Association of
Cardiovascular Imaging

European Association of Cardiovascular Imaging (EACVI) 410

The European Heart House
Les Templiers - 2035 route
des colles CS 80179 Biot
Sophia Antipolis Cedex 06903
France

Phone: +33 (0)4 92 94 76 00

escardio.org/EACVI

We are a not-for-profit organisation driven by renowned cardiovascular imaging experts. We support our 14,000 members and all healthcare professionals in the field worldwide so they can deliver the best possible care to patients. Our Mission: to promote excellence in clinical diagnosis, research, technical development, and education in cardiovascular imaging.



Fujifilm Medical Systems USA, Inc. 500

81 Hartwell Avenue
Lexington, MA 02421
United States
Phone: 203-602-3625
fujimed.com

Fujifilm will exhibit Synapse Cardiology PACS and Synapse 3D – two robust workflow tools that offer a host of features designed to meet the demands of busy practices with the most advanced cardiac imaging and reporting needs.



GE Healthcare 501

9900 Innovation Drive
Wauwatosa, WI 53226
United States
Phone: 414-704-6137
gehealthcare.com

GE Healthcare is a leading provider of medical imaging, monitoring, and life science technologies. GE Healthcare enables precision health in diagnostics, therapeutics and monitoring through intelligent devices, data analytics, applications and services to help providers, researchers, life sciences companies in their mission to improve outcomes for patients around the world.

Heritage Medical Products, Inc 417

10380 County Road 6310
West Plains, MO 65775
United States
Phone: 888-256-8748
sonobed.com

Since 1995 Heritage Medical Products has been inventing, manufacturing and selling exam beds direct to fellow sonographers. Who knows better than a sonographer how to make an exam bed that works for you and not against you! Stop by our booth and take a test drive on our SonoBeds!



Hitachi Healthcare 400

1959 Summit Commerce Park
Twinsburg, OH 44087
United States
Phone: 800-800-3106
hitachihealthcare.com

Hitachi Healthcare is delivering the next level of cardiovascular ultrasound. Our portfolio of cardiac and vascular solutions, including the premium 2D and 3D Lisendo 880 system, deliver exceptional clinical performance with state-of-the-art features and analytics. Our Pure Image technology, Seamless Workflow, and premium 2D and 3D cardiovascular applications provide advanced solutions for your clinical challenges. Learn how and come see the new LISENDO 880 at Booth 400.

ImageGuideRegistry

ImageGuide Registry 415

2530 Meridian Parkway, Suite 450
Durham, NC 27713
United States
Phone: 919-861-5574
ImageGuideRegistry.org

The ImageGuide Registry® is the nation's first clinical data registry for non-invasive cardiovascular imaging. The ImageGuide Registry contains two modules: ImageGuideEcho™, developed by the American Society of Echocardiography (ASE), and ImageGuideNuclear™, developed by the American Society of Nuclear Cardiology (ASNC). Both modules operate autonomously but also integrate seamlessly to track and improve quality for the benefit of patient care.

Infinity Massage Chairs 807

72 Stard Street
Seabrook, NH 03874
United States
Phone: 603-910-6000
infinitymassagechairs.com

In today's culture, we place more emphasis on our wellness than ever before. At Infinity, we aim to help people of all lifestyles do just that by designing our chairs with the latest technology in the industry. Elevate your wellness and live your best life with Infinity Massage Chairs.

EXHIBITOR DESCRIPTIONS

Intersocietal Accreditation Commission (IAC) ... 616

6021 University Boulevard, Suite 500
Ellicott City, MD 21043
United States
Phone: 800-838-2110

intersocietal.org

The IAC programs for vascular testing, echocardiography, nuclear/PET, MRI, CT/dental, carotid stenting, vein center, cardiac electrophysiology and cardiovascular catheterization are dedicated to ensuring quality patient care and support one mission: Improving health care through accreditation®.

Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS) 614

6021 University Boulevard, Suite 500
Ellicott City, MD 21043
United States
Phone: 443-973-3251

jrkdms.org

The JRC-DMS makes accreditation recommendations for diagnostic medical sonography (DMS) programs to the Commission on Accreditation of Allied Health Education Programs. 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 Medical Imaging, Inc. 509

331 Treble Cove Road
North Billerica, MA 01862
United States
Phone: 800-362-2668

lantheus.com

Lantheus Medical Imaging www.lantheus.com, a global leader in the development, manufacture and commercialization of innovative diagnostic imaging agents and products serving Echocardiography and Nuclear Medicine specialties, is headquartered in North Billerica, Massachusetts with offices in Puerto Rico and Canada.

Mayo Clinic Cardiovascular Education..... 309

200 1st Street SW
Rochester, MN 55905
United States
Phone: 800-283-6296

cveducation.mayo.edu

Mayo Clinic Department of Cardiovascular Medicine offers live education conferences and online courses to fit your time and learning style. Whether you participate in our education offerings in-person or online, we're committed to providing the best experience possible. Mayo Clinic Ranked #1 by US News and World Report. Booth #309.

MDocHaus..... 817

485 Mass Avenue
Cambridge, MA 02139
United States
Phone: 866-985-8217

mdochaus.com

The first social network to exclusively serve the medical field.

MedAxiom, an ACC Company 811

2300 Marsh Point Road, Suite 200
Neptune Beach, FL 32266
United States
Phone: 904-778-6334

medaxiom.com

As the nation's leading cardiovascular performance community, MedAxiom advances cardiovascular healthcare by improving organizations and promoting patient centricity through expert consulting, networking, and membership services including educational events and knowledge/data sharing. Stop by our booth and let MedAxiom's CV experts help your program achieve success in 2019 and visit

www.medaxiom.com.

Medical University of South Carolina..... 113

163 Rutledge Avenue
Charleston, SC 29425
United States
Phone: 843-792-2300

musc.edu

MUSC is South Carolina's only comprehensive academic health science center. Our purpose is to preserve and optimize human life in South Carolina through our vision to lead health innovation for the lives we touch.

Medical Positioning, Inc..... 612

1146 Booth Street
 Kansas City, KS 66103
 United States
 Phone: 800-593-3246

medicalpositioning.com

Medical Positioning, Inc. (MPI) specializes in ergonomically designed, bariatric capable multi-modality platforms that increase patient access, reduce sonographer RSI and enhance images. MPI will be showcasing our unique Stress EchoBed with new upgraded features and will have information on our many lines designed for cardiac imaging.

My Custom Tailor 914

Worldwide Industrial Center
 Shan Meitei Street
 Fotan Shatin NT
 Hong Kong
 Phone: 646-257-5886

mycustomtailor.com

My Custom Tailor specializes in ready to wear as well as custom made medical clothing such as doctor's lab coats, nurses uniforms and work wear etc.



National Board of Echocardiography (NBE)..... 317

1500 Sunday Drive, Suite 102
 Raleigh, NC 27607
 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.



Oregon Institute of Technology 210

3201 Campus Drive
 Klamath Falls, OR 97601
 United States
 Phone: 206-755-6987

oit.edu

Oregon Institute of Technology is offering exciting and relevant bachelor's degree completion programs in echocardiography and vascular technology as well as a master's degree in Allied Health that specializes in healthcare leadership skills that can help advance your career. Come check out our booth in Portland, at the ASE meeting.

Oxford University Press 215

198 Madison Ave
 New York, NY 10016
 United States
 Phone: 919-677-0977

global.oup.com

Oxford University Press is proud to partner with the European Society of Cardiology to publish some of the most prestigious and trusted cardiovascular medicine resources in the world, including the European Heart Journal and European Heart Journal – Cardiovascular Imaging, and ESC CardioMed.

PHILIPS



Philips..... 300

3000 Minuteman Road
 Andover, MA 01852
 United States
 Phone: 800-453-6860

philips.com

Philips is a leading health technology company focused on improving people's health and enabling better outcomes across the health continuum from healthy living and prevention, to diagnosis, treatment and home care. Philips leverages advanced technology and deep clinical and consumer insights to deliver integrated solutions. Headquartered in the Netherlands, the company is a leader in diagnostic imaging, image-guided therapy, patient monitoring and health informatics, as well as in consumer health and home care.

Learn more at usa.philips.com/healthcare/solutions/ultrasound/cardiovascular-ultrasound.

EXHIBITOR DESCRIPTIONS

Scimage, Inc. 813

4916 El Camino Real
Los Altos, CA 94022
United States
Phone: 650-694-4858 x 123
scimage.com

Delivering access to all patient data from all cardiology disciplines in ONE platform, Scimage's PICOM365 Enterprise PACS can be implemented to address Echocardiography-specific workflow or as your comprehensive CVIS to improve clinical collaboration and enhance productivity by allowing physicians to read and report on any image, anywhere, anytime.

Sheehan Medical, LLC..... 207

7835 85th Place Southeast
Mercer Island, WA 98040
United States
Phone: 206 498 0766
sheehan-medical.com

Real Ultrasound™ is a unique line of echo and TEE simulators that display real patient images, in real-time, for a realistic scanning experience. Our simulators provide trainees with feedback on their skill immediately after every image acquisition. Trainees progress is self-paced, saving faculty time for advanced coaching. NEW: color Doppler.



Siemens Healthineers 800

40 Liberty Boulevard
Malvern, PA 19355
United States
Phone: 713-352-9284
usa.healthcare.siemens.com

Siemens Healthineers, enabling healthcare providers to increase value by expanding precision medicine, transforming care delivery, and improving patient experience, by digitalizing healthcare. A leader in medical technology for more than 120 years, the > 48,000 dedicated colleagues at Siemens Healthineers will continue to innovate and shape the future of healthcare.

Sound Ergonomics, LLC 204

6830 NE Bothell Way
Kenmore, WA 98028
United States
Phone: 425-489-3839
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.



StudyCast by Core Sound Imaging, Inc. 609

7000 Six Forks Road
Raleigh, NC 27615
United States
Phone: 919-277-0636 x 156
corestudycast.com

More than a PACS, the StudyCast® system offers comprehensive imaging workflow on demand. View diagnostic-quality images and cine loops, quickly document findings, and generate high-quality reports right in your favorite browser. It even integrates with your EMR/RIS. Imagine your whole imaging workflow at your fingertips. Anywhere. Anytime. Instantly.

Texas Children's Hospital..... 408

6621 Fannin Street
Houston, TX 77030
United States
Phone: 832-824-1000
texaschildrens.org

Texas Children's Hospital is committed to creating a healthier future for children throughout the global community by leading in patient care, education and research. Consistently ranked among the best children's hospitals in the nation, Texas Children's has garnered widespread recognition for its expertise and breakthroughs in pediatric health.

TOMTEC Corporation 308

525 W. Monroe Street
Chicago, IL 60661
United States
Phone: 704-554-1289
tomtecusa.com



TOMTEC is a worldwide leader for medical image software solutions. Specialized in cardiology it offers state-of-the-art solutions for clinical customers and industry partners.

The products encompass a wide range of 2D and 3D/4D technology for visualization, automated analysis, quantification, reporting and image management.



Ultraling Healthcare Solutions, Inc. 117

27 Union Square West
New York, NY 10003
United States
Phone: 800-227-2956
ultraling.com

UltraLinq is your secure, fast cardiovascular cloud PACS platform. Our cloud PACS platform is designed to provide secure, fast access and retrieval of patient reports. With multi-site access from any internet-connected device, reporting is streamlined and always accessible. Advanced image reporting tools and customizable worksheets provide optimized patient reporting.

Valley Children's Hospital 212

9300 Valley Children's Place
Madera, CA 93636
United States
Phone: 559-353-7058
valleychildrens.org

Valley Children's Hospital is one of the nation's largest free-standing pediatric hospitals and the second largest pediatric hospital in California. We are located in affordable Central California close to three national parks including Yosemite, Kings Canyon & Sequoia. Visit us at booth 212 to learn about our cardiac sonographer opportunities!

Ventripoint Diagnostics Ltd 214

2 Sheppard Avenue East, Suite 605
Toronto, ON M2N 5Y7
Canada
Phone: 416-848-4156
ventripoint.com

Ventripoint Diagnostics is a Canadian medical device company engaged in the development and commercialization of a breakthrough diagnostic tool using Artificial Intelligence to create 3D volumetric measurements & ejection fractions from standard 2D Echo for all four chambers of the heart. Visit us to learn more about our VMS+ technology.



West Coast Ultrasound Institute 416

291 South La Cienega Boulevard, Suite 500
Beverly Hills, CA 90211
United States
Phone: 310-871-1501
wcui.edu

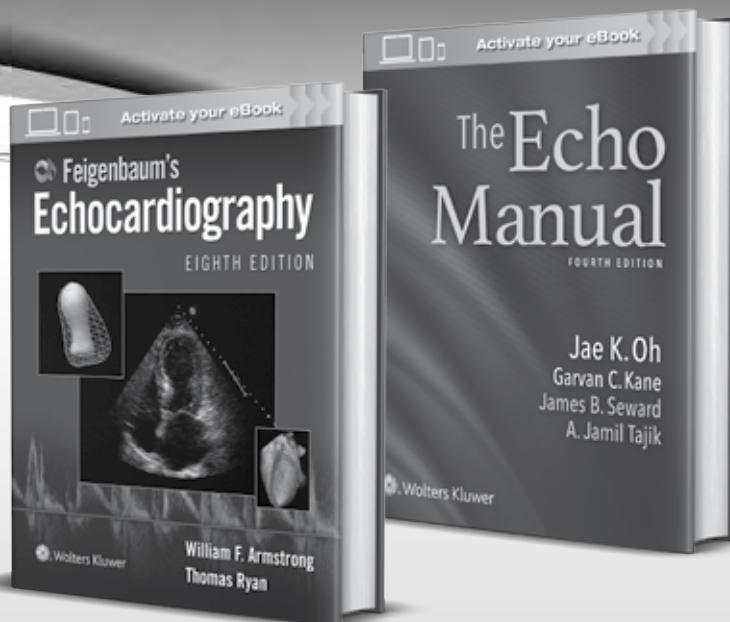
West Coast Ultrasound Institute is dedicated to the success of its students. We are a private post secondary college. Our main campus is located in Beverly Hills, CA. We have branch campuses located in Ontario, Canada and in Phoenix, AZ.

Wolters Kluwer 405

Two Commerce Square, 2001 Market Street
Philadelphia, PA 19103
United States
Phone: 215-521-8300
shop.lww.com

Wolters Kluwer provides trusted clinical technology and evidence-based solutions that engage clinicians, patients, researchers, students, and the next generation of healthcare providers. With a focus on clinical effectiveness, research and learning, safety and surveillance, and interoperability and data intelligence, our proven solutions drive effect decision-making and consistent outcomes.

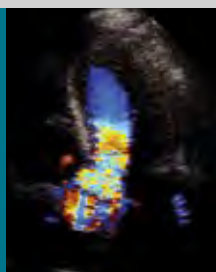
Save on new Lippincott® Echo Clinical Resources at ASE 2019!



Visit the Wolters Kluwer Booth # 405 and ask us about special savings!
shop.lww.com



30th ANNUAL



January 20-24, 2020

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



Course Director

Neil J. Weissman, MD, FASE
Past President, ASE

ECHO HAWAII



Course Co-Director

James D. Thomas, MD, FASE
Past President, ASE

“Wonderful conference with outstanding faculty presenters. Overall, the talks were clinically applicable and will help me improve the way I practice echocardiography.” Echo Hawaii Attendee

ASEcho.org/EchoHawaii



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



ASE Foundation ANNUAL APPEAL

Making a WORLD of Difference

Your support means the world to us! Thank you for all the ways you continue to make a difference for the field of cardiovascular ultrasound.

-  RESEARCH INVESTIGATOR SUPPORT
-  TRAVEL GRANTS & SCHOLARSHIPS
-  RESEARCH
-  DEMONSTRATING THE VALUE OF CARDIOVASCULAR ULTRASOUND
-  PATIENT AWARENESS
-  GUIDELINE TRANSLATIONS & GLOBAL DISSEMINATION
-  GLOBAL HEALTH OUTREACH EVENTS
-  AREA OF GREATEST NEED

100% of every donation received goes back out into the field.

ASE Foundation Events in Portland

Visit the Foundation Booth located outside the Exhibit Hall to learn more.

SATURDAY, JUNE 22

- 7:50 AM - 9:45 AM Join us to congratulate the 2019 ASEF Travel Grant and Scholarship Recipients
Opening Plenary: Exhibit Hall A
- 9:00 AM – 5:00 PM Sign up for the Cardiovascular Challenge and Tie-A-Knot for pediatric patients!
ASE Foundation Booth
- 9:00 AM Images from the Heart Gallery Opening **ASE Foundation Booth**

SUNDAY, JUNE 23

- 9:00 AM – 5:00 PM Log your steps for the Cardiovascular Challenge
ASE Foundation Booth
- 1:15 PM - 2:45 PM Inaugural Gardin Lecture presented by New York Times Bestselling author Barbara Natterson-Horowitz, MD **Exhibit Hall A**
- 2:45 PM - 3:30 PM *Zoobiquity* book signing with Barbara Natterson-Horowitz, MD
ASE Foundation Booth
- 3:30 PM – 5:00 PM Brian Haluska Sonographer Research Award Competition **Portland Ballroom 253-254**
- 7:30 PM – 11:00 PM 10th Annual ASE Foundation Research Awards Gala: Celebrating Cardiovascular Ultrasound Research **Hilton Downtown Portland** *Private event; tickets required*

MONDAY, JUNE 24

- 10:15 AM – 11:45 AM 2019 Kalmanson Lecture presented by Matt Bruce, MD
Portland Ballroom 256
- 2:00 PM Last chance to log your steps for the Cardiovascular Challenge
ASE Foundation Booth
- 3:15 PM Announcement of Cardiovascular Challenge Winners
ASE Booth in the Exhibit & Poster Hall
- 3:30 PM – 5:30 PM 2019 Arthur E. Weyman Young Investigator’s Award Competition
Exhibit Hall A

GENERAL INFORMATION

ASEFoundation.org

As a 501(c)(3) organization, contributions made to the ASE Foundation are U.S. tax deductible to the fullest extent of law.

10TH ANNUAL RESEARCH AWARDS

BLACK & WHITE
GALA

PRESENTED BY THE ASE FOUNDATION

SUNDAY, JUNE 23, 2019

7:30 – 11:00 PM

HILTON PORTLAND DOWNTOWN, PORTLAND, OR

Black tie is encouraged for this magical evening featuring curated regional wines, entertainment, dinner, and dancing.

Seats are limited, please reserve yours today.

ASEFoundation.org/Gala



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

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, help with coding and reimbursement issues, an image library, and other career resources. ASE membership through December 31, 2019 is included with most nonmember registrations for the ASE 30th Annual Scientific Sessions.

CONTACT US

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

Phone: 919-861-5574
Email: ASE@ASEcho.org

ASEcho.org
ASEFoundation.org
SeeMyHeart.org
ASEMarketplace.com
OnlineJASE.com
CVCASEJournal.com

ASE STAFF

Chief Executive Officer.....Robin Wiegerink, MNPL
Deputy Director Andrea Van Hoever, MSGH
Chief Standards Officer &
International Relations Specialist Rhonda Price
Accounting ManagerAndrea Abramowski, CPA
Registry Manager.....Sarah Beth Bdoyan, MSPH
Vice President of Health PolicyIrene Butler, MPP
Foundation ManagerMary Carmody
Digital Marketing Manager Arissa Cooper
Vice President of Internal Relations.....Mary Alice Dilday
Office Manager..... Jill Gaffin
Healthcare Education Specialist Jennifer Goss
Meeting and Education Products Assistant Teresa Graham
Information Systems Manager Paulette Harmon
Foundation Administrative Assistant Kevin James
Meeting Planner Kelly Joy
Director of Grant ActivitiesCathy Kerr, CAE
Director of Education Christina LaFuria
Online Education Specialist Liz Lane
Education and Products Manager..... Alyssa Lawrentz
Meetings Department Manager Jackie Levine, CMP
Associate Manager, Member Services Dallas Lyons
Research and Standards Specialist.....Kathryn Lyons
Meetings Project Manager Erin McClure
Senior Marketing Project Manager..... Tricia Meeks
JASE and CASE Managing Editor..... Deborah Meyer
Vice President of
Business DevelopmentMeredith Morovati, MBA
Membership Manager..... Suzanne Morris
Corporate Relations ManagerAndie Piddington, MBA
Director of Marketing and Communications.....Angie Porter
Director of Membership Natalya Read
Executive Assistant Lori Smith

ASE EXECUTIVE COMMITTEE

President

Jonathan R. Lindner, MD, FASE
Oregon Health & Science University
Portland, OR

President-Elect

Madhav Swaminathan, MD, FASE
Duke University Medical Center
Durham, NC

Vice President

Judy W. Hung, MD, FASE
Massachusetts General Hospital
Boston, MA

Treasurer

Carol K. C. Mitchell, PhD, RDMS,
RDCS, RVT, RT(R), ACS, FASE
University of Wisconsin
Madison, WI

Secretary

Elizabeth F. McIlwain, MPH, RCS, FASE
West Jefferson Medical Center/LCMC
Health
New Orleans, LA

Council Representative

Wyman W. Lai, MD, MPH, FASE
CHOC Children's
Orange, CA

Immediate Past President

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

Chief Executive Officer

Robin L. Wiegink, MNPL
American Society of Echocardiography
Durham, NC

DIRECTORS

Bonita A. Anderson, MAppISC, DMU, AMS,
ACS, AFASA, FASE
Queensland University of Technology &
The Prince Charles Hospital
Brisbane, Australia
International Representative

Jayashri R. Aragam, MD, FASE
West Roxbury VA Hospital
Sudbury, MA

Keith A. Collins, MS, RDCS, FASE
Froedtert/Medical College of Wisconsin
Milwaukee, WI

Gregory J. Ensing, MD, FASE
University of Michigan
Ann Arbor, MI
PCHD Council Chair

Alan C. Finley, MD, FASE
Medical University of South Carolina
Charleston, SC
COPE Chair

Edward A. Gill, MD, FASE
University of Colorado, Denver
Denver, CO

Amer M. Johri, MD, FASE
Queens University
Kingston, ON, Canada
*Circulation and Vascular Ultrasound
Council Chair*

James N. Kirkpatrick, MD, FASE
University of Washington Medical Center
Seattle, WA

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

Michael L. Main, MD, FASE
Saint Luke's Mid America Heart Institute
Kansas City, MO

Geoffrey Rose, MD, FASE
Sanger Heart & Vascular Institute
Charlotte, NC

Liza Y. Sanchez, RCS, FASE
University of Texas MD Anderson Medical
Center
Houston, TX

Elaine A. Shea, ACS, RCS, RCCS, FASE
Alta Bates Summit Medical Center
Berkeley/Oakland, CA
Cardiovascular Sonography Council Chair

James D. Thomas, MD, FASE
Northwestern University Feinberg School of
Medicine
Chicago, IL
Past President Representative

David H. Wiener, MD, FASE
Thomas Jefferson University Hospital
Philadelphia, PA



ASE 2018 Board & Leadership

PAST PRESIDENTS

Benjamin F. Byrd III, MD, FASE
Anthony N. DeMaria, MD, FASE
Pamela S. Douglas, MD, FASE
Harvey Feigenbaum, MD, FASE
Julius M. Gardin, MD, FASE
Linda D. Gillam, MD, FASE
Walter L. Henry, MD, FASE
Sanjiv Kaul, MD, FASE
Richard E. Kerber, MD, FASE
Bijoy K. Khandheria, MBBS, FASE

Allan L. Klein, MD, FASE
Joseph A. Kisslo, MD, FASE
Roberto M. Lang, MD, FASE
Randolph P. Martin, MD, FASE
Alfred F. Parisi, MD, FASE
Alan S. Pearlman, MD, FASE
Patricia A. Pellikka, MD, FASE
Michael H. Picard, MD, FASE
Richard L. Popp, MD, FASE
Harry Rakowski, MD, FASE

Vera H. Rigolin, MD, FASE
Thomas Ryan, MD, FASE
David J. Sahn, MD, FASE
James D. Thomas, MD, FASE
Susan E. Wieggers, MD, FASE
Neil J. Weissman, MD, FASE
Arthur E. Weyman, MD, FASE
William A. Zoghbi, MD, FASE

BOARD, COUNCIL, AND COMMITTEE MEETINGS

FRIDAY, JUNE 21ST

Board of Directors Meeting	12:00 – 2:30 PM	C-124
Council on CV Sonography Steering Committee	3:00 – 5:00 PM	A-108
Rising Star Task Force	3:00 – 4:00 PM	B-110
Council on PCHD Steering Committee	3:00 – 5:00 PM	B-111
New Committee Chair/ Co-Chair Orientation	3:30 – 4:30 PM	A-107
CASE Editorial Board	5:00 – 6:00 PM	A-106

SATURDAY, JUNE 22ND

POCUS Task Force B Meeting	10:00 – 11:00 AM	A-108
Membership Steering Committee	10:00 – 11:30 AM	A-106
ImageGuideEcho Registry Committee	11:30 AM – 1:00 PM	A-107
COPE Council Steering Committee Meeting	11:30 AM – 1:00 PM	B-112
Leadership Academy	11:45 AM – 12:45 PM	C-120
Pediatric Echo Lab Directors	1:00 – 2:00 PM	C-124
3D Echo Interoperability Task Force	1:30 – 3:30 PM	A-106
Council on PCHD Business Meeting	3:00 – 3:15 PM	Portland Ballroom 251
Council on Perioperative Echocardiography Business Meeting	3:00 – 3:15 PM	Portland Ballroom 256
International Relations Advisory Committee	3:00 – 4:30 PM	A-107
Critical Care Workgroup	3:00 – 4:30 PM	A-108

SUNDAY, JUNE 23RD

Governance Task Force	7:00 – 7:45 AM	B-111
ASEF Annual Appeal Committee	8:00 – 9:30 AM	A-107
Advocacy Committee	8:30 – 10:00 AM	A-106
Awards Committee	9:30 – 10:15 AM	B-112
Research Committee	10:00 – 11:30 AM	A-106
ASE Cares Task Force	10:00 – 11:00 AM	B-111
Technology Task Force	11:00 AM – 12:00 PM	A-108
Education Committee	11:30 AM – 12:30 PM	B-110
FASE Advisory Committee	11:45 AM – 12:45 PM	B-112
International Leadership Luncheon	11:45 AM – 1:15 PM	C-123
Industry Roundtable Committee	12:00 – 1:30 PM	A-106
ImageGuideEcho Research & Publications Committee	12:00 – 1:30 PM	B-111
Council on Circulation & Vascular Ultrasound Steering Committee	1:15 – 2:30 PM	B-112
SHD Task Force	3:30 – 4:30 PM	A-108
Twitter Journal Club Task Force	3:30 – 4:30 PM	B-110
JASE Editorial Board	4:00 – 5:30 PM	A-106

MONDAY, JUNE 24TH

Bylaws & Ethics Committee	7:00 – 7:45 AM	B-112
Public Relations Committee	9:30 – 10:30 AM	A-107
CPELP Workgroup	11:00 AM – 12:00 PM	B-112
CME Committee	11:30 – 12:30 PM	B-110
Guidelines Committee	11:45 AM – 1:15 PM	A-107
Council on CV Sonography Business Meeting	1:15 – 1:35 PM	Portland Ballroom 253-254
Finance Committee	2:00 – 3:30 PM	B-110
Nominations Committee	2:30 – 3:30 PM	B-112

TUESDAY, JUNE 25TH

Council on Circulation & Vascular Ultrasound Business Meeting	7:00 – 7:10 AM	Portland Ballroom 255
---	----------------	------------------------------



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 out into the field. The Foundation conducts an Annual Appeal each year soliciting individuals, companies, and foundations to support its efforts. The ASE Foundation exceeded its \$250,000 fundraising goal for the 2018 Annual Appeal, raising \$287,915. All contributions to the Foundation support the following initiatives:

- Demonstrating the Value of Cardiovascular Ultrasound
- Guideline Translations and Global Dissemination
- Global Health Outreach Events
- Patient Awareness
- Research Investigator Support
- Research Studies
- Travel Grants and Scholarships

Stop by the ASE Foundation booth, located in the Pre-function C Lobby on Level 1 to:

- Learn more about fundraising events being hosted in Portland, such as the Annual Research Awards Gala, the Cardiovascular Challenge, and how to assemble a blanket for a pediatric patient at the Oregon Health & Science University Doernbecher Children's Hospital.
- View the photo exhibition showcasing outreach event pictures
- 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!

TIE-A-KNOT FOR PEDIATRIC PATIENTS

Stop by the ASEF booth to make a tie-knot blanket for pediatric patients at the Oregon Health & Science University Doernbecher Children's Hospital! We'll have pre-cut fabric that's ready to be tied. Printed instructions will also be available - but you'll get the hang of it quickly! Donate at least \$10 to the ASE Foundation and you can participate in this fun, creative, and rewarding activity. Put a smile on a child's face with a blanket you made just for them! Money raised through this effort will be allocated to Patient Awareness projects in 2020.

CARDIOVASCULAR CHALLENGE

Compete with your feet and get moving with the ASE Foundation! ASEF is highlighting physical activity, which can dramatically lower an individual's risk of cardiovascular disease, improve mental health, and lower the risk of obesity related diseases. Key areas around the Oregon Convention Center will display step targets. The top three participants will win a prize! A \$150 Amazon gift card will be awarded to the winner, second place will receive a \$75 Amazon gift card, and the person with the third highest step count will receive a limited edition ASEF hat. Record your steps taken at the conference and check in each day with the ASEF Booth to log your steps and keep an eye on the competition. The winners will be announced Monday, June 24th during the afternoon break in the Exhibit & Poster Hall.



Special thanks to our 2019 Cardiovascular Challenge sponsors:



IMAGES FROM THE HEART GALLERY

Back this year, ASEF is presenting a curated display of photos taken by ASE members while they traveled the world participating in various medically-related outreach events. ASE members entered photographs that captured faces of people met along the way, landscapes, cultural observations, etc., and wrote a few heartfelt memories about what the photos meant to them. Stop by the ASEF booth in the Pre-function C Lobby to view the incredible photos and read the stories. Want to take these photos home? Many will be available for a donation to the ASE Foundation in the photographer's name.

THE GARDIN LECTURE

Endowed to the ASE Foundation through a generous long-term gift from Julius Gardin, MD, FASE, we are proud to announce the establishment of the Gardin Lecture. Dr. Gardin has been associated with the ASE for nearly four decades. He served as the ninth President of ASE (1993-1995), chaired the first Scientific Sessions in 1990, presented the Edler Lecture in 1997, and recently completed a 10-year term as associate editor of JASE. He has a passion for education which will be supported by this lecture series because it will provide the funding resources to bring a luminary speaker to the Scientific Sessions every year. The inaugural Gardin Lecture will be presented by *New York Times* best-selling author Barbara Natterson-Horowitz, MD. Her lecture entitled "Species-Spanning Echocardiography: Cardiovascular Insights for Humans and Other Animals" will take place during the Echo Technology at the Cutting Edge of Knowledge session. Dr. Natterson-Horowitz will be at the ASE Foundation booth on Sunday, June 23rd from 2:45 – 3:30 PM signing copies of her book, *Zoobiquity*.

THANK YOU – CUMULATIVE GIVING RECOGNITION

This list recognizes cumulative giving from individual donors as of December 31, 2018. 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.

FOUNDER'S CIRCLE (\$100,000+)

Jamil Tajik, MD, FASE*

LEGACY CIRCLE (\$25,000+)

Jose Banchs, MD, FASE
Julius M. Gardin, MD, FASE*
Edward A. Gill, MD, FASE
Sanjiv Kaul, MD, FASE*^
Vera H. Rigolin, MD, FASE
Geoffrey A. Rose, MD, FASE*
Thomas J. Ryan, MD, FASE*^
Lissa Sugeng, MD, MPH, FASE
William A. Zoghbi, MD, FASE*^

AMBASSADOR'S CIRCLE (\$10,000+)

David B. Adams, RCS, RDSCS, FASE*
Merri L. Bremer, RN, RDSCS, FASE
Harvey Feigenbaum, MD, FASE
Craig E. Fleishman, MD, FASE
David H. Forst, MD, FASE*
Stefanie J. Fry, MD, FASE
Linda D. Gillam, MD, FASE*
Rebecca T. Hahn, MD, FASE
Brian D. Hoit, MD, FASE*
Judy W. Hung, MD, FASE
Allan L. Klein, MD, FASE
Peg Knoll, RDSCS, FASE^
Roberto M. Lang, MD, FASE*^
Steven J. Lester, MD, FASE
Sunil Mankad, MD, FASE
Barbara N. McCallister, RN, RDSCS
Sherif F. Nagueh, MD, FASE
Navin C. Nanda, MD
Jae K. Oh, MD, FASE
Bharatbhushan J. Patel, RDSCS, RVS,
RDMS, FASE
Alan S. Pearlman, MD, FASE*
Miguel A. Quiñones, MD
Peter S. Rahko, MD, FASE
David S. Rubenson, MD, FASE*
Samuel Chi Bun Siu, MD, SM, FASE
Raymond F. Stainback, MD, FASE*
James D. Thomas, MD, FASE*^
Susan E. Wieggers, MD, FASE

EDLER CIRCLE (\$5,000+)

Theodore P. Abraham, MD, FASE
Ford Ballantyne III, MD
Mark G. Berry, DO, FASE
Benjamin F. Byrd III, MD, FASE^
Pamela S. Douglas, MD, FASE*
Benjamin W. Eidem, MD, FASE
Steven A. Goldstein, MD
Richard A. Grimm, DO, FASE
Rachel Hughes-Doichev, MD, FASE
Linda K. Kerber
Bijoy K. Khandheria, MD, FASE*
James N. Kirkpatrick, MD, FASE
Georgeanne Lammertin, MBA, RCS,
RDSCS, FASE
Howard Leong-Poi, MD, FASE
Jonathan R. Lindner, MD, FASE
Stephen H. Little, MD, FASE
Joan C. Main, BS, RDSCS, MBA, FASE
Randolph P. Martin, MD, FASE*
Marti L. McCulloch, MBA, BS, RDSCS,
FASE*
Fletcher A. Miller Jr., MD, FASE
Sharon L. Mulvagh, MD, FASE*
David A. Orsinelli, MD, FASE
Maryellen H. Orsinelli, RN, RDSCS, FASE
Patricia A. Pelliikka, MD, FASE
Michael H. Picard, MD, FASE*
Stephen G. Sawada, MD^
James B. Seward, MD, FASE*
Douglas C. Shook, MD, FASE
Cynthia Taub, MD, FASE
Richard L. Weiss, MD, FASE*
Neil J. Weissman, MD, FASE*

DOPPLER CIRCLE (\$1,000+)

Michael Adams, RDSCS (AE, PE), FASE
on behalf of the Greater Houston
Society of Echo-Vascular
Deborah A. Agler, RCT, RDSCS, FASE
Carolyn A. Altman, MD, FASE
Devendra K. Amin, MD
Jayashri R. Aragam, MD, FASE
Federico M. Asch, MD, FASE
Dennis G. Atherton, RDSCS, RCT, RRT,
FASE
Gerard P. Aurigemma, MD, FASE
Holly C. Bazarnick, RDSCS*

J. Todd Belcik, BS, RCS, RDSCS,
FASE^
Marek Belohlavek, MD, PhD, FASE
Elizabeth A. Bisnov, MD, FASE
Lori Blauwet, MD, FASE
Michael J. Boland, MD
Juan-Carlos Brenes, MD, FASE
Barry B. Canaday, MS, RN, RDSCS,
RCS, FASE
Hollie D. Carron, RDSCS, FASE
Sant Chatwal
Frederick C. Cobey, MD, FASE
Meryl S. Cohen, MD, FASE
Keith A. Collins, MS, RDSCS, FASE
Deborah J. Creighton, RDSCS, RVT, FASE
Linda J. Crouse, MD*
Jeanne M. DeCara, MD, FASE
Anthony N. DeMaria, MD, FASE*
John M. Dent, MD, FASE
Manu and Rama Desai
Milind Y. Desai, MD
Mary Alice Dilday
Teri Dittrich, RDSCS, FASE
Jean G. Dumesnil, MD, FASE
Sidney K. Edelman, PhD*
Robert D. Elgar, DO
Sibel Enar, MD, FASE
Gregory J. Ensing, MD, FASE
Dali Fan, MD, PhD, FASE
Alan Finley, MD, FASE
Annitta J. Flinn, BA, RDSCS, FASE*
Rafael A. Flores, RVT, RDSCS*
Michael C. Foster, RCS, RDSCS, FASE
William K. Freeman, MD, FASE
Peter C. Frommelt, MD, FASE
Edwards F. Gibbons, MD, FASE
George Gibson, MD
Yvonne E. Gilliland, MD, FASE
Frederic Ginsberg
Kathryn E. Glas, MD, FASE
John Gorcsan III, MD, FASE*
Frank J. Green, MD
Ken A. Hahn, MD, FASE*
Kathleen A. Harper, DO*
Jeff Hill, BS, RDSCS, FASE
Kenneth D. Horton, RCS, RDSCS, FASE^
Helen M. Hunt, MA*
Wael A. Jaber, MD
Cynthia Jones
Barry L. Karon, MD, FASE
Alan S. Katz, MD, FASE

Richard E. Kerber, MD, FASE*
Mary Etta King, MD, FASE
Smadar Kort, MD, FASE
Joe Kreeger, RDSCS, RDSCS, FASE
Itzhak Kronzon, MD, FASE
Karla M. Kurrelmeyer, MD, FASE
Oi Ling B. Kwan, BS, RDSCS, FASE
Arthur J. Labovitz, MD, FASE
Wyman W. Lai, MD, MPH, FASE
Elizabeth Le, MD, FASE
Mark P. Lebeis, MD*
Stamatiou Lerakis, MD, FASE*
Robert A. Levine, MD*
Jennifer E. Liu, MD, FASE
Leo Lopez, MD, FASE
G. Burkhard Mackensen, MD, PhD,
FASE
Richard C. Madlon-Kay, MD*
Michael L. Main, MD, FASE
Majesh Makan, MD, FASE
Judy R. Mangion, MD, FASE
Domenic Marini, MD*
Jane E. Marshall, BS, RDSCS, FASE*
Susan A. Mayer, MD, FASE
David McCarty, MBBCh
Elizabeth F. McIlwain, MHS, RDSCS,
RCS, FASE
Rick Meece, ACS, RDSCS, RCIS, FASE
David K. Millward, MD*
Douglas Misch, RCIS, RCS, RDSCS, RRT
Carol Mitchell, PhD, RDMS, RDSCS,
RVT, RVT, RT(R), FASE
G. Wayne Moore, BSC, MBA, FASE*
Victor Mor-Avi, PhD, FASE
Bernhard Mumm
Brad I. Munt, MD*
Tasneem Z. Naqvi, MD, FASE
Alina Nicoara, MD, FASE
Vuyisile Nkomo, MD
Charles Nyman, MBBCh
Joan J. Olson, BS, RDSCS, RVT, FASE
Roger C. On, MD
Catherine M. Otto, MD*
Felix L. Oviyasu, MD
Natesa G. Pandian, MD
Alfred F. Parisi, MD, FASE*
Margaret M. Park, BS, RDSCS, RVT, FASE
Matthew Parker, MD
Dilip Patel
Jaydev Patel, on behalf of the Patel
Family Foundation

*Denotes Charter Supporter ^Denotes Learning Lab Supporter

THANK YOU – CUMULATIVE GIVING RECOGNITION

Pravin Patil, MD, FASE
Julio E. Perez, MD, FASE
Sue D. Phillip, RCS, FASE
Sabrina D. Phillips, MD, FASE
Sorin V. Pislaru, MD, PhD, FASE
Juan Carlos Plana, MD, FASE
Richard L. Popp, MD, FASE*
Thomas R. Porter, MD, FASE
Kit B. Powers, MD, FASE*
Min Pu, MD, PhD, FASE
Michael D. Puchalski, MD, FASE
Mohammed S. Rais, MD, FASE
Harry Rakowski, MD, FASE*
Scott T. Reeves, MD, FASE
Rick Rigling, BS, RDCS, FASE^
Diana B. Rinkevich, MD
W. Scott Robertson, MD*
L. Leonardo Rodriguez, MD
Judy Rosenbloom, RDCS, FASE*
Lawrence G. Rudski, MD, FASE
Angela Saca, RVT, RCS
Kiran B. Sagar, MD
David J. Sahn, MD, FASE*
Muhammed Saric, MD, PhD, FASE
Robert M. Savage, MD*
Retu Saxena, MD
Marielle Scherrer-Crosbie, MD, PhD,
FASE
Russell J. Schiff, MD, FASE
Nelson B. Schiller, MD
Partho P. Sengupta, MBBS, MD, DM,
FASE
Elaine A. Shea, ACS, RCS, RCCS, FASE
Stanton K. Shernan, MD, FASE
Takahiro Shiota, MD, FASE
Nikolaos J. Skubas, MD, FASE
Jeffrey F. Smallhorn, MBBS
Frank C. Smith, MD, FASE*
Mikel D. Smith, MD, FASE
Roman M. Sniecinski, MD, FASE
Vincent L. Sorrell, MD, FASE
Jessica Spellman, MD
Kirk T. Spencer, MD, FASE
Richard B. Stacey, MD, FASE
J. Geoffrey Stevenson, MD, FASE*
William J. Stewart, MD, FASE
G. Monet Strachan, RDCS, FASE
Madhav Swaminathan, MD, FASE
Mark A. Taylor, MD, FASE
Ritu Thamman, MD, FASE
John H. Toptine, RCS, RDCS, FASE
Wendy Tsang, MD
Zoltan Turi, MD

Andrea M. Van Hoever
Mani A. Vannan, MBBS, FASE*
Eric J. Velazquez, MD, FASE
Flordeliza S. Villanueva, MD*
Francis E. Wanat, MD, FASE
Zuyue Wang, MD, FASE
Melissa Wasserman, RDCS, RCCS,
FASE
Kevin Wei, MD, FASE
Arthur E. Weyman, MD, FASE
David H. Wiener, MD, FASE
Susan Wilansky, MD, FASE
Malissa J. Wood, MD, FASE
Joshua Wynne, MD, FASE
Luciana T. Young, MD, FASE
Ren Zhang, MD
Qiong Zhao, MD, PhD, FASE
Karen G. Zimmerman, BS, ACS,
RDCS, RVT, FASE

PRESIDENT'S CIRCLE (\$500+)

Harry Acquatella, MD, FASE
Nausheen Akhter, MD, FASE
Abbas K. Ali, MD, RDCS, FASE
William J. Alt, MD
Solomon Aronson, MD, MBA*
Basant Arya, MD, FASE
Piers C. A. Barker, MD, FASE
Rolf Baumann
Judith A. Becker, MD
Michelle Bierig, MPH, RDCS, FASE
Daniel G. Blanchard, MD, FASE
Alvin S. Blaustein, MD
Eric L. Bonno, MD
Paul F. Braum, BS, RDCS, RCS, RVT,
RVS, ACS, FASE
Thomas M. Brown Jr., MD
Donica U. Bryant, BS, RDCS
Dan J. Carliile, RDCS, FASE*
Michael Chan, MD*
Kent Chastain, MD*
Namsik Chung, MD, FASE
Craig B. Clark, DO, FASE
Patrick Coon, RCCS, RDCS, FASE
Timothy M. Cordes, MD
Mary C. Corretti, MD, FASE
Jacob P. Dal-Bianco, MD, FASE
Ranley M. Desir, MD*
Holly D. Diglio, RCS, FASE
Hisham Dokainish, MD, FASE
Daniel H. Drake, MD
John C. Drow, RTR, RVS, RDCS, FASE*

Norman S. Eshoo, MD
William H. Fabian, MD
Luiz Egberto Scavone Ferlante, MD
Brian Fey, BA, RDCS (AE/PE), ACS, FASE
Benjamin H. Freed, MD, FASE
Mark K. Friedberg, MD, FASE
Volker Gerling, MD
Suzanne Golz, MS, RDCS
Mardi Gomberg
Aasha S. Gopal, MD, FASE
Beverly L. Gorman, RDCS
Joy D. Guthrie, PhD, ACS, RDMS,
RDCS, RVT, FASE
Yuchi Han, MD, MMSc, FASE
Thomas E. Harris, RDCS
Andrew M. Hauser, MD, FASE*
Donna D. Hendeles, RCVT, RCS, FASE*
Sydni Hennemann, BS, RDCS, FASE
Jose E. Herrera, MD*
Lanqi Hua, RDCS (AE/PE/FE), MS, FASE
Jill B Inafuku, BS, RDCS, RDMS, FASE
Howard W. Jackson Jr., BS, RDCS
Kishor Y. Joshi, AIA
Madhavi Kadiyala, MD, FASE
William E. Katz, MD, FASE
Martin G. Keane, MD, FASE
Andrew M. Keller, MD, FASE
Brenda Khadije
Thomas R. Kimball, MD, FASE
Richard A. Kirkpatrick, MD*
Joseph A. Kisslo, MD, FASE*
Kyle W. Klarich, MD, FASE
Berthold Klas
H. Helen Ko, BS, ACS, RDMS, RDCS,
RCCS, FASE
John P. Kovalchik, MD, FASE
Jun Kwan, MD*
Christina LaFuria
Paula Medrano Lara, RDCS
David B. Lieb, MD, FASE*
Sheldon E. Litwin, MD, FASE
Do Doan Loi, MD
Helga Lombardo, RDCS, FASE
George K. Lui, MD, FASE
Anthony Magalski, MD, FASE
Kameswari Maganti
Sue Maisey, MBA, RDCS, RCS, FASE
Jonathan B. Mark, MD
Wilson Mathias Jr., MD, PhD, FASE
David J. Mehlman, MD, FASE
Jennifer H. Mercandetti, RDCS, ACS,
FASE
Debbie R. Meyer
L. LuAnn Minich, MD, FASE

Anita J. Moon-Grady, MD, FASE
Kathleen A. Munson, RDCS, RVT, RDMS
Dakshina R. Murthy, MD, FASE
Raymond R. Musarra, RDCS, RCS, FASE
Vijay Nambi, MD, FASE
Alireza Nazeri, MD*
Ugo N. Okereke, MD
Richard A. Palma, BS, RDCS, RCS,
ACS, FASE
Ira A. Parness, MD, FASE
David Parra, MD, FASE
Amit R. Patel, MD
Riti Patel, MD, FASE
Ayan R. Patel, MD, FASE
Philip J. Patel, MD, FASE
Kunal Patel
Andy Pellett, PhD, RCS, RDCS, FASE
Maria A. Pernetz, RDCS, RVT, FASE
Angie Porter
Suzanne Poston, RDCS, FASE
Gregg S. Pressman, MD, FASE
Rhonda Price
Jose R. Rivera Del Rio, MD, FASE
Brad J. Roberts, RCS, FASE
Veronika M. Rodriguez, RDCS, FASE
Jack Rychik, MD
Ritu Sachdeva, MBBS, FASE
Thriveri Sanagala, MD, FASE
Danita M. Yoerger Sanborn, MD,
MMSc, FASE
Liza Y. Sanchez, RCS, FASE
Gregory M. Scalia, MBBS, FASE
Jack S. Shanewise, MD, FASE*
Giulia L. Sheftel, MD, FASE
David I. Silverman, MD, FASE
Norman H. Silverman, MD, FASE*
Binoy K. Singh, MD*
Aldona M. Siwinska, MD
Robert A. Skotnicki, DO, FASE
Timothy C. Slesnick, MD, FASE
Michael Smith, MD, FASE
Neha Soni-Patel, BS, RDCS, FASE
Cynthia C. Spector*
Shubhika Srivastava, MD, FASE
Gregory H. Tatum, MD, FASE
Robert L. Wade, MD*
Alan D. Waggoner, MHS, RDCS*
Lin Wang, MD, MS
Robin L. Wiegerink, MNPL
Rex J. Winters, MD
Tom Wolk
Jian Zhang

We strive to be accurate and complete, but errors occasionally occur. Your assistance in bringing any inaccuracies to our attention is greatly appreciated.

2018 APPEAL DONORS

The ASE Foundation thanks the following investors for their demonstrated leadership and generous support in 2018. This list reflects all gifts of \$50 or more made from January 1 through December 31, 2018.

HERO INVESTORS (\$1500+)

Theodore Abraham, MD, FASE
Ford Ballantyne III, MD
Jose Banchs, MD, FASE*
Merri Bremer, EdD, RN, RDCS, FASE
Harvey Feigenbaum, MD, FASE
Craig Fleishman, MD, FASE
Stefanie Fry, MD, FASE
Julius Gardin, MD, FASE
Edward Gill, MD, FASE*
Fredric Ginsberg
Rebecca Hahn, MD, FASE
Brian Hoit, MD, FASE
Judy Hung, MD, FASE
Allan Klein, MD, FASE
Georgianne Lammertin, MBA, RCS,
RDCS, FASE
Howard Leong-Poi, MD, FASE
Jonathan Lindner, MD, FASE
G. Burkhard Mackensen, MD, PhD,
FASE
Majesh Makan, MD, FASE
Rick Meece, RDCS, RCS, RCIS, FASE
Sharon Mulvagh, MD, FASE
Navin Nanda, MD, FASE
Alan S. Pearlman, MD, FASE
Vera Rigolin, MD, FASE
Geoffrey Rose, MD, FASE
David Rubenson, MD, FASE
Samuel Siu, MD, FASE
Raymond Stainback, MD, FASE
G. Monet Strachan, RDCS, FASE
Lissa Sugeng, MD, MPH, FASE*
A. Jamil Tajik, MD, FASE
Zoltan Turi, MD
Susan Wieggers, MD, FASE
Joshua Wynne, MD

VISIONARY INVESTORS (\$1000- \$1499)

David Adams, RCS, RDCS, FASE
Federico Asch, MD, FASE
Mark Berry, DO, FASE
Sant Chatwal
Keith Collins, MS, RDCS, FASE

Rama Desai
Benjamin Eidem, MD, FASE
Robert Elgar, DO
Linda Gillam, MD, FASE
Yvonne Gilliland, MD, FASE
Steven Goldstein, MD, FASE
Sanjiv Kaul, MD, FASE
James Kirkpatrick, MD, FASE
Peg Knoll, RDCS, RCS, FASE
Jennifer Liu, MD, FASE
Joan Main, BS, RDCS, MBA, FASE*
Sunil Mankad, MD, FASE*
Alina Nicoara, MD, FASE*
Joan Olson, BS, RDCS, RVT, FASE
David Orsinelli, MD, FASE
Maryellen Orsinelli, RN, RDCS, FASE
Bharatbhushan Patel, RDCS, RVS,
RDMS, FASE
Pravin Patil, MD, FASE
Sabrina Phillips, MD, FASE
Sorin Pislaru, MD, PhD, FASE
Peter Rahko, MD, FASE
Thomas Ryan, MD, FASE
Vincent Sorrell, MD, FASE, FCMR
Richard Stacey, MD, FASE
Ritu Thamman, MD, FASE
Neil Weissman, MD, FASE

CHAMPION INVESTORS (\$500- \$999)

Nausheen Akhter, MD, FASE
Devendra Amin
Basant Arya, MD, FASE
Gerard Aurigemma, MD, FASE
David Forst, MD, FASE
Mardi Gomberg
Jeff Hill, BS, FASE
Roberto Lang, MD, FASE
Judy Mangion, MD, FASE
Jonathan Mark, MD
Susan Mayer, MD, FASE
Elizabeth McIlwain, MHS, RCS, FASE
G. Wayne Moore, BSC, MBA, FASE
Matthew Parker, MD
Dilip Patel
Kunal Patel
Michael Picard, MD, FASE

Retu Saxena, MD
Marielle Scherrer-Crosbie, MD, PhD,
FASE
Douglas Shook, MD, FASE
Roman Sniecinski, MD, FASE
Jessica Spellman, MD
William Stewart, MD, FASE
Madhav Swaminathan, MD, FASE
Cynthia Taub, MD, FASE
David Wiener, MD, FASE
Malissa Wood, MD, FASE
William Zoghbi, MD, FASE

PATRON INVESTORS (\$100-\$499)

Karima Addetia, MD
Waleed Ahmed, MD
Carolyn Altman, MD, FASE
Bonita Anderson, MAPPLSC, DMU,
FASE
Asimul Ansari, MD, FASE
Jayashri Aragam, MD, FASE
William Armstrong, MD
Piers Barker, MD, FASE
Judith Becker, MD
Nicole Bhave, MD, FASE
Kristen Billick, BS, RDCS (AE, PE),
FASE
Alvin Stephen Blaustein, MD
Lori Blauwet, MD, FASE
Eric Bonno, MD
Paul Braum, BS, RDCS, RCS, RVT,
RVS, FASE
Joan Briller, MD, FASE
Robert Burke, MD, FASE
Benjamin Byrd III, MD, FASE
Barry Canaday, MS, RN, RDCS, RCS,
FASE
Hollie Carron, RDCS, FASE
Frederick Cobey, MD, FASE
Meryl Cohen, MD, FASE
Timothy Cordes, MD
Mary Corretti, MD, FASE
Frederick Crock, MD, FASE
Jacob Dal-Bianco, MD, FASE
R. Andrew de Freitas, MD
Jeanne DeCara, MD, FASE
Mary Alice Dilday*
Daniel Drake, MD
Micah Eimer, MD
Sibel Enar, MD, FASE
Gregory Ensing, MD, FASE
Francesco Faletra, MD
Luiz Ferlante, MD
Brian Fey, BA, RDCS (AE/PE), FASE
Alan Finley, MD, FASE
Michael Foster RCS, RCCS, RDCS,
FASE*
Benjamin Freed, MD, FASE
Mark Friedberg, MD, FASE
Audrey Gardner
Suzanne Golz, MS, RDCS, FASE
Beverly Gorman, RDCS*
Frank Green, MD
Aileen Houghton
David Hsi, MD, FASE
Jill Inafuku, BS, RDCS, RDMS, FASE
Farid Jadbabaie
Kishor Joshi, AIA
Vidyasagar Kalahasti, MD
Martin Keane, MD, FASE
Mary Etta King, MD, FASE
Thanh Kirkpatrick
Theodore Koliass, MD, FASE
Srikanth Koneru, MD
Samantha Kopcienski
Smadar Kort, MD, FASE
Oi Ling Kwan, BS, RDCS, FASE
Wyman Lai, MD, MPH, MBA, FASE
James Lee
Steven Lester, MD, FASE
Steve Leung, MD, FASE
Stephen Little, MD, FASE
Leo Lopez, MD, FASE
Juan Lopez-Mattei, MD, FASE
George Lui, MD, FASE
Kameswari Maganti, MD, FASE
Jane Marshall, BS, RDCS, FASE
Vernon Mascarenhas, MD
Joanne Mazzarelli
Scott McQuilkin
Anuj Mediratta, MD, FASE
Lawrence Melniker
Jennifer Mercandetti, BS, RDCS (AE/
PE), FASE
Debbie Meyer
Issam Mikati, MD, FASE

Fletcher Miller Jr., MD, FASE
 Douglas Misch*
 Carol Mitchell, PhD, RDMS, RDCS,
 RVT, RT(R), FASE
 Victor Mor-Avi, PhD, FASE
 Jacobo Moreno Garijo
 Samira Morhy, MD, FASE
 Bernhard Mumm
 Kathleen Munson, RDCS, RVT, RDMS
 Dakshina Murthy, MD, FASE
 Raymond Musarra, RDCS, RCS, FASE*
 Tasneem Naqvi, MD, FASE
 Roger On, MD
 Donald Oxorn, MD
 Sheela Pai Cole, MD, FASE
 Margaret Park, BS, RDCS, RVT, FASE
 David Parra, MD, FASE
 Daxa Patel
 Priti Patel
 Sanjay Patel
 Minesh Patel
 Amit Patel, MD
 Sheena Patel
 Hitesh Patel
 Patricia Pellikka, MD, FASE
 Sue Phillip, RCS, FASE
 Nelangi Pinto, MD, FASE
 Juan Carlos Plana, MD, FASE
 Angie Porter
 Gregg Pressman, MD, FASE
 Michael Puchalski, MD, FASE
 Jyothy Puthumana, MD, FASE
 John Quinn, MD
 Sasan Ryan Raissi, MD
 Inga Robbins, MD, FASE
 Veronika Rodriguez, RDCS, FASE
 Steven Romero, MD, FASE
 Judy Rosenbloom, RDCS, FASE
 Angela Saca
 Ritu Sachdeva, MBBS, FASE
 Omid Salehian
 Danita Sanborn MD, MMSc, FASE
 Aarti Sarwal, MD
 Stephen Sawada, MD
 Nelson Schiller, MD, FASE
 Sanjiv Shah, MD, FASE
 Elaine Shea, RCS, RCCS, FASE
 Richard Sheu, MD
 Lana Skelton, MD
 Nikolaos Skubas, MD, FASE
 Michael Smith, MD, FASE

Neha Soni-Patel, BS, RDCS, FASE
 Kirk Spencer, MD, FASE
 Jordan Strom, MD, MSc, FASE
 Gregory Tatum, MD, FASE
 James Thomas, MD, FASE
 Elizabeth Thompson, RDCS, FASE
 John Toptine, RCS, RDCS, FASE
 Wendy Tsang, MD
 Andrea Van Hoever, MSGH
 Patricia Vassallo, MD, FASE
 Flordeliza Villanueva, MD
 Melissa Wasserman, RDCS, RCCS,
 FASE*
 Grzegorz Wdowiak
 Kevin Wei, MD, FASE*
 Richard Weiss, MD, FASE
 Robin Wiegerink, MNPL
 Susan Wilansky, MD, FASE
 Tom Wolk
 Xinxing Yang
 Luciana Young, MD, FASE
 Lily Zhang, MD
 Qiong Zhao, MD, PhD, FASE
 Jing-Sheng Zheng, MD, PhD, FASE
 Allison Zielinski, MD
 Karen Zimmerman, BS, RDCS (AE,
 PE), RVT, FASE

FRIEND INVESTORS (\$15-\$99)**

Cyril Abrams
 Theodore Addai, MD
 David Addley, DO
 Michael Adjei-Poku, MD, MPH
 Syed Ahmed, MD
 Loubna Amar, RCS
 Ala Anbar
 Ashish Aneja, MD
 Ajay Bali, MD
 Ashutosh Bapat, MD, FASE
 Michael Edwin Bearb, MD
 Harald Becher, MD, PhD
 Michelle Bierig, RCS, RDCS, FASE
 Sabrina Black, BS, RDCS, FASE
 Ian Bond, MD
 Leslie Brookfield, MD
 Donica Bryant, BS, RDCS
 Jeffrey Buetikofer, MD
 Reginald Bulkley
 Elena Castillo
 Antonis Christodoulides, MD

David Clardy, MD
 Michelle Clunie
 Jose Coddens, MD
 Mark Cohen, MD
 Frederman Concepcion, MD
 Cartan Costello
 Vlad Cotarlan, MD
 Daniel Courtade, MD
 Tina Cullen
 Kwasi Dakwa, MD
 Joseph Daoko, MD
 Dimuth De Silva, MBBS
 Giovanni Deluca, MD
 Susan Dillon, RDCS, FASE
 Teri Dittrich, BA, RDCS, FASE
 Allison Divanovic, MD
 Michael Duggan, MD, FASE*
 Elizabeth Ebert, MD, FASE
 Erik Echegaray, BS, RDCS, FASE
 John Erikson, MD, PHD, FASE
 Abimbola Faloye, MD
 Julie Fetters, MD, FASE
 Francois Gagnon, MD
 John Galle, MD, FASE
 Jagadeesh Ganji
 Edinson Garcia, MD
 Anthony Gargiulo, RDCS, FASE
 Dan Giebel, MD, FASE
 Santosh Gill, MD
 Kathryn Glas, MD, FASE
 V. Jason Godenir, MD
 Jose Luis Gutierrez-Bernal, MD
 John Heath, MD
 Marion A Hofmann Bowman
 Nay Htye
 Lanqi Hua, RDCS, (AE/PE/FE), FASE
 Daniel Humiston, MD
 Helen Hunt, MA
 David Hur
 Debra Isaac, MD
 Loretta Isada, MD
 Dinesh Jagasia, MD
 Renuka Jain, MD, FASE
 Sean Jedrzkiewicz, MD, FASE
 Maurice Jones, MD
 Michelle Josephson
 Cecilia Juarez, BS, RDCS
 Gilda Kadiu, RDCS, FASE
 Alan Katz, MD, FASE
 William Katz, MD, FASE

Linh Kieu
 Devendra Koganti, MD
 Chris Kramer, RDCS, FASE
 Lance La Madrid, RDCS, RVT, FASE
 Sherif Labib, MD
 Mark Lebeis, MD
 Daniel Leonard, MD
 Robert Levine, MD
 Thomas Lewandowski, MD
 Theodore Lieux, MD
 Jimmy Lu, MD, FASE
 Jose Madrazo, MD, FASE
 Christopher Mahnke
 Haruka Makinae, MD
 Angela Malone, RDCS, RVT, FASE
 Andrew Mangum, MD
 Noelle Mann
 Pamela Marcovitz
 Juan Marmol-Velez, MD
 Veronica Massey
 Wilson Mathias Jr., MD, FASE
 Carlene McClanahan, RDCS, FASE
 Veeranna Merla
 John Mireau
 Tricia Moore
 Samia Mora, MD, FASE
 Carol Mortier, RDCS, RVT, FASE
 Thomas Murtaugh, MD
 Sheila Myers
 Gillian Nesbitt, MD, FASE
 Ijeoma Okogbue, MD
 Bassam Omar, MD
 Richard Palma, BS, RDCS, RCS, FASE
 Srinivas Pamidi, MD
 Robert Parris
 Anitha Parthiban, MD, FASE
 Meenaxi Patel
 Sanjay Patel, MD
 Priscilla Peters, BA, RDCS, FASE
 Dermot Phelan, MD, PhD, FASE
 Teresa Phipps, RDCS
 Andie Piddington*
 Rhonda Price
 Miguel Quinones, MD, FASE
 Mohammed Rais, MD, FASE
 Preeti Ramachandran
 Barbara Ray-McDade, RDCS
 Jorge Reyes Villanes
 Brian Riegel
 Carlos Rivas-Gotz, MD

2018 APPEAL DONORS

Paul Rogers, MD
Gerald Roul, PhD, MD
John Roy, MD, PhD
Linda Russo
Kiran Sagar, MD
Samir Saha, MD, PhD, FASE
Nizar Saleh
Alberto San Juan Jr., MD
Monika Sanghavi
Vimala Santhanam, MD, FASE
Elif Seda Selamet Tierney, MD, FASE
Sanjiv Shah
Barbara Sidoti

Mengistu Simegn, MD
Saket Singh
Jack Slosky, PhD, MBA
Lynn Smith-Dorsey, RCS, BS
Terri Stewart, RDCS, RVT
Joel Strom, MD
Joel Swanson, MD
Vu Ta, MD
Rekha Tailor
Timothy Tan, MBBS, BSc (Hons 1),
PHD, FASE
Carrie Taylor, RDCS, RVT
Howard Terry, MD

Ganpat Thakker, MD, FASE
Nidhish Tiwari, MD, FASE
Matthew Townsley, MD, FASE
Stephen Van Duren, RDCS, FASE
Colette Veyrat, MD
Deepthi Vodnala, MD, FASE
Lin Wang, MD, MS, FASE
Yu Wang, RDCS (AE)
Elizabeth Welch, MD, FASE
Kanoë Williams
Lynne Williams, MBBCh, PHD
Thaw Winmaung, RDCS, RVT
Michael Wise

L. Wolfe, MD
Konstantin Yastrebov
William Yip, MD
David Zakas, RDCS, RVT, RDMS
Syamasundera Zampani, MD

**Denotes an ASE Foundation sustainer*

***This list reflects all donations of \$50 or more made to the 2018 Annual Appeal between 1/1/2018 and 12/31/2018*

We strive to be accurate and complete, but errors occasionally occur. Your assistance in bringing any inaccuracies to our attention is greatly appreciated.

The ASE Foundation would like to thank the following organizations for their support of the 2018 Annual Appeal

Bracco Diagnostics Inc.
CAE Healthcare
Canon Medical Systems USA, Inc.
Cardiovascular Credentialing International
Children's Hospital of Philadelphia
Cleveland Clinic
Duke University Medical Center
Esaote North America
GE Healthcare
Haslam Family Endowed Chair in CV Medicine
Houston Methodist Hospital
Johns Hopkins University
Lantheus Medical Imaging, Inc.
MedStar Health

National Board of Echocardiography, Inc.
Northwestern Medicine
Oregon Health & Science University
Patel Family Foundation
San Diego Society of Echocardiography
StudyCast by Core Sound Imaging, Inc.
University of Kentucky

2018 Annual Appeal Partner

Intersocietal Accreditation Commission

2018 Partners in Care

Financial grant support, in-kind equipment, and logistical arrangements for global health events.

Mérida, Yucatán, Mexico, August 2018

Philips Mexico Commercial S.A. de C.V.

West Virginia, October 2018

AliveCor
Butterfly Network
Cloud DX®
Edwards Lifesciences Foundation
Hitachi Healthcare Americas
Hitachi Healthcare Americas Informatics Division
Kencor Health
Phosphorus Inc.
West Virginia University Heart and Vascular Institute

In-kind Research Support for the World Alliance Societies of Echocardiography (WASE) Normal Values Study

Medidata
MedStar Health
TOMTEC IMAGING SYSTEMS GMBH
University of Chicago

Ongoing Support through Multi-Year Grants for 2018 Scholarships and Travel Grants

Elsevier Inc.
National Board of Echocardiography, Inc.
TOMTEC IMAGING SYSTEMS GMBH
UltraEcho, Ltd.



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 here are new FASE members from the February, April, June, August, October, and December cycles. For a complete list of FASE, please visit SeeMyHeart.org. Learn more about applying for FASE at ASEcho.org or stop by ASE's booth #409. New inductees will be recognized at the ASE Awards Session on Saturday morning at 8:15 AM. Join us to recognize their accomplishment!

FASE LOUNGE – B-114 – LEVEL 1

SATURDAY, JUNE 22ND – MONDAY, JUNE 24TH

9:00 AM – 4:00 PM

TUESDAY, JUNE 25TH

9:00 – 11:00 AM

Enjoy the benefits of being a Fellow of the American Society of Echocardiography (FASE) at the exclusive FASE Lounge. Come and pick up your FASE ribbon to show your dedication to your field and your prestigious designation. Lounge amenities will allow you to connect with friends, grab some refreshments, and take a break from the hustle and bustle of the day while being close to all the sessions.

MEET FACE TO FACE

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 #409 in the Exhibit Hall, during the morning and afternoon breaks on Sunday and Monday, 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.

NEW FASE RECIPIENTS

June 2018 - April 2019

Ginnie Abarbanell, MD, FASE
Karima Addetia, MD, FASE
Santhi Adigopula, MD, FASE
Arpit Agarwal, MD, FASE
Sabreen Ahmed, BS, RCS, FASE
Erick Avelar, MD, FASE
Sowmya Balasubramanian, MD, FASE
Shane Balthazaar, BSc.Kin, RDCS, FASE
Michelle Anne Bay, ACS, RDCS, FASE
Mary Bechis, MD, FASE
Manoj Bhandari, MD, FASE
Monodeep Biswas, MD, FASE
Vaibhav Bora, MBBS, FASE
Yuriy Bronshteyn, MD, FASE
Brittany P. Byrd, RDCS, FASE
Shemy Carasso, MD, FASE
Sheila J. Carroll, MD, FASE
Courtney J. Cassidy, RDCS, FASE
Tiffany Chen, MD, FASE
Laurie J. Clark, RDCS, FASE
Frederick W. Crock, MD, FASE
Brigid Culey, BS, RDCS, FASE
Mauricio Daher, MD, PhD, FASE
Debra Lynn Dhondt, RN, RDCS, FASE
Arpan Rameshchandra Doshi, MD, FASE
David M. Dudzinski, MD, FASE
Parma Nicole Duncan, BS, RCCS, RDCS, (FE PE), FASE
Alexander Egbe, MD, MPH, FASE
Jens Eichhorn, MD, PhD, FASE
Matthew Ellison, MD, FASE
Mariano Luis Falconi, MD, FASE
Rohesh J. Fernando, MD, FASE
Andrea L. Fields, MHA, RDCS, FASE
Abhishek Gaur, MD, FASE
Brian R. Gebhardt, MD, MPH, FASE
Amanda M. Geilfuss, BS, RDCS, RVT, FASE
Mariya Geube, MD, FASE
Josh Gilles, ACS, RDCS, RCCS, FASE
Suma Goudar, MD, FASE
Michael Goyfman, MD, MPH, FASE
Julia Grapsa, MD, PhD, FASE

Antonio Hernandez, MD, FASE
Elizabeth Lee Herrera, MD, FASE
Eliotte Hirshberg, MD, FASE
McKenzie Hollon, MD, FASE
Adam E. Jackson, RDCS, RVT, BS, FASE
Ankit Jain, MBBS, FASE
Christine Jellis, MD, PhD, FASE
Gangadhara Kabbli, MD, FASE
Nishant Kalra, MD, FASE
Kelly L. Kasir, RCCS, RCS, FASE
Abhishek Khemka, MD, FASE
Maria G. Kiaffas, MD, PhD, FASE
Jiwon Kim, MD, FASE
Kenneth Scott Kirby, RDCS, FASE
Rukmini Rajaratnam Komarlu, MD, FASE
Andrew Kott, MD, FASE
Megan Kraushaar, BS, RCS, FASE
Laura Rose Kress, BS, RDCS, RVT, FASE
Brandi Nicole Lang, BS, RDCS (PE, FE), RCCS, FASE
David E. Langholz, MD, FASE
James C. Lee, MD, FASE
Cynthia Lenninger, RDCS, RVT, FASE
Laura Maria Mattos Lourenco, MD, FASE
Radmila Lyubarova, MD, FASE
Peace Madueme, MD, MS, FASE
Jose Donato A. Magno, MD, FASE
James Maher, MD, FASE
Kate Marriott, MCardiacUltrasound, ACS, AMS, FASE
Ronald Mastouri, MD, FASE
Ashley Ann Mays, MD, FASE
Carlene A. McClanahan, RDCS, FASE
Erin D. Michos, MD, MHS, FASE
Lara Miller, RDMS, RVT, RDCS, RCCS, FASE
Shalini Modi, MD, FASE
Denisa Muraru, MD, PhD, FASE
Hesham Abdo Naeim, MD, FASE
Jayant Nath, MD, FASE
Kris Nowakowski, MBBS, FASE
Kathy A. Olejnik, BS, RDCS, ACS, FASE
Allison Ornella, AAS, RDCS, RVT, FASE
Dawn Park, BS, RDCS, RDMS, FASE
Matthew W. Parker, MD, FASE
Marquand Patton, Jr., DO, RPVI, FASE
Joshua Pearson, RCS, CCSS, CRAT, FASE
Katherine Phillips, RDCS, RVT, FASE
Anuradha S. Prabhu, MD, FASE
Yvonne B. Prince, ACS, RDMS, RVT, RDCS, FASE
Salima Qamruddin, MD, MPH, FASE
Marilyn F. Riley, RDCS, FASE
Sarah Marie Roemer, BS, RDCS, FASE
Wen Ruan, MD, FASE
Sarah Ann Samaan, MD, FASE
Fabio Sangalli, MD, FASE
Michael S. Scholfield, MD, FASE
Becky Gibbons Schwaegler, BS, RDMS, RDCS (AE,PE), FASE
Timothy Jon Sekarski, RDCS, RCCS, FASE
Tina Shah, MD, FASE
Sofia Shames, MD, FASE
Jyoti Sharma, MD, FASE
Richard David Sheu, MD, FASE
Ahmad H. Shihabi, MD, FASE
Manavjot S. Sidhu, MD, FASE
Abraham Sonny, MD, FASE
Kenan W.D. Stern, MD, FASE
Jordan B. Strom, MD, MSc, FASE
Sudhakar Subramani, MBBS, MD, MMed, FASE
Sharath S. Subramanian, MD, FASE
Michele Sumler, MD, FASE
Robert John Suriani, MD, FASE
Poonam Thankavel, MD, FASE
Julian M. Thomas, MD, FASE
Cassie Michelle Tighe, BS, RCS, FASE
Edwin S. Tucay, MD, FASE
Robert D. Tunks, MD, MHS, FASE
Ratna Vadlamudi, MD, FASE
Deepthi Vodnala, MD, FASE
Lin Wang, MD, MS, FASE
Lisa A. Wehrle, AAS, AAB, RDCS, FASE
Brandon M. Wiley, MD, MSc, FASE
Bo Xu, MD, FASE
Tina Yost, ACS, RDCS, RVT, FASE
Syed Javed Hasan Zaidi, MD, FASE
Kathryn K. Zeigler, BS, RRT, RDCS, FASE

Register by July 20th for
an additional \$30 off the
early registration prices!

ASE 2020

THE NEXT
MILLENNIUM

**Gaylord Rockies
Resort and
Convention Center
Denver, Colorado**

June 19-23, 2020

ASEScientificSessions.org

American Society of Echocardiography

the next level
of fetal, pediatric, and
adult congenital echo



Join us for Hitachi's Science and Technology Theater presentation

...a lifetime of
echocardiography

ASE2019 ~ June 21st 6:30

IMAGINGINSIDERS2019
ASE SCIENCE AND TECHNOLOGY THEATER

LISENDO 880
Premium 2D and 3D Cardiovascular Ultrasound

Science & Technology Theater sessions are not part of the official ASE Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

