ASE 2017 Final Program



Baltimore Convention Center

American Society of Echocardiography ASEScientificSessions.org

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.

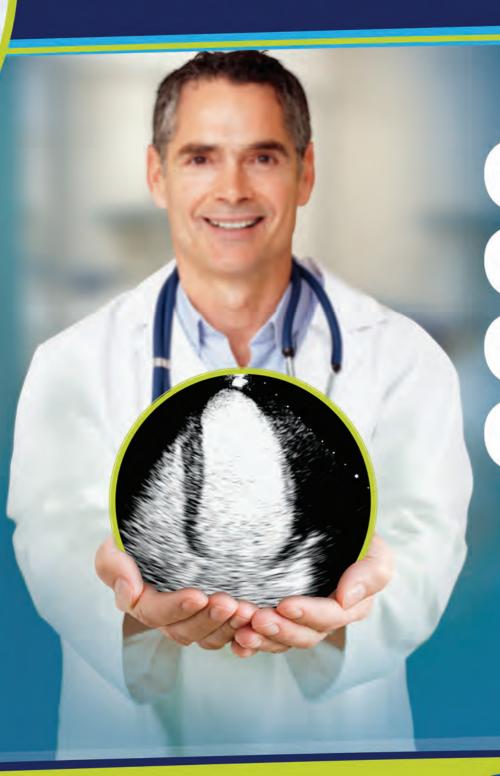
In postmarketing use, rare but serious cardiopulmonary or hypersensitivity reactions have been reported during or shortly following perflutren-containing microsphere administration [see Adverse Reactions (6)]. The risk for these reactions may be increased among patients with unstable cardiopulmonary 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.



Visit our booth at ASE

The DEFINITY® Difference

A proven diagnostic advantage that optimizes outcomes, patient management, and cost-effectiveness¹



- Impacts cardiac diagnosis¹
- Avoids additional diagnostic procedures¹
- Alters patient management decisions¹
- Reduces resource utilization and per-patient expense¹

More than 8 million echoes have been performed with DEFINITY*7

Please see brief summary on the next page, including boxed **WARNING** regarding serious cardiopulmonary reactions.

REFERENCES: 1. Kurt M. et al. Impact on Contrast Echocardiography on Evaluation of Ventricular Function and Clinical Management in a Large Prospective Cohort. J. Am. Coll. Cardiol. 2009;53:802-810. 2. DEFINITY* [package insert]. N. Billerica, MA: Lantheus Medical Imaging, Inc., 2017. 3. Becher H, Burns PN. Handbook of Contrast Echocardiography: Left Ventricular Function and Myocardial Perfusion. Heidelberg, NY: Springer-Verlag; 2000;2-44. 4. Kitzman DW. et al. Efficacy and Safety of the Novel Ultrasound Contrast Agent Perfusiren (DEFINITY) in Patients with Suboptimal Baseline Left Ventricular Echocardiographic Images. Am J Cardiol. 2000;86:69-674. 5. Sboros V, et al. Contrast Agent Stability: A Continuous B-Mode Imaging Approach. Ultrasound in Med. & Biology. 2001;27:1367-1377. 6. Data on file, Lantheus Medical Imaging. In C. 7. ©2017 DE/Decision Resources, LLC. All rights reserved. Reproduction, distribution, transmission or publication is prohibited. Reprinted with permission.







FOR INTRAVENOUS USE

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 perflutrencontaining 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 horder.

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 intraarterial 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 perflutrencontaining 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), 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

		INITY® 1716)
Total Number of Adverse Reactions	269	,
Total Number of Subjects with an Adverse Reaction	144	(8.4%)
Body system		
Preferred term	n	(%)
Application Site Disorders	11	(0.6)
Injection Site Reactions	11	(0.6)
Body as a Whole	41	(2.4)
Back/renal pain	20	(1.2)
Chest pain	13	(8.0)
Central and peripheral nervous		
system disorder	54	(3.1)
Headache	40	(2.3)
Dizziness	11	(0.6)
Gastrointestinal system	31	(1.8)
Nausea	17	(1.0)
Vascular (extracardiac) disorders	19	(1.1)
Flushing	19	(1.1)

N=Sample size 1716 subjects who received activated $\ensuremath{\mathsf{DEFINITY}}^{\oplus}$

 $\ensuremath{\mathsf{n=}}\xspace\mathsf{Number}$ 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

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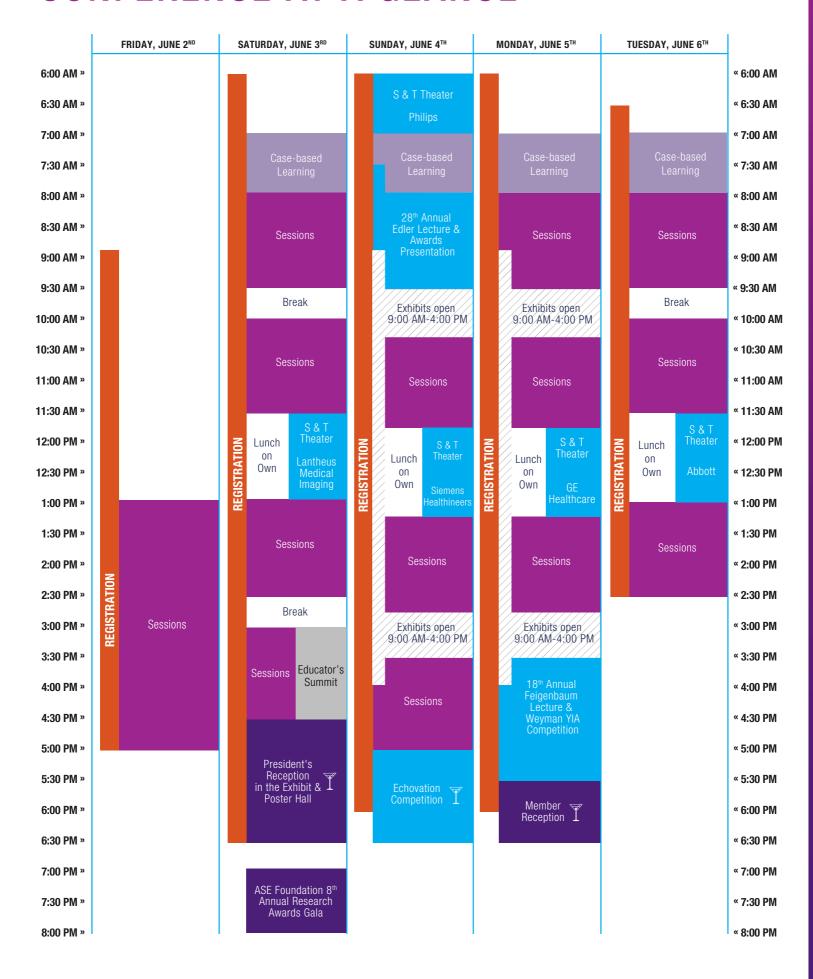
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Contribute to the conversation Hear from top echo experts Obtain connections



CONFERENCE AT A GLANCE





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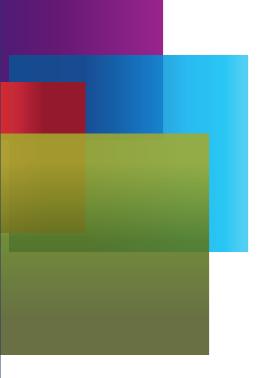
Stay up-to-date on ASE 2017 and all of ASE's live educational courses by downloading the

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 and Apple Stores to download.







ASE 2017 Program Chair **Geoffrey A. Rose, MD, FASE** Sanger Heart & Vascular Institute Charlotte, North Carolina



ASE 2017 Sonographer Co-Chair **Elizabeth McIlwain, MHS, RCS, FASE**

West Jefferson Medical Center/ LCMC Health

New Orleans, Louisiana

WELCOME MESSAGE

Dear Colleagues,

On behalf of the Scientific Sessions Planning Committee, welcome to the 28th Annual American Society of Echocardiography Scientific Sessions! The theme of this year's meeting is **Investigate—Innovate—Incorporate**, and as you look through the program to plan the sessions you will attend, we trust that you will see these concepts well reflected in the meeting's content.

To expand: ASE's members have a distinguished record of accomplishment in using ultrasound to pursue important questions (<u>investigation</u>) and then develop solutions (<u>innovation</u>) that impact how we take care of patients every day (<u>incorporation</u>). Each step is vital if we are to advance care. Mirroring this, many symposia begin with the basics, then overview emerging techniques—we've **embedded abstracts** selected from this year's submissions—then close by synthesizing how to put this all together in daily practice. Our popular **Chalk Talks** and **Guidelines in Action** sessions also serve to translate core concepts and new ideas into applicable frameworks.

Some highlights: The emerging disciplines of **Critical Care Echo**, **Cardio-Oncology**, and **Structural Heart Disease** have been organized into **mini-courses** within the Sessions, giving a head start to those seeking to incorporate these programs into clinical practice. Our **Value Summit** on Monday will help to make sense of the rapid changes transforming the U.S. healthcare landscape and offer practical approaches when preparing for the 'value world' that lies ahead. And in conjunction with the Intersocietal Accreditation Commission (IAC), headquartered here in Baltimore, we have organized an **Accreditation Boot Camp** to provide you with one-on-one time with IAC staff and leadership.

Not to be missed: In this year's **Edler Lecture**, ASE's Immediate Past President Susan Wiegers, MD, FASE will present "The Point of Care." Howard Leong-Poi MD, FASE will discuss "The Evolution of Contrast Echocardiography: A Journey from Diagnostic to Therapeutic Applications" in this year's **Feigenbaum Lecture**. We welcome **Valentin Fuster, MD, PhD**, editor of the *Journal of the American College of Cardiology*, as guest lecturer and co-chair of our Vascular Council's symposium "The Coming Storm: Atherosclerosis Imaging." We will do deep dives into "Strain Imaging in Heart Failure" and "Assessment of Diastolic in Special Populations" in joint sessions with the Japanese Society of Echocardiography and with European Association of Cardiovascular Imaging. And we will salute **Dr. Alan Pearlman's** tenure as editor of JASE in a new session, "The Editor's Pick," where we will highlight some of the most important science our journal has published in the past year or so.

What's new and cutting-edge? The **2**nd **annual Echovation Challenge** on Sunday afternoon provides a glimpse as to what the future holds. The **Exhibit and Poster Hall** serves as our gathering place to view the latest in technology and learn more in the industry-supported **Science and Technology Theater** sessions. Visit **over 350 posters** detailing the latest research (including moderated sessions), and please plan to join in on the **Sonographer Investigator's Award** and **Young Investigator's Award Competitions**.

Networking remains an important aspect of ASE's Scientific Sessions. The ASE Foundation once again hosts the **Research Awards Gala**, and the **President's and Member Receptions** provide a great opportunity to connect with friends old and new. And we hope you will take some time with colleagues after each day's events to explore all that Baltimore's Inner Harbor has to offer.

On behalf of the ASE Scientific Sessions Program Committee and the Board of Directors, we thank you for attending this year's meeting. Welcome to Baltimore!

ASE 2017 PROGRAM COMMITTEE



Geoffrey Rose. MD, FASE Chair



Mary Corretti, MD, FASE Local Liaison



Michael Main, MD, FASE Member at Large



Elizabeth McIlwain, MHS, RCS, FASE Sonographer Co-Chair



Jeanne DeCara. MD, FASE Member at Large



Sunil Mankad, MD, FASE Abstract Chair and International Relations Representative



Richard Grimm, DO. FASE Past Chair



Alan Finley, MD, **FASE** Perioperative Council Representative



Sherif Nagueh, MD, FASE Member at Large



Allan Klein, MD, **FASE** President



Craig Fleishman, MD, **FASE** Member at Large



Margaret Park, BS, ACS, RDCS, **RVT, FASE** Member at Large



Abraham, MD, **FASE** Presidential Liaison

Theodore



Mark Friedberg, MD, FASE PCHD Council Representative



Thomas Porter, MD. FASE Member at Large



EdD, RN, RDCS, ACS, FASE Cardiovascular Sonography Council Representative

Merri Bremer,



Steven Goldstein, MD, **FASE** Member at Large



Vera Rigolin, MD, FASE President-Flect



Samuel Brown, MD, FASE Point of Care Representative



Amer Johri, MD, **FASE** Vascular Council Representative



Marielle Scherrer-Crosbie, MD, FASE Abstract Co-Chair

SCIENTIFIC PROGRAM TRACKS & KEY

CASE-BASED LEARNING



During these sessions, the practice of clinical echocardiography and its relationship to patient management will be highlighted and stressed by experts. Special attention is paid to valvular disease during dedicated sessions. In addition, diastolic function, contrast, the right ventricle, and myriad other topics are covered in these sessions. There is a dedicated track devoted to cases each morning from 7:00 - 7:50 AM.



This track will instruct practitioners on techniques of assessment and quantitation. There are disease-based sessions that will help you improve your skills in chamber quantification and imaging a variety of disease states. In addition, there are practical sessions on lab management. diastology, and pericardial disease that you can incorporate into your lab when you return home. There is a special session on Friday, June 2 addressing scanning and ergonomics.

PEDIATRIC/CONGENITAL 22



The ASE Council on Pediatric and Congenital Heart Disease has put together a program packed with cutting-edge science from fetus to adult, whether you are a pediatric echocardiographer or just want to learn more about the care of patients living with congenital heart diseases. The popular staples of the track return: Pediatric Echo Jeopardy, Fireside Chat, case presentations, oral abstract sessions, and the always entertaining controversy debates. We will unveil the mysteries of some of the newer echo technologies, such as 3D printing, and see how expert care centers apply them in clinical practice.

PERIOPERATIVE P



This track has been designed by the ASE Council on Perioperative Echocardiography to bring surgeons, anesthesiologists, echocardiographers, and sonographers together. These sessions will explore incorporating 3D echo into your practice for cases including mitral valve disease, aortic stenosis, and the dilated aortic root.

POINT OF CARE



New in 2017 The Point of Care track has been added because this highly valuable modality is of critical importance as healthcare practitioners become skilled in the use of point of care ultrasound. A special session on Friday afternoon on POCUS Basics: Ultrasound for the Critically III Patient is a great introductory session to this innovative use of cardiovascular ultrasound. There are also sessions on understanding ultrasound outside the echo lab and evaluating the hypertensive patient in the ICU and emergency department.

SYMPOSIA [5]



The 2017 Program Committee has designed the Symposia Track to move from more basic lectures on Saturday to an increasing focus on new technology, techniques, and science on the other days. Each symposium discusses a specific topic in detail and instructs you on how to apply state-of-the-art cardiovascular ultrasound techniques in clinical practice.

RESEARCH R



Investigators will present the latest advances in cardiovascular ultrasound throughout the conference. Don't miss two special competitions designed to acknowledge exceptional research. the Sonographer Investigator's Award Competition and the prestigious Arthur E. Weyman Young Investigator's Award Competition, where the four best abstracts submitted compete in front of a panel of luminaries for international recognition. Meet the investigators during dedicated poster viewing times in the Exhibit & Poster Hall.

VASCULAR V



ASE's Council on 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. Dr. Valentin Fuster, Director of the Zena and Michael A. Wiener Cardiovascular Institute, Mount Sinai Heart, is a special faculty guest for The Coming Storm: Atherosclerosis Imaging session on Saturday, June 3. You won't want to miss the special vascular sessions on Friday afternoon, June 2, which include Carotid and Peripheral Imaging for Atherosclerosis and EchoVascular Ergonomics.

REGISTRATION INFORMATION

ATTENDEE REGISTRATION

The ASE Registration Counter is located in the Charles Street Lobby outside the Exhibit & Poster Hall on Level 100 of the Baltimore Convention Center. Attendees may pick up their conference materials and name badge at this location.

REGISTRATION HOURS

Friday, June 2 nd	.9:00 AM - 5:00 PM
Saturday, June 3 rd	6:00 AM - 6:30 PM
Sunday, June 4 th	6:00 AM - 6:00 PM
Monday, June 5 th	6:00 AM - 6:00 PM
Tuesday, June 6 th	6:30 AM - 2:30 PM

NAME BADGES

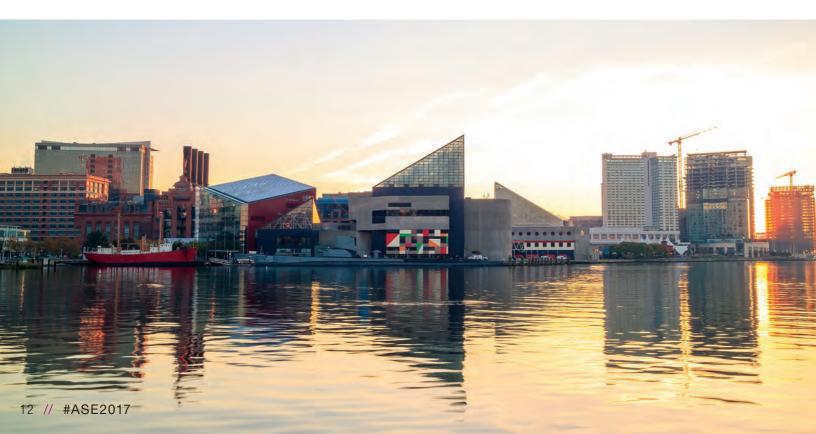
Admission to the educational sessions, ASE Exhibit & Poster Hall, and Science & Technology Theater is by badge only. Please wear your name badge at all times when in the convention center. We recommend, for your safety, that you do not wear your name badge outside of the convention center. ASE exhibitors 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 Counter. ASE reserves the right to revoke or deny attendance to any registered participant, speaker, exhibitor, news media reporter, or photographer at presentations or activities during the 28th Annual ASE Scientific Sessions.

SPEAKER READY ROOM

Faculty name badges are available at the ASE Registration Counter during registration hours. The Speaker Ready Room is located in Room 321-322 and staffed with technicians to assist faculty with uploading and previewing presentations. It is open during the following times:

Friday, June 2 nd 1	2:00 PM - 5:00	PM
Saturday, June 3 rd	6:00 AM - 4:30	PM
Sunday, June 4 th	6:30 AM - 4:30	PM
Monday, June 5 th	6:30 AM - 4:30	PM
Tuesday, June 6 th	6:30 AM - 1:00	PM



CLAIMING CONTINUING EDUCATION CREDIT

To claim your CME credit for the 28th 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 JULY 28, 2017.**

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 member profile).
- 3. Go to Step 6.

Nonmembers:

- 4. Go to **ASEUniversity.org** and create a new account or log into your existing account.
- 5. Go to Step 6.

Claiming Credit

- 6. Click on "Your Account."
- 7. Select the "Access Code" tab and enter the code "ASE2017"
- 8. Verify your registration information. Be sure to use the same information that you used to register for the event.
- 9. Once verified, click "Take Evaluation" to claim your CME credit. CME credits are not earned until the entire evaluation has been completed.
- 10. Remember to enter your ABIM, ABA, and/or ABP number and birth date if you choose to have MOC points for this meeting submitted to ABIM, ABA, or ABP. There is a space for this information on the first page of the evaluation.
- 11. Your certificate will be available for immediate download and can also be found under "Your Account" in the "CE Transcript".

INTERACTIVE SESSIONS: ASK QUESTIONS

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

iOS: http://apple.co/2oQyl3z Android: http://bit.ly/2pfalJD

Once you have downloaded the app, you can use the app to ask questions during each

- 1. Select "Agenda" on the main screen to access the sessions.
- 2. Select the Session you
- 3. Select "Ask a Question"
- 4. Enter your question and tap the red symbol in the



FACILITY INFORMATION

The Baltimore Convention Center's physical address is:

ONE WEST PRATT STREET
BALTIMORE, MARYLAND 21201

Located in the heart of Baltimore, the Baltimore Convention Center is nestled in the middle of the action. From the world renowned Inner Harbor to historic Little Italy, the Center offers attendees a grand variety of attractions just steps away.

The Center is conveniently located close to public transportation for easy access by MARC Train or Baltimore's Light Rail to Washington, D.C. or the Baltimore International Airport (BWI). Baltimore's Penn Station is a short seven minute drive while BWI Airport is only 20 minutes by car.

FIRST AID

An emergency medical professional will be available during the hours of the ASE 2017 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 nurse on duty.

LOST & FOUND

Questions regarding lost or found items can be directed to the ASE Registration Counter located in the Charles Street Lobby outside the Exhibit & Poster Hall on Level 100 of the convention center.

LUGGAGE STORAGE

Luggage storage will be available at the Baltimore Convention Center in the Charles Street Lobby near the ASE Registration Counter on Tuesday, June 6.

BALTIMORE CONVENTION CENTER BUSINESS CENTER

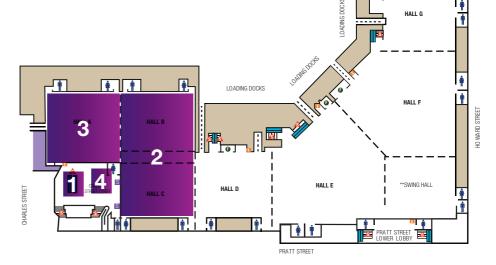
The Baltimore Convention Center features an in-house full service Business Center operated by ABC Imaging. The Business Center offers you a place to copy, fax, scan, and print your business materials on a variety of paper sizes and colors. You may also send your files by email (eking@abcimaging.com) to Business Center before arrival and have your documents ready for you at the start of the meeting. Shipping services are also available. The Business Center is located in the Pratt Street Lobby adjacent from Room 333. Hours of operation are Monday — Friday, 8:30 AM — 4:30 PM.



FACILITY MAP

CONWAY STREET

- Registration
- **Exhibit & Poster Hall**
- Science & Technology Theater
- **ASE Foundation Booth**
- **Session Rooms**
- **FASE** Lounge
- **Speaker Ready Room**
- **ASE Products Booth**
- **Learning Labs**
- **Committee Meetings**



LEVEL 100



LEVEL 300

LEVEL 400

PROGRAM INFORMATION & REGULATIONS

FOOD FUNCTIONS

ASE will provide continental breakfast on Level 300, from 6:30 – 7:30 AM daily. Morning and afternoon coffee breaks are available for registered attendees in the Exhibit & Poster Hall on Sunday, June 4 and Monday, June 5 and on Level 300, on Friday, June 2, Saturday, June 3, and Tuesday, June 6. 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 100, ASE will provide breakfast on Sunday, and lunch each day on a first come, first served basis (max. 350 participants). See page 83 of this program for a detailed theater schedule.

INTERNET ACCESS

Complimentary Wi-Fi is available in the Baltimore Convention Center. The password is: IHeartEcho.

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 the sessions you attend. Please remember to turn your mobile device to silent or vibrate mode. Refer to Page 13 for more information on the app.

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.

NEWS MEDIA

For information regarding news releases, news conferences, and interviews, please visit the ASE Registration Counter located outside the Exhibit & Poster Hall on Level 100 of the convention center. Copies of all news releases are also available under "News" on **ASEcho.org**.

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.

PHOTOGRAPHY AND AUDIO/ VISUAL RECORDING POLICY

No person may record any portion of the ASE 2017 Scientific Sessions, either by video, still or digital photography, audio or any other recording or reproduction mechanism. Taking photos of or recording the content of meeting room slides or poster abstract presentations is also prohibited and is considered intellectual piracy. Attendees who ignore this policy will be asked to leave the educational session and are at risk of losing their conference badge and privileges. Photographs taken for the purpose of sharing on social media is allowed, but should avoid showing presentation slides. Please use #ASE2017 when posting on social media. ASE reserves the rights to all recordings or reproductions at ASE meetings. Please be aware that during the Scientific Sessions, attendees, vendors, guests, and exhibitors may be photographed or videotaped by ASE 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.

CHILDREN

Information about childcare is available at your hotel's concierge desk. ASE does not offer childcare services. Due to limited seating capacity and the highly technical nature of the program, children are not allowed to attend sessions. Children 12 and older must have a purchased guest registration before they will be allowed entry into the Exhibit & Poster Hall. Children 11 and younger, strollers, and infant carriers are not permitted on the exhibit floor at any time. For their safety, children must be accompanied by an adult at all times during the ASE 2017 Scientific Sessions.

EDUCATION INFORMATION

TARGET AUDIENCE

The ASE 28th 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, cardiac sonographers, and emergency and critical care physicians, as well as hospitalists, 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: Boston Scientific, GE Healthcare, Lantheus Medical Imaging, Inc., Thoratec.

IN-KIND DONATIONS

This activity is supported in part by in-kind donations from: GE Healthcare. Philips. Siemens Healthineers. TOMTEC Corporation.

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, intraprocedural, 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 practiceimprovement measures.
- Determine when to advise the surgeon that repair of residual lesions at time of surgery is necessary.
- ldentify the role of echocardiography in recognizing risk factors for poor outcome and improve management in congenital heart disease.
- Define the role of echo specifically in the guidance of non-surgical procedures.

ACCREDITATION AND DESIGNATION

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

The American Society of Echocardiography is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The American Society of Echocardiography designates the 28th Annual ASE Scientific Sessions for a maximum of **29.75** *AMA PRA Category 1 Credits*™ for attending the entire conference. Attendees should claim only the credit commensurate with the extent of their participation in the activity.

DAILY BREAKDOWN OF CME CREDITS:

June 2, 2017 = 3.5

June 3, 2017 = 6.75

June 4, 2017 = 7.0

June 5, 2017 = 7.25

June 6, 2017 = 5.25

Successful completion of this CME activity enables the participant to earn up to 29.75 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is 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 22 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 29 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 29.75 *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 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 Essential Areas and policies of the ACCME require that any relationships that could possibly conflict with the educational value of the program be resolved prior to the educational session and disclosed to the audience. In accordance with these policies, ASE implemented mechanisms prior to the planning and implementation of this CME activity to identify and resolve conflicts of interest for all individuals in a position to control content. Disclosure information is referenced and can be found beginning on page 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®.





ASE 2017 FACULTY DISCLOSURE INFORMATION

It is the policy of ASE to ensure balance, independence, objectivity, and scientific rigor in all of its educational activities. All speakers at the 28th 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 YOU ARE 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

Abraham, T	None
Adams, D	
Addetia, K	
Agler, D	
Agrawal, V	
Akhter, N	
Allada, V	
Altman, C	
Anderson, B.	
Acquatella, H	
Aragam, J.	
Arya, B	
Asch, F	
Aurigemma, G	
Austin, B	
Bailitz, J	
Baldano, L	
Banchs, J	

Bansal, M	None	Crandall, I	None
Barac, A	None	Crispi, F	None
Barker, P	None	Cuneo, B	Philips Ultrasound (1)
Becher, HBracco	(1, 2, 4); Lantheus (1, 4)	Davis, A	None
Belcik, J	None	DeCara, J	None
Bender, P	None	DeMaria, A	None
Benenstein, R	None	Dent, J	None
Betz, J	None	Desai, M	Myokardia, Inc (2)
Bienvenu, L	None	Dietz, H	None
Bierig, M	None	Diaz-Gomez, J	None
Blauwet, L	None	Dillenbeck, A	None
Boniface, K	None	Dilsizian, VGE Healthcare	e (4); Siemens Medical Solutions (4)
Border, W	None	DiMaria, M	None
Bourque, D	Lantheus Medical (1)	Dokainish, H	None
Brady, M	None	Donal, E	None
Breburda, C	None	Donofrio, M	None
Bremer, M	None	Dorfman, A	None
Brook, M	Siemens Ultrasound (4)	Douglas, P	None
Brown, S	None	Dragulescu, A	None
Burgess, P	None	Eberhardt, R	None
Burkett, D	None	Edvardsen, T	None
Byrd, Benjamin	None	Eidem, B	None
Byrd, Brittany	None	Elvert, L	None
Cameron, D	None	Ensing, G	None
Cardim, N	None	Estep, J	None
Carron, H	None	Fassl, J	None
Cavalcante, J	None	Feigenbaum, H	None
Chaudhry, F	None	Fey, B	None
Chen, E	None	Finley, A	None
Cho, G	None	Fleishman, C	None
Chow, C	None	Forsha, D	None
Chowdhury, S	None	Foster, M	None
Choy, J	Bracco (2)	Friedberg, M	None
Cleve, J	None	Frommelt, M	None
Cobey, F	None	Frommelt, P	None
Coffin, C	None	Galderisi, M	None
Cohen, M	None	Garcia, M	None
Coleman, D	None	Garg, R	None
Colen, T	None	Geva, T	None
Collins, K	None	Gill, E	None
Corretti, M	None	Gillam, L	None

Glyde, KLantheus Medical Imaging () Khalique, O	None
Goldberg, DNor	e Khandheria, B	None
Goldstein, SNor	e Khoo, N	None
Gopal, ANor	e Kim, E	None
Gorcsan, JBiotronic (4); GE (4	; Kim, Y	None
Hitachi Aloka (4); Medtronic () King, M	None
Gordon, TNor	e Kirkpatrick, J	None
Gorman, BNor	e Kisslo, J	None
Griffin, BNor	⁹ Klein, A	None
Grimm, RNor	⁹ Klarich, K	None
Grissom, CNor	e Knoll, P	None
Guerra, VNor	⁹ Ko, H	None
Gutierrez-Fajardo, PNor	e Kort, S	None
Ha, JNor	⁹ Koulogiannis, K	None
Hahn, RNor	e Kovalchin, J	None
Harrild, DNor	Kramer, C	None
Hays, ANor		None
Helfinstine, KNor		None
Herrmann, HAbbott Vascular (4); Bayer (4	Kronzon, L	Cardiovascular Research Foundation (2)
Boston Scientific (4); Corvia (4 Edwards Lifesciences (4); Medtronic (4	, , , ,	Lantheus Medical Imaging (2)
Microinterventional Devices (3); St Jude Medical (4		None
Hill, J Philips Healthcare () Kutty, S	None
Hirshberg, ENor	e Lai, W	None
Hoit, BNor	e Landeck, B	None
Horton, KNor	e Lang, R	None
Hung, JNor	e Lanspa, M	None
Hunter, KNor	e Leong-Poi, H	Lantheus Medical Imaging (1);
Isselbacher, ENor	Э	Bracco Imaging (8)
Janardhanan, RNor	e Lester, S	None
Jankowski, MNor	e Lewin, M	None
Jantz, JNor	E Lin, G	None
Johri, ANor	E Linder, J	None
Jone, PNor	,	Abbott (7); Medtronic (7); Neovasc (7)
Joshi, VNor		None
Kane, GNor	e Lui, R	None
Kaplan, RNor		None
Kasliwal, RNor	,	None
Katz, WNor	e Lui, G	None
Kaul, SNor		None
Kavanaugh-McHugh, ANor	,	None
Keane, MNor	Maganti, K	None

Maghasi, M	None	Nanda, N	None
Main, M	Bracco (4); Boston Scientific (2, 4)	Nambi, V	
Malkowski, M	None	Naqvi, T	Abbott (4); Cordex (2); Medtronic (4)
Mangion, J	GE Healthcare (7); Bracco (2)	Natarajan, S	None
Mankad, R	None	Nay, S	None
Mankad, S	Siemens (8); Ultrasound Division (8)	Nicoara, A	None
Marcoff, L	None	Nikravan, S	Philips Ultrasound (2)
Marcus, R	None	Nyman, C	None
Marek, J	None	Nyrnes, S	None
Marshall, J	GE (3)	Oh, J	Medtronic (2); UpToDate (6)
Martin, R	Abbott Structural and Valve (1); Bay Labs (3);	Oliver, D	None
	Edwards (1); Medtronic (1)	Olivieri, L	None
	GE Medical Systems (4)	Olson, J	None
	None	Omran, A	None
	None	Oren-Grinberg, A	None
,	None	Orsinelli, D	None
	None	Orsinelli, M	None
•	None	Palma, R	None
	None	Pandian, N	None
	Philips Healthcare (1)	Park, M	None
	None	Parra, D	None
	None	Parthiban, A	EDWARDS (4)
•	None	Passeri, J	None
	None	Patel, A Astell	las (4); Myocardial Solutions (4); Philips (4)
,		Pearce, K	None
	None	Pearlman, A	None
•	None	Pellett, A	None
Mitchell, C	Davies Publishing Inc. (8); Elsevier (8); Wolters Kluwer (8)	Pellikka, P	None
Mohan J	None	Pernot, M	None
•	None	Phelan, D	None
	Philips (1)	Pibarot, P	None
•	None	Picard, M	None
	None	Pignatelli, R	None
-	None	Phillip, S	None
	None	Plana, J	None
•	None	Plastino, M	None
-	None		None
	None	•	None
-	. Edwards Lifesciences, Inc. (1); Hitachi Co. (4);	•	None
	Toshiba Medical Corp (4)	• •	None
		Porter, T	Lantheus Medical Imaging (4); Bracco (4)

Prado, A. None Scherer, M. Abbot (1), (2); Edwards LifeSciences (1), (2) Price, S. None Scherrer-Crosbie, M. None Printz, B. None Schillcutt, S. e-echocardiography.com (2) Prohias, J. None Schiller, N. None Puchalski, M. None Schievano, S. None Punn, R. None Seeberger, M. None Puthumana, J. None Sengupta, P. None Quider, N. None Senjor, R. Bracco (1); GE (1); Lantheus Medical Imaging (1); Quarterman, M. None Seward, J. None Quinones, M. None Shahul, S. None Rabischoffsky, A. None Shahul, S. None Radigan, K. None Shamoun, F. None Razizada, V. None Shiota, T. Philips (1) Rampoldi, M. None Shook, D. Edwards Lifesciences (8); LivaNova (8); Rastelli, M. None Shook, D. Edwards Lifesciences (8); LivaNova (8); Sicari	Powell, A	None	Schaaf, J	None
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Punn, R.NoneSeeberger, M.NonePuthumana, J.NoneSengupta, P.NoneQian, Z.NoneSengupta, S.NoneQuader, N.NoneSenior, R.Bracco (1); GE (1); Lantheus Medical Imaging (1); Quarterman, M.Quinones, M.NoneSeward, J.NoneQuiroz, R.NoneShahul, S.NoneRabischoffsky, A.NoneShamoun, F.NoneRadigan, K.NoneShea, E.NoneRaizada, V.NoneShiota, T.Philips (1)Rampoldi, M.NoneShirali, G.NoneRapoport, L.NoneShook, D.Edwards Lifesciences (8); LivaNova (8); Boston Scientific (8)Rastelli, M.NoneSicari, R.None	Prohias, J	None	Schiller, N	None
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Quarterman, M.NonePhilips Healthcare (1)Quinones, M.NoneSeward, J.NoneQuiroz, R.NoneShahul, S.NoneRabischoffsky, A.NoneShamoun, F.NoneRadigan, K.NoneShea, E.NoneRaizada, V.NoneShiota, T.Philips (1)Rampoldi, M.NoneShirali, G.NoneRapoport, L.NoneShook, D.Edwards Lifesciences (8); LivaNova (8); Boston Scientific (8)Rastelli, M.NoneSicari, R.None	Qian, Z	None	Sengupta, S	None
Quinones, M.NoneSeward, J.NoneQuiroz, R.NoneShahul, S.NoneRabischoffsky, A.NoneShamoun, F.NoneRadigan, K.NoneShea, E.NoneRaizada, V.NoneShiota, T.Philips (1)Rampoldi, M.NoneShirali, G.NoneRapoport, L.NoneShook, D.Edwards Lifesciences (8); LivaNova (8); Boston Scientific (8)Rastelli, M.NoneSicari, R.None	Quader, N	None	Senior, R Bracc	co (1); GE (1); Lantheus Medical Imaging (1);
Quiroz, R. None Rabischoffsky, A. None Radigan, K. None Raizada, V. None Rampoldi, M. None Rapoport, L. None Rastelli, M. None Rastelli, M. None	Quarterman, M	None		Philips Healthcare (1)
Rabischoffsky, A. None Radigan, K. None Raizada, V. None Rampoldi, M. None Rapoport, L. None Rastelli, M. None Rastelli, M. None Rabischoffsky, A. None Shamoun, F. None Shea, E. None Shiota, T. Philips (1) Shirali, G. None Shook, D. Edwards Lifesciences (8); LivaNova (8); Boston Scientific (8) Sicari, R. None	Quinones, M	None	Seward, J	None
Radigan, K. None Raizada, V. None Rampoldi, M. None Rapoport, L. None Rastelli, M. None Rastelli, M. None Rastelli, M. None Raigan, K. None Shea, E. None Shiota, T. Philips (1) Shirali, G. None Shook, D. Edwards Lifesciences (8); LivaNova (8); Boston Scientific (8) Sicari, R. None	Quiroz, R	None	Shahul, S	None
Raizada, V. None Rampoldi, M. None Rapoport, L. None Rastelli, M. None Raizada, V. None Shiota, T. Philips (1) Shirali, G. None Shook, D. Edwards Lifesciences (8); LivaNova (8); Boston Scientific (8) Sicari, R. None	Rabischoffsky, A	None	Shamoun, F	None
Rampoldi, M. None Rapoport, L. None Rastelli, M. None	Radigan, K	None	Shea, E	None
Rapoport, L. None Rastelli, M. None Shook, D. Edwards Lifesciences (8); LivaNova (8); Boston Scientific (8) Sicari, R. None	Raizada, V.	None	Shiota, T	Philips (1)
Rastelli, M	Rampoldi, M	None	Shirali, G	None
Rastelli, MNone Sicari, RNone	Rapoport, L	None	Shook, D	* ,
Sicari, RNone	Rastelli, M	None		
Rigling, RNone	Rigling, R	None	,	
Rigolin, V	Rigolin, V	None		
Roberson, D	Roberson, D	None	•	
Roberts, B	Roberts, B	None	•	
Roberts, M	Roberts, M.	None	-	
Skubas, N	Rodrigues, A	None	,	
Rodriguez, L	Rodriguez, L	None		
Roozen, M	•		•	
Rose G Sniecinski, R		, ,		
Soni-Patel, N				
Soriano, B		, ,		• • • • • • • • • • • • • • • • • • • •
Rychik, J	Rychik, J	None		
Sable C Soslow, JNone	-			
Sachdeva, R				
Sade, L	Sade, L	None		
Sadeghnour A Stainback, RNone				
Sanborn, D	• .		-	• • • • • • • • • • • • • • • • • • • •
Sanchez, LNone Stephenson, ENone				
Sanders, S				
Sarano, M				
Saric, M				
Scalia, GNone		() . ()	Jugeriy, L	None

Swaminathan, M	None
Szwast, A	None
Tacy, T	None
Tanaka, H	None
Tani, L	None
Taub, C	None
Taylor, B	None
Taylor, M	None
Thaden, J	None
Thavenidiranathan, P	None
Thomas, J	Abbott (2); Edwards (2); GE (2)
Thompson, W	None
Thu, H	None
Tierney, E	None
Tsang, W	None
Tuncay, E	None
Turner, T	Sound Ergonomics (2)
Tworetzky, W	None
Umland, M	None
	None

Venkateshvaran, A.	None
Vieira, M	None
Villanueva, F	None
Voigt, J	None
Wang, Z	None
Wantanabe, N	None
Wei, K	None
Weiner, D	None
Weiner, R	None
Weissman, N	None
Welch, T	None
Wells, B	None
Wiegers, S	None
Woo, A	None
Wood, M	None
Woolf, A	None
Wuebben, D	None
Yared, K	None
Young, L	None
Younoszai, A	None
Zimmerman, K	None
7 11: \\	



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Medicine, Boston, MA



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Anesthesia and Perioperative Medicine
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Carolina, Charleston, SC



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Clinical Research Coordinator,
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FASE LOUNGE Rooms 324–326

Saturday, June 3 9:00 AM - 4:00 PM

Sunday, June 4 9:00 AM - 4:00 PM

Monday, June 5...... 9:00 AM − 4:00 PM

Tuesday, June 6 9:00 AM - 2:00 PM

SCHEDULE AT A GLANCE

FRIDAY, JUNE 2ND

ASE American Society of Echocardiography

	REGISTRATION OPEN: 9:00 AM - 5:00 PM (Exhibit & Poster Hall Closed)						
ROOM	ROOM 318-320	ROOM 314-317	ROOM 309-310	ROOM 307-308			
1:00 – 2:30 PM	Pediatric Learning Lab: 3D Echo in Congenital Heart Disease IAC Echocardiography Boot Camp		POCUS Basics: Ultrasound for the Critically III Patient	Hands-On Vascular Lab: Carotid and Peripheral Imaging for Atherosclerosis			
2:30 - 3:00 PM	REFRESHMENT BREAK						
3:00 – 5:00 PM	Pediatric Learning Lab: 3D Echo in Congenital Heart Disease	IAC Echocardiography Boot Camp	POCUS Workshop: Ultrasound for the Critically III Patient	Hands-On Vascular Lab: EchoVascular Ergonomics			



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

Canadian Society of Echocardiography





Image Calendar COMPETITION is back for 2018

Deadline to submit images is August 14





FRIDAY, JUNE 2ND SCHEDULE

1:00 PM - 5:00 PM

Intersocietal Accreditation Commission Interactive Echocardiography Boot Camp – Room 314-317

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

1:00 PM - 5:00 PM

Learning Lab: 3D Echo of CHD: Image Acquisition, Optimization – Room 318-320

(Ticketed Event. Additional Fee Required) Chairs: D. Roberson, J. Simpson

1:00 PM - 1:30 PM

X-Plane / Live / Zoom D. Roberson

1:30 PM - 2:00 PM

Full Volume *J. Simpson*

2:00 PM - 2:10 PM

Demo Machine D. Roberson

2:10 PM - 2:30 PM

Case Examples *G. Marx*

2:30 PM - 2:50 PM

Case Examples *G. Shirali*

3:00 PM - 3:10 PM

3D Quantitation *A. Dragulescu*

3:10 PM - 3:25 PM

3D QA J. Simpson

3:25 PM - 3:35 PM

Heart Model: 3D Chamber Quantification *D. Roberson*

3:35 PM - 3:45 PM

TOMTEC: Quantification for Valvular and Congenital Heart Disease *G. Marx*

3:45 PM - 3:55 PM

3D Volume Lit Review *A. Dragulescu*

3:55 PM - 4:55 PM

Hands-on Practice G. Marx, D. Roberson, G. Shirali, J. Simpson

1:00 PM - 2:30 PM

POCUS Basics: Ultrasound for the Critically III Patient – Room 309-310

Chairs: S. Brown, S. Mankad

1:10 PM - 1:20 PM

Diagnosing the Cause of Shock K. Boniface

1:20 PM - 1:30 PM

Echo-based Management of Shock *B. Arya*

1:30 PM - 1:40 PM

Volume Expansion *E. Hirshberg*

1:40 PM - 1:50 PM

Pleural Ultrasound S. Nikravan

1:50 PM - 2:00 PM

Echocardiography During CPR *C. Grissom*

2:00 PM - 2:10 PM

Ultrasound for the Bleeding Patient: eFAST *R. Liu*

2:10 PM - 2:20 PM

Venous Thrombosis *L. Rapoport*

2:20 PM - 2:30 PM

Lung Ultrasound *B. Wilev*

FRIDAY, JUNE 2ND SCHEDULE

1:00 PM - 2:30 PM

W Hands-on Vascular Lab: Carotid and Peripheral Imaging For Atherosclerosis - Room 307-308

Chairs: R. Benenstein, T. Nagvi

Station 1: Carotid Intima-media Thickness and 2D Carotid **Imaging**

C. Coffin

Station 2: Carotid Intima-media Thickness and Duplex Imaging M. Skoczylas

Station 3: Carotid Imaging for Plaque Assessment T. Nagvi

Station 4: Ankle Brachial Index and Doppler Ultrasound R. Benenstein

3:00 PM - 5:00 PM

POCUS Workshop: Ultrasound for the Critically III Patient - Room 309-310

Chairs: S. Brown. R. Liu

Diagnosing the Cause of Shock

K. Boniface

Echocardiography During CPR

C. Grissom

Volume Expansion

E. Hirshberg

Ultrasound for the Bleeding Patient: eFAST

R. Liu

Echo-based Management of Shock

B. Arya

Lung Ultrasound

B. Wiley

Pleural Ultrasound

S. Nikravan

Venous Thrombosis

L. Rapoport

3:00 PM - 5:00 PM

Hands-on Vascular Lab: EchoVascular Ergonomics - Room 307-308

Chairs: C. Coffin. A. Johri

Station 1: Right-Handed Vascular Imaging

T. Turner

Station 2: Left-Handed TTE Imaging

C. Coffin

Station 3: Right-Handed TTE Imaging

D. Wuebben

Station 4: Movement

M. Roozen

SCHEDULE AT A GLANCE

SATURDAY, JUNE 3RD

REGISTRATION OPEN: 6:00 AM - 6:30 PM						
EXHIBIT & POSTER HALL OPEN: 4:30 – 6:30 PM						
ROOM	BALLROOM I-II	BALLROOM III	BALLROOM IV	ROOM 314-317	ROOM 309-310	ROOM 307-308
7:00 – 7:50 AM	P The Moderates	GL Stress Echo	Intra-operative Echo Cases: When Do I Tell the Surgeon To Go Back?	Diastology Boot Camp	Focus: Tricuspid Valve Disease	Three Faces of Apical Dysfunction
8:00 – 9:30 AM	Perioperative Echocardiography: A Team Approach	S Electric Echo	Path-Echo Correlations I: Pulmonary Atresia with Intact Ventricular Septum	"IN the Know" for the Sonographer	Contrast Echo in Clinical Practice	Cardio-Oncology I: Radiation Related Cardiovascular Disease
9:30 – 10:00 AM			REFRESHM	ENT BREAK		
10:00 – 11:30 AM	The Evolving Role of TAVR in Managing Aortic Stenosis	Multimodality Imaging in the Era of Quantification	Path-Echo Correlations II: Critical Aortic Stenosis and the Borderline Left Ventricle	All IN With the Image: Image Optimization	Strain 101	Cardio-Oncology II: Tumors and Chemotherapy and Strain
11:30 AM - 1:00 PM		SCIENC	E & TECHNOLOGY THEATE	R: LANTHEUS MEDICAL I	MAGING	
1:00 – 2:30 PM	P The Dilated Aortic Root: When Can the Aortic Valve Be Spared?	Clinical Focus: Endocarditis	Detecting Dysfunction Before Dysfunction: Which Modality, When, and How Often?	The Coming Storm: Atherosclerosis Imaging (Joint Sonographer & Vascular Council Session)	Controversies in Mitral Valve Disease	Establishing a Cardio-Oncology Clinic
2:30 - 3:00 PM	REFRESHMENT BREAK					
3:00 – 4:30 PM	Incorporating 3D Echocardiography Into Your Perioperative Practice	Stress Echo in the Evaluation of Coronary Artery Disease	Fireside Chat Pediatric Echo Jeopardy	Valvular Heart Disease: Guidelines/Future Horizons	Evaluation and Management of Aortic Aneurysm and Dissection: State of the Art	Advances in Molecular and Therapeutic Applications
3:00 - 4:30 PM			EDUCATOR'S SUM	MMIT - ROOM 302		
4:30 - 6:30 PM		PRES	SIDENT'S RECEPTION IN E	XHIBIT & POSTER HALL	T	
7:00 – 11:00 PM	ASE FOUNDATION 8 [™] ANNUAL RESEARCH AWARDS GALA This event requires a separate registration. Proceeds benefit the ASE Foundation's charitable research activities.					

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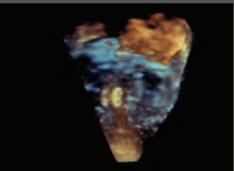
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Course Co-Director **Linda D. Gillam, MD, FASE** Morristown Medical Center Morristown, NJ







Learning Lab Director **Deborah A. Agler, ACS, RDCS, FASE**Cleveland Clinic

Cleveland. OH

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7:00 AM - 7:50 AM

The Moderates – Ballroom I-II

Chairs: A. Nicoara, B. Taylor

7:00 AM - 7:12 AM

Moderate Mitral Regurgitation in a Patient Undergoing Coronary Artery Bypass Grafting M. Taylor

7:12 AM - 7:24 AM

Moderate Tricuspid Regurgitation in a Patient Undergoing LVAD **Implantation**

J. Fassl

7:24 AM - 7:36 AM

Moderate Mitral Regurgitation in a Patient Undergoing Aortic Valve Replacement N. Skubas

7:36 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM



Stress Echo – Ballroom III

Chairs: N. Thi Thu Hoai. P. Pellikka

7:00 AM - 7:15 AM

Multivessel Coronary Artery Disease M. Bansal

7:15 AM - 7:30 AM

I Can't Breathe: The Diastolic Stress Echo J. Ha

7:30 AM - 7:45 AM

Low Gradient, Low Ejection Fraction Aortic Stenosis M. Malkowski

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM



🔃 Intra-operative Echo Cases: When Do I Tell The Surgeon To Go Back? - Ballroom IV

Chairs: C. Altman, P. Barker, M. Jacobs

7:00 AM - 7:15 AM

Atrioventricular Valve Regurgitation and Stenosis M. Quartermain

7:15 AM - 7:30 AM

Outflow Tract Obstruction B. Soriano

7:30 AM - 7:45 AM

Residual Ventricular Septal Defects and Atrial Septal Defects M. Puchalski

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM



Diastology Boot Camp – Room 314-317

Chairs: J. Hill, S. Nagueh

7:00 AM - 7:15 AM

Diastolic Dysfunction with Normal Left Ventricular Ejection Fraction A. Woolf

7:15 AM - 7:30 AM

Assessing Left Ventricular Filling Pressures L. Bienvenu

7:30 AM - 7:45 AM

Turning the Data Into Action: Diastology Case Examples B. Roberts

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM



Focus: Tricuspid Valve Disease – Room 309-310

Chairs: A. Rodrigues, N. Nanda

7:00 AM - 7:15 AM

Functional Tricuspid Regurgitation: Diagnosis and Management A. Rodrigues

7:15 AM - 7:30 AM

Pacemaker Lead Tricuspid Regurgitation: Diagnosis and Management

G. Kane

7:30 AM - 7:45 AM

Carcinoid Heart Disease J. DeCara

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

Three Faces of Apical Dysfunction – Room 307-308

Chairs: N. Cardim, S. Goldstein

7:00 AM - 7:15 AM

Apical Hypertrophic Cardiomyopathy with Aneurysm *M. Mukherjee*

7:15 AM - 7:30 AM

Apical Myocardial Infarction with Aneurysm L. Marcoff

7:30 AM - 7:45 AM

Stress Induced Cardiomyopathy T. Shiota

7:45 AM - 7:50 AM

Question and Answer

8:00 AM - 9:30 AM

Perioperative Echocardiography: A Team Approach - Ballroom I-II

Chairs: E. Isselbacher, S. Shillcutt

8:00 AM - 8:15 AM

Council on Perioperative Echocardiography Business Meeting *R. Sniecinski*

8:15 AM - 8:30 AM

Case Presentation: Perioperative Echo to the Rescue *A. Nicoara*

8:30 AM - 8:45 AM

The Role of the Sonographer in Perioperative Echocardiography *K. Zimmerman*

8:45 AM - 9:00 AM

Does a "Normal" TTE in Awake Patients Apply to Patients Studied by TEE During General Anesthesia?

M. Seeberger

9:00 AM - 9:15 AM

Transforming Care Delivery: Building A Perioperative Echocardiography Team S. Shillcutt

9:15 AM - 9:30 AM

Question and Answer

8:00 AM - 9:30 AM

S Electric Echo – Ballroom III

Chairs: T. Edvardsen, J. Gorcsan

8:00 AM - 8:15 AM

The Mechanics of Synchronous Right Ventricular and Left Ventricular Contraction

T. Edvardsen

8:15 AM - 8:30 AM

A Primer on AV and VV Optimization *E. Donal*

8:30 AM - 8:45 AM

Pre/Post Device Therapy: What the EP and CHF Teams Need to Know from Echo

1. Sade

8:45 AM - 9:00 AM

Lead Induced TR: How Big an Issue is This? How to Diagnose? *G. Lin*

9:00 AM - 9:15 AM

TEE/Cardioversion Issues: Sludge, Stunning, and Anticoagulation Strategies *M. Saric*

9:15 AM - 9:30 AM

Question and Answer

8:00 AM - 9:30 AM

Path-Echo Correlations I: Pulmonary Atresia with Intact Ventricular Septum – Ballroom IV

Chairs: A. Dorfman, M. Jacobs, A. Younoszai

8:00 AM - 8:20 AM

Pathology *S. Sanders*

8:20 AM - 8:35 AM

Fetal Imaging and Innovation Prediction of Biventricular Outcomes and the Role of Pulmonary Balloon Valvuloplasty H. Gardiner

8:35 AM - 8:50 AM

Pre-procedure Echo *B. Landeck*

8:50 AM - 9:05 AM

3D Echo Assessment of Right Ventricular Volumes *A. Dragulescu*

9:05 AM - 9:30 AM

A Case for Discussion and Management (Panel and Audience Discussion)

A. Dorfman, M. Jacobs

8:00 AM - 9:30 AM

E "IN the Know" for the Sonographer – Room 314-317 Chairs: R. Martin. C. Mitchell

8:00 AM - 8:20 AM

"IN" the Know – Council on Cardiovascular Sonography Business Meeting C. Mitchell

8:20 AM - 8:35 AM

IN The Profession: Sonographer Career Pathways *M. Roberts*

8:35 AM - 8:45 AM

Do We Really Need An Advanced Cardiac Sonographer (ACS): Pro *B. Khandheria, C. Kramer*

8:45 AM - 8:55 AM

Do We Really Need An Advanced Cardiac Sonographer (ACS): Con *P. Knoll, J. Mangion*

8:55 AM - 9:05 AM

Sonographer Licensure is a Must: Pro *J. Dent, J. Belcik*

9:05 AM - 9:15 AM

Sonographer Licensure is a Must: Con *R. Palma. D. Wiener*

9:15 AM - 9:30 AM

Question and Answer

8:00 AM - 9:30 AM

S R Contrast Echo in Clinical Practice – Room 309-310

Chairs: S. Kaul, H. Leong-Poi

8:00 AM - 8:15 AM

Basics of Contrast in Clinical Care K. Wei

8:15 AM - 8:30 AM

Clinical Applications of Contrast: Guidelines and Best Practices *M. Main*

8:30 AM - 8:45 AM

Image Optimization with Contrast *J. Choy*

8:45 AM - 9:00 AM

IN-01: Differences in Regional Wall Motion and Quantitative Ejection Fraction Measurements When Using Standard Left Ventricular Opacification versus Real Time Very Low Mechanical Index Algorithms

J. Darrah

9:00 AM - 9:15 AM

Contrast Echo in Stress Echo Lab *R. Senior*

9:15 AM - 9:30 AM

Question and Answer

8:00 AM - 9:30 AM

S Cardio-Oncology I: Radiation Related Cardiovascular Disease – Room 307-308

Chairs: J. DeCara, M. Scherrer-Crosbie

8:00 AM - 8:15 AM

Pathophysiology and Natural History of Radiation Related Injury M. Scherrer-Crosbie

8:15 AM - 8:30 AM

Radiation and the Pericardium *T. Welch*

8:30 AM - 8:45 AM

Myocardium and Conduction Disease *J. Liu*

8:45 AM - 9:00 AM

Radiation-related Valve Disease J. DeCara

9:00 AM - 9:15 AM

Radiation and Vascular Disease *N. Hamburg*

9:15 AM - 9:30 AM

Question and Answer

10:00 AM - 11:30 AM

P The Evolving Role of TAVR in Managing Aortic Stenosis – Ballroom I-II

Chairs: A. Finley, M. Taylor

10:00 AM - 10:15 AM

Moving to Low Risk: Considerations and Challenges *D. Steinberg*

10:15 AM - 10:30 AM

Optimal Annular Sizing: Multidetector CT, 3D, TEE M. Monaghan

10:30 AM - 10:45 AM

TAVR: Low-Flow, Low-Gradient Aortic Stenosis M. Taylor

10:45 AM - 11:00 AM

Performance Bars and TEE Monitoring During TAVR: Routine Use of TEE in TAVR is Warranted R. Hahn

11:00 AM - 11:15 AM

Performance Bars and TEE Monitoring During TAVR: Routine Use of TEE in TAVR is Not Warranted R. Grimm

11:15 AM - 11:30 AM

Question and Answer

10:00 AM - 11:30 AM



Multimodality Imaging in the Era of Quantification - Ballroom III

Chairs: L. Gillam, J. Voigt

10:00 AM - 10:15 AM

Quantification Techniques for Valve Regurgitation M. Desai

10:15 AM - 10:30 AM

Quantification of Left Ventricular Systolic Function J. Mohan

10:30 AM - 10:45 AM

IN-02: Incremental Utility of Right Ventricular Strain Compared to Conventional Echo Quantification for Assessment of Cardiac MRI Evidenced Right Ventricular Dysfunction A. Di Franco

10:45 AM - 11:00 AM

Quantification of Right Ventricular Size and Function W. Tsang

11:00 AM - 11:15 AM

Quantification of Atrial Size B. Hoit

11:15 AM - 11:30 AM

Question and Answer

10:00 AM - 11:30 AM

Path-Echo Correlations II: Critical Aortic Stenosis and The Borderline Left Ventricle - Ballroom IV

Chairs: M. Brook, D. Cameron, R. Sachdeva

10:00 AM - 10:20 AM

Pathology S. Sanders

10:20 AM - 10:35 AM

Fetal Imaging and Innovation: Prediction of Biventricular Outcome and the Role of Maternal Hyperoxygenation A. Szwast

10:35 AM - 10:50 AM

Pre-operative Echo C. Taylor

10:50 AM - 11:05 AM

3D Echo Assessment of Left Heart Structures G. Marx

11:05 AM - 11:30 AM

A Case for Discussion and Management (Panel and Audience Discussion) D. Cameron, J. Kovalchin

10:00 AM - 11:30 AM

📵 All IN With the Image: Image Optimization – Room 314-317

Chairs: K. Pearce, M. Roberts

10:00 AM - 10:15 AM

Imaging Planes & 2D Optimization R. Palma

10:15 AM - 10:30 AM

Doppler Optimization K. Glyde

10:30 AM - 10:45 AM

Imaging Challenges

M. Rastelli

10:45 AM - 11:00 AM

Artifacts R. Meece

11:00 AM - 11:15 AM

Beyond The Protocol: Indication Based Scanning J. Hill

11:15 AM - 11:30 AM

Question and Answer

10:00 AM - 11:30 AM

Strain 101 – Room 309-310

Chairs: T. Marwick, Z. Popovic

10:00 AM - 10:15 AM

Basic Mechanics of Strain H. Dokainish

10:15 AM - 10:30 AM

Strain Modalities C. Chow

10:30 AM - 10:45 AM

Current Guidelines and Standardization Z. Popovic

10:45 AM - 11:00 AM

Clinical Applications of Strain Imaging M. Bansal

11:00 AM - 11:15 AM

Future Applications of Strain Imaging J. Gorcsan

11:15 AM - 11:30 AM

Question and Answer

10:00 AM - 11:30 AM



S R Cardio-Oncology II: Tumors and Chemotherapy and Strain - Room 307-308

Chairs: A. Barca, J. Plana

10:00 AM - 10:15 AM

Chemotherapeutic Agents and Potential Cardiac Toxicities M. Plastino

10:15 AM - 10:30 AM

Role of Strain in Early Detection of Cardiotoxicity J. Plana

10:30 AM - 10:45 AM

IN-03: Less is not More for Diagnosis of Cardiotoxicity: Single vs Standard Multiview Assessment of Global Longitudinal Strain T. Negishi

10:45 AM - 11:00 AM

Primary Cardiac Tumors J. Banchs

11:00 AM - 11:15 AM

The Spectrum of Metastic Cardiac Disease K. Maganti

11:15 AM - 11:30 AM

Question and Answer

1:00 PM - 2:30 PM

The Dilated Aortic Root: When Can the Aortic Valve Be Spared? - Ballroom I-II

Chairs: M. Brady, F. Cobey

1:00 PM - 1:15 PM

Pre-Repair Evaluation of the Aortic Valve and Aortic Root R. Sniecinski

1:15 PM - 1:30 PM

Valve Sparing Roots: Surgical Options E. Chen

1:30 PM - 1:45 PM

Echocardiographic Predictors of Failed Aortic Root Replacement M. Brady

1:45 PM - 2:00 PM

What Does a Surgeon Want to Know from TEE? D. Cameron

2:00 PM - 2:15 PM

Is 2D TEE Good Enough? Or Can 3D TEE Improve Surgical Planning? F. Cobey

2:15 PM - 2:30 PM

Question and Answer

1:00 PM - 2:30 PM



Clinical Focus: Endocarditis – Ballroom III

Chairs: J. Aragam, E. Tucay

1:00 PM - 1:15 PM

Epidemiology and Common Complications of Endocarditis K. Poh

1:15 PM - 1:30 PM

Initial Evaluation and Surveillance Imaging: Recommendations for TTE/TEE J. Aragam

1:30 PM - 1:45 PM

Endocarditis and Mechanical Devices (ICD, PPM, VAD): Management Strategies K. Yared

1:45 PM - 2:00 PM

Nonbacterial Thrombotic Endocarditis V. Agrawal

2:00 PM - 2:15 PM

Infective Endocarditis in South America M. Vieira

2:15 PM - 2:30 PM

1:00 PM - 2:30 PM



R Detecting Dysfunction Before Dysfunction: Which Modality, When, and How Often? -**Ballroom IV**

Chairs: G. Ensing, G. Singh

1:00 PM - 1:15 PM

Detecting Early Left Ventricular Dysfunction V. Joshi

1:15 PM - 1:30 PM

Detecting Early Right Ventricular Dysfunction L. Mercer-Rosa

1:30 PM - 1:45 PM

Detecting Early Single Ventricular Dysfunction J. Lu

1:45 PM - 2:00 PM

Assessment of Valve Regurgitation and Early Ventricular Remodelina T. Colen

2:00 PM - 2:15 PM

Early Detection of Myocardial Remodeling: Fibrosis Imaging by MRI A. Powell

2:15 PM - 2:30 PM

IN-05: Using Strain Imaging to Monitor Cardiac Function in Survivors of Childhood Cancer on Angiotensin Converting Enzyme Inhibition or Angiotensin Receptor Blockade J. Harrington

2:30 PM - 3:00 PM

Council on Pediatric and Congenital Heart Disease Business Meeting

M. Cohen

1:00 PM - 3:00 PM

Learning Lab: 3D Volume/Function Quantification -Room 318-320

(Ticketed Event. Additional Fee Required) Chairs: K. Collins, W. Tsang Learning Lab Assistants: D. Agler, P. Burgess, R. Kaplan, C. Kramer, K. McGregor, A. Woolf

1:00 PM - 2:30 PM



V The Coming Storm: Atherosclerosis Imaging (Joint Sonographer & Vascular Council Session) - Room 314-317 Chairs: H. Becher. V. Fuster

1:00 PM - 1:30 PM

Ultrasound in Subclinical Atherosclerosis V. Fuster

1:30 PM - 1:45 PM

Vulnerable Plaque: Contrast and 3D A. Johri

1:45 PM - 2:00 PM

Vulnerable Plaque: Gray Scale and Strain V. Nambi

2:00 PM - 2:15 PM

How Can We Apply Atherosclerosis Imaging in Everyday Practice? S. Mulvagh

2:15 PM - 2:30 PM

Panel Discussion: Intersection Between Vascular and Echo Doppler in Various Pathologies: Aortic Stenosis H. Becher, V. Fuster

1:00 PM - 2:30 PM





S R Controversies in Mitral Valve Disease – Room 309-310

Chairs: B. Griffin, N. Watanabe

1:00 PM - 1:15 PM

Role of Stress Testing in Mitral Valve Disease? B. Griffin

1:15 PM - 1:30 PM

Functional Mitral Regurgitation: What is Severe? What are Options for Management? J. Hung

1:30 PM - 1:45 PM

IN-04: Impact of Non-Ischemic Fibrosis on Echo-evidenced Right Ventricular Function among Patients with Ischemic Mitral Regurgitation A. Di Franco

1:45 PM - 2:00 PM

Percutaneous Repair of Mitral Regurgitation: What are the Limits? F Gill

2:00 PM - 2:15 PM

When to Treat Concomitant Tricuspid Valve Disease? J. Voigt

2:15 PM - 2:30 PM

1:00 PM - 2:30 PM

S Establishing a Cardio-Oncology Clinic – Room 307-308

Chairs: J. Plana, P. Thavendiranathan

1:00 PM - 1:15 PM

Techniques for Assessment: Strain, 3D, Diastology, and Stress *P. Thavendiranathan*

1:15 PM - 1:30 PM

Guideline Based Imaging Protocols for Evaluation and Follow-up *J. Plana*

1:30 PM - 1:45 PM

Staffing the Cardio-Oncology Clinic: Structure and Training *T. Gordon*

1:45 PM - 2:00 PM

The Complete Cardio-Oncology Echo Reports *N. Akhter*

2:00 PM - 2:15 PM

The Cardio-Oncology Clinic in Action: Case Example of Longitudinal Follow-up *A. Barac*

2:15 PM - 2:30 PM

Question and Answer

3:00 PM - 4:30 PM

P Incorporating 3D Echocardiography Into Your Perioperative Practice – Ballroom I-II

Chairs: A. Finley, M. Swaminathan

3:00 PM - 3:15 PM

Acquisition of 3D Images A. Finley

3:15 PM - 3:30 PM

Using MPR to Your Advantage *F. Cobey*

3:30 PM - 3:45 PM

Basic Measurements Using 3D Datasets A. Nicoara

3:45 PM - 4:00 PM

Where Can 3D Make a Difference in the Operating Room? M. Swaminathan

4:00 PM - 4:15 PM

Where Can 3D Make a Difference in the Cath/Electrophysiology Lab? G. Mackensen

4:15 PM - 4:30 PM

Question and Answer

3:00 PM - 4:30 PM

Stress Echo in the Evaluation of Coronary Artery Disease – Ballroom III

Chairs: H. Feigenbaum, D. Jakrapanichakul

3:00 PM - 3:15 PM

Stress Modality: Exercise and Pharmacologic *F. Chaudhry*

3:15 PM - 3:30 PM

Stress Echo for Ischemia Including Strain T. Marwick

3:30 PM - 3:45 PM

Stress Echo for Viability Including Strain *R. Sicari*

3:45 PM - 4:00 PM

Contrast Perfusion: Correlation With Other Techniques *R. Senior*

4:00 PM - 4:15 PM

Stress Echo for Risk Stratification *P. Pellikka*

4:15 PM - 4:30 PM

Question and Answer

3:00 PM - 4:30 PM

Fireside Chat and Pediatric Echo Jeopardy – Ballroom IV

Fireside Chat Chair: C. Altman
Pediatric Echo Jeopardy Chairs: M. Brook, D. Harrild

3:00 PM - 3:30 PM

Fireside Chat Interviewer: C. Altman Dignitary: N. Ayres

3:30 PM - 4:30 PM

Pediatric Echo Jeopardy

Team Boomers

P. Spevak, A. Kavanaugh-McHugh, M. Frommelt

Team Generation X

C. Altman, L. Young, D. Coleman

Team Millennials

S. Natarjan, R. Punn, J. Soslow

Team Homelanders

L. Olivieri, M. DiMaria, D. Forsha

3:00 PM - 4:30 PM

Valvular Heart Disease: Guidelines/Future Horizons – Room 314-317

Chairs: L. Elvert, S. Kort

3:00 PM - 3:15 PM

Guideline Update: Valvular Stenosis

J. Belcik

3:15 PM - 3:30 PM

Aortic Stenosis: Getting It Right

I. Crandall

3:30 PM - 3:45 PM

Guideline Update: Valvular Regurgitation

A. Dillenbeck

3:45 PM - 4:00 PM

Mitral Regurgitation: Getting It Right

A. Davis

4:00 PM - 4:15 PM

Incorporating New Technologies: Strain & 3D

K. Horton

4:15 PM - 4:30 PM

Question and Answer

3:00 PM - 4:30 PM

S Evaluation and Management of Aortic Aneurysm and Dissection: State of the Art – Room 309-310

Chairs: S. Goldstein, E. Isselbacher

3:00 PM - 3:15 PM

Embryology and Anatomy of the Aorta and Aortic Valve

M. Corretti

3:15 PM - 3:30 PM

Echo Guidelines for Evaluating Aortic Disease: How to Measure

and When to Measure *I. Kronzon*

3:30 PM - 3:45 PM

Multi-Modality Imaging of the Aorta

R. Janardhanan

3:45 PM - 4:00 PM

Aortic Dissection: Lessons from the International Registry for

Aortic Dissection

F. Isselbacher

4:00 PM - 4:15 PM

State of the Art: Surgical Interventions of Aortic Disease *D. Cameron*

4:15 PM - 4:30 PM

Question and Answer

3:00 PM - 4:30 PM

S R Advances in Molecular and Therapeutic Applications – Room 307-308

Chairs: J. Lindner, T. Porter

3:00 PM - 3:15 PM

Detection of Subclinical Atherosclerosis in Multiple Vascular Beds *S. Mulvagh*

3:15 PM - 3:30 PM

Targeted Therapeutic Delivery Applications in Cancer *F. Villanueva*

3:30 PM - 3:45 PM

IN-06: The Biophysics of Ultrasound-stimulated Microbubbles for Drug/Gene Delivery *B. Helfield*

3:45 PM - 4:00 PM

Targeted Therapeutic Delivery Applications in Ischemia H. Leong-Poi

4:00 PM - 4:15 PM

Application of Contrast for Stroke, Acute Myocardial Infarction, and Thrombolysis

W. Mathias

4:15 PM - 4:30 PM

Question and Answer

3:00 PM - 4:30 PM

Educator's Summit – Room 302

Chairs: C. Mitchell, R. Palma

Assessing Clinical Competency

B. Anderson

Educating a Different Generation

C. Mitchell

SCHEDULE AT A GLANCE

SUNDAY, JUNE 4TH

	REGISTRATION OPEN: 6:00 AM - 6:00 PM							
EXHIBIT & POSTER HALL OPEN: 9:00 AM – 4:00 PM								
ROOM	BALLROOM I-II	BALLROOM III	BALLROOM IV	ROOM 314-317	ROOM 309-310	ROOM 307-308		
6:00 – 7:00 AM	SCIENCE & TECHNOLOGY THEATER: PHILIPS							
7:00 – 7:50 AM		Diastolic Function Assessment	Coronary Abnormalities	Pericardial Disease Boot Camp	Everyday Use of Contrast to Solve Clinical Dilemmas	Hiding in Plain Sight: Left Ventricular Hypertrophy Mimickers Not to Miss		
7:30 – 9:30 AM	S ASE AWARDS PRESENTATIONS, ANNOUNCEMENTS, FASE CONVOCATION, AND 28 TH ANNUAL EDLER LECTURE – BALLROOM I-II							
9:30 – 10:15 AM	REFRESHMENT BREAK, CHALK TALKS, AND VISIT EXHIBIT & POSTER HALL							
10:15 – 11:45 AM	The Best of JASE and Introducing <i>CASE</i> : The Editor's Pick	Structural Heart Disease: I	Evidence Based Echo: From Abstracts to Guidelines	If I Only Had A Heart: Mechanical Device Support	The Commons: Diabetic and Hypertensive Heart Disease	Echo and Acute Myocardial Infarction		
11:45 – 1:15 PM	SCIENCE & TECHNOLOGY THEATER: SIEMENS HEALTHINEERS AND MODERATED POSTERS							
1:15 – 2:45 PM	Assessment of Diastolic Function in Special Populations (Joint ASE/EACVI Session)	Structural Heart Disease: II	Echo Assistance in Heart Failure	Reaching the Summit: Sonographer Investigator's Competition & Career Conversation	POCUS: Ultrasound Outside The Echo Lab	Clinical Focus: Nonischemic Left Ventricular Systolic Dysfunction		
2:45 – 3:30 PM	REFRESHMENT BREAK, CHALK TALKS, AND VISIT EXHIBIT & POSTER HALL							
3:30 – 5:00 PM		Stress Echo for Valvular Heart Disease: Go with the Flow	Hypoplastic Left Heart Syndrome (Joint ASE/EACVI Session)	It's All Right: The Right Heart	Integration of 2D and 3D TEE In Current Practice	The Leading Edge: What Will We Be Doing in Five Years?		
5:00 – 6:30 PM	S R ECHOVATION CHALLENGE COMPETITION – BALLROOM I-II							

21st Annual Meeting of the European Association of Cardiovascular Imaging (EACVI), a registered branch of the ESC, in cooperation with the Portuguese Working Group of Echocardiography.

2017 Deadlines

Call for Abstracts and Clinical Cases 1 April - 31 May
Early registration 30 September

Late registration 31 October





Lisbon - Portugal 6-9 December 2017





SUNDAY

7:00 AM - 7:50 AM

Diastolic Function Assessment – Ballroom III

Chairs: S. Lester, T. Zhu

7:00 AM - 7:15 AM

Patient with Dyspnea and Normal Ejection Fraction: Heart Failure with Preserved Ejection Fraction S. Lester

7:15 AM - 7:30 AM

Refractory Heart Failure With Normal Ejection Fraction: Constriction J. Oh

7:30 AM - 7:45 AM

Refractory Heart Failure With Normal Ejection Fraction: Restrictive Cardiomyopathy B. Anderson

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM



Coronary Abnormalities – Ballroom IV

Chairs: J. Kovalchin, W. Lai

7:00 AM - 7:15 AM

Pearls for Coronary Imaging J. Kreeger

7:15 AM - 7:30 AM

Origin from the Other Sinus V. Guerra

7:30 AM - 7:45 AM

ALCAPA

T. Slesnick

7:45 AM - 7:50 AM

Discussion: Is Echo Truly Adequate to Exclude ALCAPA J. Kovalchin, W. Lai

7:00 AM - 7:50 AM



Pericardial Disease Boot Camp – Room 314-317

Chairs: M. Park, T. Welch

7:00 AM - 7:15 AM

Pericardial Anatomy and the Pathophysiology of Pericardial Disease T. Welch

7:15 AM - 7:30 AM

Constrictive Pericarditis: Evaluation Pre and Post Treatment J. Marshall

7:30 AM - 7:45 AM

Cardiac Tamponade: Evaluation Pre and Post Treatment K. Radigan

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM



Everyday Use of Contrast to Solve Clinical Dilemmas - Room 309-310

Chairs: R. Senior, K. Wei

7:00 AM - 7:15 AM

Evaluation for Ischemic Heart Disease M. Main

7:15 AM - 7:30 AM

Evaluation of the Post Myocardial Infarction Patient H. Leong-Poi

7:30 AM - 7:45 AM

Evaluation of Cardiac Masses C. Taub

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM



Chairs: G. Aurigemma, I. Kronzon

7:00 AM - 7:15 AM

Hypertrophic Cardiomyopathy A. Woo

7:15 AM - 7:30 AM

Fabry Disease M. Galderisi

7:30 AM - 7:45 AM

Amyloidosis A. Patel

7:45 AM - 7:50 AM

7:30 AM - 9:30 AM

S ASE Awards Presentations, Announcements, FASE Convocation, and 28th Annual Edler Lecture – Ballroom I-II

7:30 AM - 7:45 AM

Welcome & State of ASE A. Klein

7:45 - 8:00 AM

Board of Directors Induction and Announcements *A. Klein*

8:00 - 8:20 AM

FASE Convocation (new FASE members June 2016 – April 2017)

8:20 AM - 8:40 AM

Edler Lecture: The Point of Care *S. Wiegers*

8:40 AM - 9:20 AM

Awards Presentations and Other Society Recognitions *A. Klein*

9:20 AM - 9:30 AM

Incoming President's Address *V. Rigolin*

10:00 AM - 12:00 PM

Learning Lab: 3D Cropping - Room 318-320

(Ticketed Event. Additional Fee Required)
Chairs: M. Monaghan, B. Roberts
Learning Lab Assistants: D. Agler, A. Armour, K. Collins,
K. Horton, C. Kramer, K. Zimmerman

10:15 AM - 11:45 AM



Chairs: R. Martin, A. Pearlman

10:15 AM - 10:30 AM

One of My Recent JASE Favorites: Why You Should Know This Work *V. Mor-Avi*

10:30 AM - 10:45 AM

One of My Recent JASE Favorites: Why You Should Know This Work *D. Adams*

10:45 AM - 11:00 AM

One of My Recent JASE Favorites: Why You Should Know This Work *J. Lindner*

11:00 AM - 11:15 AM

One of My *CASE* Favorites: Highlight from Our Newest Journal *L. Rodriguez*

11:15 AM - 11:30 AM

One of My Recent JASE Favorites: Why You Should Know This Work *M. Picard*

11:30 AM - 11:45 AM

Reflections on My Tenure as Editor of JASE A. Pearlman

10:15 AM - 11:45 AM

Structural Heart Disease: I – Ballroom III

Chairs: F. Asch, R. Kasliwal

10:15 AM - 10:30 AM

TAVR: TTE and TEE Evaluation *F. Asch*

10:30 AM - 10:45 AM

MitraClip: Basic Echo Imaging for Routine Clip *S. Little*

10:45 AM - 11:00 AM

MitraClip for Complex and Challenging Cases *Z. Wang*

11:00 AM - 11:15 AM

Imaging for Left Atrial Appendage Occlusion H. Michelena

11:15 AM - 11:30 AM

Echo Guidance for Paravalvular Leak Closure K. Koulogiannis

11:30 AM - 11:45 AM

Question and Answer

10:15 AM - 11:45 AM

R Evidence Based Echo: From Abstracts to Guidelines – Ballroom IV

Chairs: M. Donofrio. M. Lewin

10:15 AM - 10:30 AM

Rapid Fire Abstracts

P1-28: Revisiting the Bernoulli Equation in Coarctation Following Norwood Procedure *S. Hashemi*

P1-29: Can Ultrasonography in Early Gestation Improve Visualization of Fetal Cardiac Structures in the Morbidly Obese Pregnant Woman?

A. Majeed

P1-30: Hemodynamic Adaptation to Suboptimal Fetal Growth in Patients with Single Ventricle Physiology Differs from Normal Controls T. Alsaied

P1-31: Developmental Patterning of Left Ventricular Vortex Formation from Infancy to Adulthood

S. Srivastava

P1-32: Comparison of Traditional Manual and Fully Automated Methods of LV Strain Analysis in Tetralogy of Fallot

P1-33: Improvement in Clinic and Echocardiography Lab Efficiency via Scheduled Echocardiograms

T. Best

P1-34: Strain and Rotational Mechanics in Children with Single Left Ventricles vs. Age-Matched Controls

C. Lopez

P1-35: Abnormal Features of Vortex Formation in Single Ventricle Physiology

S. Uppu

P1-36: Knowledge of Appropriate Outpatient Echocardiogram Ordering Among Primary Care Physicians and Trainees: Are we Reaching the Masses?

S. Lang

P1-37: Comparison of Transthoracic 3D Echo Derived Patient Specific 3D Printed Valve Models to 3D Molded Models for Simulated Repair of Congenitally Abnormal Atrioventricular Valves M. Jolley

P1-38: A Quality Improvement Effort to Improve the Efficiency of Pediatric and Congenital Echocardiograms K. Stern

P1-39: Serial Changes in Right Ventricular Systolic Function in Rejection-Free Children After Heart Transplant J. Harrington

P1-40: Right Ventricular Tissue Doppler Myocardial Performance Index Correlates with Severity of Pulmonary Hypertension in Children R. Friesen

P1-41: Cardiovascular Profile of Exercise Performance in Repaired Tetralogy of Fallot Using Stress Echocardiography S. Bhatt

P1-42: Longitudinal Assessment of Quantitative Measures of Right Ventricular Function in Hypoplastic Left Heart Syndrome O. Akintoye

10:30 AM - 10:45 AM

The Best Echo Articles of the Past Year L. Mertens

10:45 AM - 11:00 AM

Fetal Echo: What the Guidelines Say, Do They Work, What is Needed? M. Donofrio

11:00 AM - 11:15 AM

Quantification Guidelines: Should They Be Updated to Include Z-Scores, Strain, and 3D? L. Lopez

11:15 AM - 11:30 AM

The New Transposition of the Great Arteries Guidelines: What Do They Say, What Will They Change? M. Cohen

11:30 AM - 11:45 AM

Use of Contrast in Pediatric and Adult Congenital Heart Disease: Recent Literature and Need for Guidelines S. Kutty

10:15 AM - 11:45 AM

If I Only Had A Heart: Mechanical Device Support - Room 314-317

Chairs: S. Shah, R. Stainback

10:15 AM - 10:30 AM

VADS: The Basics E. Shea

10:30 AM - 10:45 AM

VADS: Imaging Protocols B. Fey

10:45 AM - 11:00 AM

VADS: Complications

K. Addetia

11:00 AM - 11:15 AM

Short Term Support Devices: Impella & ECMO M. Jankowski

11:15 AM - 11:30 AM

Can I Use Contrast? D. Oliver

11:30 AM - 11:45 AM

10:15 AM - 11:45 AM

S The Commons: Diabetic and Hypertensive Heart Disease – Room 309-310

Chairs: J. Aragam, T. Zhu

10:15 AM - 10:30 AM

The Diabetic Heart *M. Galderisi*

10:30 AM - 10:45 AM

Hypertensive Heart Disease T. Marwick

10:45 AM - 11:00 AM

Ischemic Disease: Microvascular and Coronary Flow Reserve *S. Mulvagh*

11:00 AM - 11:15 AM

Vascular: Carotid Intima-Media Thickness T. Nagvi

11:15 AM - 11:30 AM

Appropriate Echo Evaluation Follow-up for the Diabetic and/or Hypertensive Patient

R Mankad

11:30 AM - 11:45 AM

Question and Answer

10:15 AM - 11:45 AM

S Echo and Acute Myocardial Infarction – Room 307-308
Chairs: J. DeCara, V. Rigolin

10:15 AM - 10:30 AM

Prognostic Value of Echo/Doppler Findings Early After Myocardial Infarction *M. Corretti*

10:30 AM - 10:45 AM

Right Ventricle Myocardial Infarction: Making the Diagnosis *A. Rodrigues*

10:45 AM - 11:00 AM

Post Myocardial Infarction Complications I: Acute Mitral Regurgitation Post Myocardial Infarction *J. Jantz*

11:00 AM - 11:15 AM

Post Myocardial Infarction Complications II: Ventricular Septal Defect and Left Ventricular Rupture/Pseudoaneurysm *D. Orsinelli*

11:15 AM - 11:30 AM

Translating Guidelines Into Action: A Care Pathway for Echo Year One Post Myocardial Infarction J. Dent

11:30 AM - 11:45 AM

Question and Answer

1:00 PM - 3:00 PM

Learning Lab: Myocardial Strain by Speckle Tracking – Room 318-320 (Ticketed Event. Additional Fee Required) Chairs: J. Gorcsan, J. Hill Learning Lab Assistants: D. Agler, P. Bastiansen, A. Davis, A. Dillenbeck, M. Umland

1:15 PM - 2:45 PM

S Assessment of Diastolic Function in Special Populations (Joint ASE/EACVI Session) – Ballroom I-II



Chairs: T. Edvardsen, A. Klein

1:15 PM - 1:45 PM

Kalmanson Lecture: Tissue Doppler: Our Window Into Diastolic Function *B. Popescu*

1:45 PM - 2:00 PM

Diastology and Atrial Fibrillation *M. Quinones*

2:00 PM - 2:15 PM

Diastology and Pulmonary Hypertension *O. Smiseth*

2:15 PM - 2:30 PM

Diastology and Mitral Valve Disease *G. Aurigemma*

2:30 PM - 2:45 PM

Diastology Hypertrophic Cardiomyopathy *H. Dokainish*

1:15 PM - 2:45 PM

Structural Heart Disease: II – Ballroom III Chairs: J. Hung, M. Sarano

1:15 PM - 1:30 PM

Alcohol Septal Ablation *O. Khalique*

1:30 PM - 1:45 PM

Balloon Mitral Valvuloplasty for Rheumatic Mitral Stenosis A. Omran

1:45 PM - 2:00 PM

Echo Guided Pericardiocentesis and Cardiac Biopsy G. Kane

2:00 PM - 2:15 PM

Percutaneous Mitral Valve Replacement S. Little

2:15 PM - 2:30 PM

Percutaneous Treatment for Tricuspid Regurgitation R. Hahn

2:30 PM - 2:45 PM

Question and Answer

1:15 PM - 2:45 PM

📴 Echo Assistance in Heart Failure – Ballroom IV

Chairs: W. Border, J. Marek

1:15 PM - 1:30 PM

The Failing Right Ventricle in the Adult Congenital Heart Disease Patient: What Do We Image? B. Printz

1:30 PM - 1:45 PM

Echo in the Ventricular Assist Device: When Do We Support the Right Ventricle and When Can We Wean? T. Tacv

1:45 PM - 2:00 PM

Cardiac Resynchronization Therapy: What Does the Electrophysiologist Want to Know From the Echocardiographer E. Stephenson

2:00 PM - 2:15 PM

Cardiac Resynchronization Therapy: Echo Before, During, and After Implantation D. Forsha

2:15 PM - 2:30 PM

Heart Failure Worldwide: Rheumatic Fever C. Sable

2:30 PM - 2:45 PM

Abstract: Echo Screening in Kenya M. Maghasi

1:15 PM - 2:45 PM

R Reaching the Summit: Sonographer Investigator's **Competition & Career Conversation – Room 314-317**

Chairs: M. Bremer, S. Mankad, E. McIlwain, M. Sherrer-Crosbie

1:15 PM - 2:05 PM

2017 Sonographer Investigator's Award Competition

SIA-1: Right Atrial Dysfunction in Pediatric Kawasaki Disease **Patients**

C. Cassidy

SIA-2: Assessment of Right Ventricular Mechanics and Volumes in the Fetal Heart Using 3D Echocardiography

L. Li

SIA-3: Speckle Tracking Echocardiography Following Hybrid Stage 1 Procedure for Infants with Hypoplastic Left Heart Syndrome

G. Kadiu

SIA-4: Progression of Pulmonary Artery Pressure and RV Function as Predictors of Outcome in Pulmonary Arterial **Hypertension**

L. Wright

Recognition of Finalists, Announcement of the Winner

2:05 PM - 2:45 PM

A Career Conversation with Margaret "Peg" Knoll Interviewer: E. McIlwain P. Knoll

1:15 PM - 2:45 PM

POCUS: Ultrasound Outside the Echo Lab -Room 309-310

Chairs: S. Brown, N. Cardim

1:15 PM - 1:30 PM

Introduction to Critical Care Echocardiography P. Bender

1:30 PM - 1:45 PM

Diagnosis and Management of Acute Circulatory Failure S. Shahul

1:45 PM - 2:00 PM

Diagnosis and Management of Acute Respiratory Failure M. Lanspa

2:00 PM - 2:45 PM

Panel Discussion

Echo Lab Perspective

T. Abraham

Emergency Medicine Perspective

K. Boniface

ICU Perspective

M. Lanspa

International Perspective

J. Prohias

1:15 PM - 2:45 PM

Clinical Focus: Nonischemic Left Ventricular Systolic Dysfunction - Room 307-308

Chairs: H. Acquatella, A. Poppas

1:15 PM - 1:30 PM

Peripartum Cardiomyopathy A. Poppas

1:30 PM - 1:45 PM

Muscular Dystrophy and Left Ventricular Dysfunction A. Hays

1:45 PM - 2:00 PM

Chagas Disease R. Marcus

2:00 PM - 2:15 PM

Endomyocardial Fibrosis M. Vieira

2:15 PM - 2:30 PM

Noncompaction A. Prado

2:30 PM - 2:45 PM

Question and Answer

3:30 PM - 5:00 PM

S Stress Echo for Valvular Heart Disease: Go with the Flow - Ballroom III

Chairs: L. Rodriguez, V. Sorrell

3:30 PM - 3:45 PM

Low Gradient Aortic Stenosis with Depressed Ejection Fraction W. Zoghbi

3:45 PM - 4:00 PM

Low Gradient Aortic Stenosis with Normal Ejection Fraction P. Pibarot

4:00 PM - 4:15 PM

Mitral Stenois W. Katz

4:15 PM - 4:30 PM

Mitral Regurgitation B. Griffin

4:30 PM - 4:45 PM

Assessment of Pulmonary Hemodynamics P. Gutierrez-Fajardo

4:45 PM - 5:00 PM

Question and Answer

3:30 PM - 5:00 PM



R Hypoplastic Left Heart Syndrome (Joint ASE/EACVI Session) - Ballroom IV



Chairs: M. Friedberg, O. Miller

3:30 PM - 3:45 PM

What Drives Right Ventricular Dysfunction in Hypoplastic Left Heart Syndrome? J. Simpson

3:45 PM - 4:00 PM

Have Tissue Doppler Imaging and Strain Helped to Assess and Understand RV Function in Hypoplastic Left Heart Syndrome? N. Khoo

4:00 PM - 4:15 PM

Has Echo Improved Outcomes in Hypoplastic Left Heart Syndrome? P. Frommelt

4:15 PM - 4:30 PM

Patient-Specific Predictive Modeling for Single Ventricle Palliation S. Schievano

4:30 PM - 4:45 PM

IN-07: Impact of Ventriculotomy on the Systemic Right Ventricle in Hypoplastic Left Heart Syndrome A. Kelle

4:45 PM - 5:00 PM

3:30 PM - 5:00 PM

It's All Right: The Right Heart – Room 314-317

Chairs: G. Kane, E. Shea

3:30 PM - 3:45 PM

Right Ventricular Chamber Quantification Update D. Bourque

3:45 PM - 4:00 PM

Incorporating New Technologies: Strain and 3D E. Kruse

4:00 PM - 4:15 PM

Assessing Pulmonary Hypertension A. Pellett

4:15 PM - 4:30 PM

Pulmonary Embolism vs. Right Ventricular Infarction M. Roberts

4:30 PM - 4:45 PM

When It's NOT Right: Carcinoid, Ebstein's, and Tricuspid Valve Complications M. Park

4:45 PM - 5:00 PM

Question and Answer

3:30 PM - 5:00 PM

Integration of 2D and 3D TEE In Current Practice - Room 309-310

Chairs: R. Grimm, R. Lang

3:30 PM - 3:45 PM

Current 3D Acquisition Systems and Techniques M. Vannan

3:45 PM - 4:00 PM

Basics of the 2D and 3D TEE Exam R. Lang

4:00 PM - 4:15 PM

2D/3D TEE in Guiding Valvular Interventions L. Marcoff

4:15 PM - 4:30 PM

2D/3D TEE in Guiding Atrial Interventions S. Mankad

4:30 PM - 4:45 PM

2D/3D TEE in Congenital Heart Disease Interventions D. Roberson

4:45 PM - 5:00 PM

Question and Answer

3:30 PM - 5:00 PM

R The Leading Edge: What Will We Be Doing in Five Years? - Room 307-308

Chairs: S. Lester, N. Weissman

3:30 PM - 3:50 PM

Machine Learning and Robotic Echo P. Sengupta

3:50 PM - 4:10 PM

New Applications of Ultrasound Physics C. Chow

4:10 PM - 4:30 PM

Molecular and Therapeutic Echo H. Leong-Poi

4:30 PM - 4:50 PM

Fusion Imaging F. Silvestry

4:50 PM - 5:00 PM

Question and Answer

5:00 PM - 6:30 PM

S R Echovation Challenge – Ballroom I-II

Chair: P. Sengupta Moderator: R. Martin

Expert Reaction Panel: T. Abraham, D. Adams, R. Druz,

J. Thomas

GOOD COMPANIES. GOOD WORKS.

ASE would like to thank our Industry Roundtable members.

Visit our Industry Roundtable Partners at ASE's 28th Annual Scientific Sessions.







BOOTH #407



BOOTH #201



BOOTH #307







BOOTH #209



BOOTH #313





10 N D A Y

SCHEDULE AT A GLANCE

MONDAY, JUNE 5^{TH}

REGISTRATION OPEN: 6:00 AM - 6:00 PM								
EXHIBIT & POSTER HALL OPEN: 9:00 AM – 4:00 PM								
ROOM	BALLROOM I-II	BALLROOM III	BALLROOM IV	ROOM 314-317	ROOM 309-310	ROOM 307-308		
7:00 – 7:50 AM	Focus On the Right Ventricle: Advanced Clinical Assessment	Mechanical Circulatory Support	Vascular Abnormalities	Stress Echo Boot Camp	CL The Athlete's Heart	From Bow to Stern: Imaging the Aorta and Great Vessels		
8:00 – 9:30 AM	Strain Imaging in Heart Failure/ Cardiomyopathy (Joint ASE/JSE Session)	"SAC" Attack: Pericardial Diseases	Frontiers in Pediatric Echocardiography: What Advances Could Impact the Field?	I'm A Lab Manager: Now What?	State of the Art: Mitral Valve Intervention	Ride the Wave: Advanced Vascular Imaging		
9:30 – 10:15 AM	REFRESHMENT BREAK, CHALK TALKS, AND VISIT EXHIBIT & POSTER HALL							
10:15 – 11:45 AM	Value of Echo Summit: Preparing for Value	Diastolic Function: From Invasive to Noninvasive Assessment	Diastology in Pediatrics	Something's Got A Hold of My Heart: Interventional Echocardiography	The Right Side of Things: Right Heart Evaluation	Multimodality Imaging in Selective Systemic Diseases		
11:45 – 1:15 PM	SCIENCE & TECHNOLOGY THEATER: GE HEALTHCARE AND MODERATED POSTERS							
1:15 – 2:45 PM	Value of Echo Summit: The High Value Echo Lab	Coronary Artery Disease: Multimodality Imaging Symposium	PC R Oral Abstracts	Making a Difference Around the World: Echo and the ASE Foundation	Left Atrial Appendage Closure for Stroke Prevention in Atrial Fibrillation	When the Abnormal Right Heart Comes of Age		
2:45 - 3:30 PM	REFRESHMENT BREAK, CHALK TALKS, AND VISIT EXHIBIT & POSTER HALL							
3:30 - 5:30 PM	S R ARTHUR E. WEYMAN YOUNG INVESTIGATOR'S AWARD COMPETITION AND 18 TH ANNUAL FEIGENBAUM LECTURE – BALLROOM I-II							
5:30 - 6:30 PM	MEMBER RECEPTION – OUTDOOR TERRACE							



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7:00 AM - 7:50 AM

CI Focus On the Right Ventricle: Advanced Clinical Assessment – Ballroom I-II

Chairs: M. Plastino, J. Seward

7:00 AM - 7:15 AM

Will This Right Ventricle Support an LVAD? J. Kirkpatrick

7:15 AM - 7:30 AM

Echocardiographic Evaluation of Arrhythmogenic Right Ventricular Cardiomyopathy D. Yoerger-Sanborn

7:30 AM - 7:45 AM

Right Ventricle Manifestations of Systemic Diseases *M. Mukherjee*

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

Chairs: J. Estep, D. Orsinelli

7:00 AM - 7:15 AM

Echo Guidance of Devices for Temporary Percutaneous Circulatory Support *P. Kumar*

7:15 AM - 7:30 AM

The LVAD Ramp Study *K. Addetia*

7:30 AM - 7:45 AM

LVAD Emergencies *B. Austin*

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

Vascular Abnormalities – Ballroom IV

Chairs: S. Natarajan, L. Young

7:00 AM - 7:15 AM

Marfan and Loeys-Dietz Syndromes: From Bench to Bedside *H. Dietz*

7:15 AM - 7:30 AM

Imaging Aortopathies and Vascular Function *E. Tierney*

7:30 AM - 7:45 AM

Vascular Tortuosity: A New Frontier? S. Morris

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

📵 Stress Echo Boot Camp – Room 314-317

Chairs: B. Anderson, T. Ryan

7:00 AM - 7:15 AM

Assessing Valvular Regurgitation *K. Pearce*

7:15 AM - 7:30 AM

The Diastolic Stress Test *M. Rampoldi*

7:30 AM - 7:45 AM

Stress Echo to Evaluate Aortic Stenosis *S. Shah*

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

The Athlete's Heart – Room 309-310

Chairs: K. Klarich, M. Wood

7:00 AM - 7:15 AM

The Effect of Athletic Conditioning on Cardiac Structure and Function *D. Phelan*

7:15 AM - 7:30 AM

Differentiating Athlete's Heart From Pathologic Conditions A. Magalski

7:30 AM - 7:45 AM

The NCAA Consensus Statement on CV Care of College Student Athletes: Is ECG Screening Enough? K. Klarich

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

V From Bow to Stern: Imaging the Aorta and Great Vessels – Room 307-308

Chairs: E. Kim, T. Naqvi

7:00 AM - 7:10 AM

Arch Vessel Imaging for the Echocardiographer *K. Yared*

7:10 AM - 7:25 AM

Screening of Aortic Disease: Familial, Abdominal Aortic Aneurysm, and Dissection *R. Quiroz*

7:25 AM - 7:40 AM

Aortopathy and Aortic Disease Management *F. Shamoun*

7:40 AM - 7:50 AM

Question and Answer

8:00 AM - 9:30 AM

S Strain Imaging in Heart Failure/
Cardiomyopathy (Joint ASE/JSE Session)

- Ballroom I-II



Chairs: S. Nakatani, J. Thomas

8:00 AM - 8:30 AM

Evaluation of Ischemic Cardiomyopathy: Insights from Strain Imaging *S. Nakatani*

8:30 AM - 8:45 AM

Strain in the Evaluation of Right Ventricular Performance *J. Gorcsan*

8:45 AM - 9:00 AM

Strain in the Evaluation of Nonischemic Cardiomyopathy H. Tanaka

9:00 AM - 9:15 AM

Strain in the Evaluation of Hypertrophic Cardiomyopathy *T. Abraham*

9:15 AM - 9:30 AM

Question and Answer

8:00 AM - 9:30 AM

S "SAC" Attack: Pericardial Diseases – Ballroom III Chairs: A. Klein, S. Sengupta

8:00 AM - 8:15 AM

Anatomy and Physiology of the Pericardium *B. Hoit*

8:15 AM - 8:30 AM

Multimodality Imaging Approach *J. Cavalcante*

8:30 AM - 8:45 AM

Water Water Everywhere: Assessment of Pericardial Effusion *M. Keane*

8:45 AM - 9:00 AM

Knock, Knock, Who's There? Constriction *J. Oh*

9:00 AM - 9:15 AM

Acute/Recurrent Pericarditis: Imaging Guided Approach *N. Pandian*

9:15 AM - 9:30 AM

Question and Answer

8:00 AM - 9:30 AM

Frontiers in Pediatric Echocardiography: What Advances Could Impact the Field? – Ballroom IV

Chairs: B. Eidem, O. Miller, S. Schievano

8:00 AM - 8:15 AM

Exercise Echo *W. Border*

8:15 AM - 8:30 AM

Fusion Imaging *P. Jone*

8:30 AM - 8:45 AM

High Frame Rate Imaging *M. Pernot*

8:45 AM - 9:00 AM

Shear Wave Imaging *M. Pernot*

9:00 AM - 9:15 AM

Blood Speckle Tracking S. Nyrnes

9:15 AM - 9:30 AM

Panel Discussion

8:00 AM - 9:30 AM

l'm A Lab Manager: Now What? – Room 314-317 Chairs: D. Agler, M. Bierig

8:00 AM - 8:15 AM

What Do I Need To Know & Where Do I Get It? M. Orsinelli

8:15 AM - 8:30 AM

Managing The Difficult Lab Member *K. Helfinstine*

8:30 AM - 8:45 AM

Managing Staffing & Workload *R. Rigling*

8:45 AM - 9:00 AM

Managing The New Employee: Interviewing & Orientation *J. Schaaf*

9:00 AM - 9:15 AM

Managing Employee Education *D. Agler*

9:15 AM - 9:30 AM

Question and Answer

8:00 AM - 9:30 AM

P State of the Art: Mitral Valve Intervention – Room 309-310
Chairs: G. Mackensen, F. Gill

8:00 AM - 8:15 AM

Open Surgical Repair: Key Echo Data the Surgeon Needs to Know *B. Taylor*

8:15 AM - 8:30 AM

Preprocedural Imaging for MitraClip Repair *C. Nyman*

8:30 AM - 8:45 AM

Intraprocedural Imaging for MitraClip Repair G. Mackensen

8:45 AM - 9:00 AM

Assessment of Mitral Regurgitation after Mitral Valve Repair S. Little

9:00 AM - 9:15 AM

3D Printed Modeling of Mitral Valve: Potential Utility to Inform Repair Strategy *Z. Qian*

9:15 AM - 9:30 AM

Question and Answer

8:00 AM - 9:30 AM

Ride the Wave: Advanced Vascular Imaging – Room 307-308

Chairs: E. Kim. B. Wells

8:00 AM - 8:15 AM

Council on Vascular Ultrasound Business Meeting E. Kim

8:15 AM - 8:30 AM

Top Vascular Disease Abstracts

A. Johri

8:30 AM - 8:45 AM

Imaging the Post-Intervention Carotid: How to Apply Diagnostic Criteria *R. Benenstein*

8:45 AM - 9:00 AM

Physiologic Testing or Duplex Imaging for Assessment of Peripheral Arterial Disease: Which to Choose R. Eberhardt

9:00 AM - 9:15 AM

Imaging in Renovascular Disease *N. Hamburg*

9:15 AM - 9:30 AM

Question and Answer

10:15 AM - 11:45 AM

S Value of Echo Summit: Preparing for Value – Ballroom I-II

Chairs: B. Byrd, P. Douglas

10:15 AM - 10:30 AM

The Brave New World of Value *C. Alspach*

10:30 AM - 10:45 AM

Lessons Learned from the Maryland Experiment *J. Colmers*

10:45 AM - 11:00 AM

Alternative Payment Models and the Cardiology Service Line *L. Sobal*

11:00 AM - 11:15 AM

The Value Proposition and the CV Service Line *L. Gillam*

11:15 AM - 11:45 AM

10:15 AM - 11:45 AM

S Diastolic Function: From Invasive to Noninvasive Assessment - Ballroom III

Chairs: T. Edvardsen, S. Nagueh

10:15 AM - 10:30 AM

Invasive Assessment of Left Ventricular Diastolic Function T. Fdvardsen

10:30 AM - 10:45 AM

Diastology Exam: What To Do and What Not To Do A. Klein

10:45 AM - 11:00 AM

Noninvasive Measurements: How They Relate To Invasive Indices M. Garcia

11:00 AM - 11:15 AM

The Diastolic Stress Test J. Oh

11:15 AM - 11:30 AM

Applying the New Guidelines S. Nagueh

11:30 AM - 11:45 AM

Question and Answer

10:15 AM - 11:45 AM

Diastology in Pediatrics – Ballroom IV

Chairs: T. Abraham, P. Frommelt

10:15 AM - 10:30 AM

Diastolic Dysfunction, Hypertrophy, and Cardiomyopathy in the Fetus B. Cuneo

10:30 AM - 10:45 AM

How Do We Assess Diastolic Function in Children? S. Srivastava

10:45 AM - 11:00 AM

Diastolic Function in Hypertrophic Cardiomyopathy W. Thompson

11:00 AM - 11:15 AM

Systolic-Diastolic Coupling S. Maskatia

11:15 AM - 11:30 AM

Why Were the Adult Guidelines Revised? J. Seward

11:30 AM - 11:45 AM

Question and Answer

10:15 AM - 11:45 AM

P Something's Got A Hold of My Heart: Interventional Echocardiography - Room 314-317

Chairs: K. Horton, A. Rabischoffsky

10:15 AM - 10:30 AM

The Guidelines: Current Recommendations for TAVR, Left Atrial Appendage Occlusion, and MitraClip Z. Wang

10:30 AM - 10:45 AM

MitraClip Imaging Protocols D. Oliver

10:45 AM - 11:00 AM

TAVR Assessment: Pre/Intra/Post Procedure J. Cleve

11:00 AM - 11:15 AM

Evaluating Closure Devices K. Horton

11:15 AM - 11:30 AM

The Spectrum of Device Complications K. Collins

11:30 AM - 11:45 AM

Question and Answer

10:15 AM - 11:45 AM

The Right Side of Things: Right Heart Evaluation - Room 309-310

Chairs: C. Grissom, N. Schiller

10:15 AM - 10:30 AM

Anatomy and Physiology of the Right Heart In Health and Disease R. Janardhanan

10:30 AM - 10:45 AM

Quantification of Right Heart Structure and Function L. Rudski

10:45 AM - 11:00 AM

Evaluation of Pulmonary Hypertension P. Gutierrez-Fajardo

11:00 AM - 11:15 AM

Limitations of Quantification Basics: New Roles for 3D and Strain Assessment L. Badano

11:15 AM - 11:30 AM

The Right Ventricle in the Unstable Patient P. Mohabir

11:30 AM - 11:45 AM

MONDAY, JUNE 5TH SCHEDULE

10:15 AM - 11:45 AM

Multimodality Imaging in Selective Systemic Diseases - Room 307-308

Chairs: M. Desai, D. Phelan

10:15 AM - 10:30 AM

Echo Features of Amyloid D. Phelan

10:30 AM - 10:45 AM

Advanced Imaging for Amyloid: MRI Techniques M. Desai

10:45 AM - 11:00 AM

Lupus V. Agrawal

11:00 AM - 11:15 AM

Hemochromocytosis A. Patel

11:15 AM - 11:30 AM

Sarcoidosis L. Blauwet

11:30 AM - 11:45 AM

Question and Answer

1:15 PM - 2:45 PM

S Value of Echo Summit: The High Value Echo Lab - Ballroom I-II

Chairs: M. Picard, S. Wiegers

1:15 PM - 1:30 PM

The Comparative Value of Echo in Clinical Care G. Rose

1:30 PM - 1:45 PM

Best Operational Practices From High Performing Echo Labs B. Khandheria

1:45 PM - 2:00 PM

Bundling and Episodes of Care: Where Does Echo Fit In? N. Weissman

2:00 PM - 2:15 PM

Echo Coding and Billing 101: What You Need to Know M. Main

2:15 PM - 2:45 PM

Question and Answer

1:15 PM - 2:45 PM

S R Coronary Artery Disease: Multimodality Imaging Symposium - Ballroom III

Chairs: V. Dilsizian, A. Weyman

1:15 PM - 1:30 PM

Utility and Limitations of Stress Echo in Evaluating Coronary Artery Disease M. Garcia

1:30 PM - 1:45 PM

CTA and FFRct in the Diagnosis of Coronary Artery Disease M. Scherer

1:45 PM - 2:00 PM

IN-08: Global Longitudinal Strain in Post-Heart Transplant Patients with Normal Left Ventricular Ejection Fraction is Associated with Coronary Allograft Vasculopathy A. Narang

2:00 PM - 2:15 PM

CMR in the Assessment of Ischemic Heart Disease J. Cavalcante

2:15 PM - 2:30 PM

Can Nuclear Imaging Compete with Other Modalities? P. Cremer

2:30 PM - 2:45 PM

Question and Answer

1:15 PM - 2:45 PM

陀 🔃 Oral Abstracts – Ballroom IV

Chairs: C. Fleishman, M. Friedberg

1:15 PM - 1:30 PM

PC-01: Right Ventricular Flow Dynamics in Dilated Right Ventricles: Energy Loss Estimation by Blood Speckle Tracking Echocardiography in Children W. Mawad

1:30 PM - 1:45 PM

PC-02: Can Abnormalities of the Mitral Valve Apparatus Identify Genotype-Positive, Phenotype-Negative Form of Hypertrophic Cardiomyopathy in Children?

R. Calderon-Anyosa

1:45 PM - 2:00 PM

PC-03: Appropriateness of Outpatient Transthoracic Echocardiography Orders Following Cessation of an Active **Educational Intervention**

S. Anderson

2:00 PM - 2:15 PM

PC-04: Echocardiographic Measures of Pulmonary Vascular Compliance: Novel Prognostic Markers for Congenital Diaphragmatic Hernia?

S. Aggarwal

2:15 PM - 2:30 PM

PC-05: Quantile Score: A New Reference System for Fetal Echocardiographic Measurements by a Multi-Center Study *X. Gu*

2:30 PM - 2:45 PM

PC-06: Correlation of Echocardiographic Measurements to Exercise Parameters in Fontan Children: A Prospective, Blinded Study *S. Goudar*

1:15 PM - 2:45 PM

S Making a Difference Around the World: Echo and the ASE Foundation – Room 314-317

Chairs: D. Adams, J. Banchs

1:15 PM - 1:30 PM

ASEF in the Philippines *D. Adams*

1:30 PM - 1:45 PM

ASEF in Kenya M. Foster

1:45 PM - 2:00 PM

ASEF in China *C. Taub*

2:00 PM - 2:15 PM

ASEF in Cuba F. Asch

2:15 PM - 2:30 PM

ASEF's Health Impact and What's Next *J. Banchs*

2:30 PM - 2:45 PM

Question and Answer

1:15 PM - 2:45 PM

S Left Atrial Appendage Closure For Stroke Prevention in Atrial Fibrillation – Room 309-310

Chairs: J. Passeri, F. Silvestry

1:15 PM - 1:30 PM

A Primer on Left Atrial Appendage Imaging: TEE, CT, and Fluoro Correlations *J. Thaden*

1:30 PM - 1:45 PM

Left Atrial Appendage Closure: Procedural Guidance with TEE *M. Saric*

1:45 PM - 2:00 PM

Left Atrial Appendage Closure: Procedural Complications, Detection by TEE S. Goldstein

2:00 PM - 2:15 PM

Novel Left Atrial Appendage Devices in Development *O. Khalique*

2:15 PM - 2:30 PM

Anticoagulation, Closure, or Something Else: What Do the Data Tell Us? *F. Silvestry*

2:30 PM - 2:45 PM

Question and Answer

1:15 PM - 2:45 PM

S When the Abnormal Right Heart Comes of Age – Room 307-308

Chairs: M. King, N. Schiller

1:15 PM - 1:30 PM

Volume Loaded Right Ventricle in Atrial Septal Defects A. Sadeghpour

1:30 PM - 1:45 PM

The Right Ventricle in the Repaired Tetralogy of Fallot *J. Prohias*

1:45 PM - 2:00 PM

The Systemic Right Ventricle: Corrected and Uncorrected Transposition *S. Morhy*

2:00 PM - 2:15 PM

Right Ventricle Response to Pressure Loads in Adults with Congenital Heart Disease *E. Krieger*

2:15 PM - 2:30 PM

Single Ventricle Fontan Circulation in the Adult *G. Lui*

2:30 PM - 2:45 PM

3:30 PM - 5:30 PM



S R Arthur E. Weyman Young Investigator's Award **Competition / 18th Annual Feigenbaum Lecture** - Ballroom I-II

Chair: S. Mankad

Judges: A. Klein, S. Nakatani, B. Popescu, T. Porter, M. Scherrer-Crosbie, A. Weyman

3:30 PM - 3:35 PM

Welcome & Introduction of Judges S. Mankad

3:35 PM - 3:50 PM

YIA-1: Diastolic Dysfunction is a Multivariable Predictor of Re-hospitalization Following Transcatheter Aortic Valve Replacement: A PARTNER 2 SAPIEN 3 Substudy G. Ong

3:50 PM - 4:05 PM

YIA-2: Ultrasound Molecular Imaging of Endothelial Activation and Platelet Adhesion in Remote Arteries after Myocardial Infarction: Implications for Reducing Risk for Remote Recurrent Atherosclerotic Events

F. Moccetti

4:05 PM - 4:20 PM

YIA-3: Effect of Continuous Positive Airway Pressure Therapy on Left Ventricular Diastolic Function in Patients with Severe Obstructive Sleep Apnea (CPAP-OASIS) assessed by Tissue Doppler, 2D Speckle Tracking and Exercise Hemodynamics: A Randomized Sham Controlled Clinical Trial D. Kim

4:20 PM - 4:35 PM

YIA-4: Impact of Left Ventricle Vortex Flow Guided Anticoagulation Therapy for Preventing Apical Thrombus Formation in Patients with Acute Myocardial Infarction. The INNOVATION Multicenter Prospective Randomized Clinical Trial J. Son

4:35 PM - 4:37 PM

Concluding Remarks S. Mankad

4:37 PM - 4:40 PM

Introduction of 18th Annual Feigenbaum Lecturer A. Klein

4:40 PM - 5:00 PM

18th Annual Feigenbaum Lecture: "The Evolution of Contrast Echocardiography: A Journey From Diagnostic to Therapeutic Applications"

H. Leong-Poi

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 Award Lecturer T. Porter

5:07 PM - 5:23 PM

Noninvasive Assessment of the Hemodynamic Significance of Coronary Stenosis Using Fusion of 3D Echocardiography and Cardiac Computed Tomography V. Mor-Avi

5:23 PM - 5:25 PM

Recognition of ASE Foundation Lecturer, Concluding Remarks T. Porter

5:25 PM - 5:30 PM

Presentation of the YIA Plagues and Announcement of the Winner A. Weyman

CALL FOR PROPOSALS

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SCHEDULE AT A GLANCE

TUESDAY, JUNE 6TH

REGISTRATION OPEN: 6:30 AM - 2:30 PM								
ROOM	BALLROOM I-II	BALLROOM IV	ROOM 314-317	ROOM 309-310	ROOM 307-308			
7:00 – 7:50 AM	CL Clinical Application of Strain Imaging	Case Competition	Advanced Cardiac Sonographer Boot Camp	POC CI POCUS: The Hypotensive Patient in the ICU/ED	Hypertrophic Cardiomyopathy: The Role of Echo in Evaluation and Intervention			
8:00 – 9:30 AM	Complex Cases in Structural Heart Disease: Consultation with the Experts I	Debates and Discussions	Surprise: There's Congenital Heart Disease	Guidelines in Action: 3 Cases, 3 Key Points	Investigate, Innovate, Incorporate: Top Abstracts from the 2017 Scientific Sessions			
9:30 - 10:00 AM	REFRESHMENT BREAK							
10:00 – 11:30 AM	Complex Cases in Structural Heart Disease: Consultation with the Experts II	From Bench to Bedside	Contrast: The New Millennium	The Support for the Failing Heart: Role of Echo	The Role of Echo in the Evaluation of Stroke			
11:30 - 1:00 PM	SCIENCE & TECHNOLOGY THEATER: ABBOTT							
1:00 – 2:30 PM	S R Emerging Therapies for Valvular Heart Disease	The Circle of Life in Congenital Heart Disease: From the Fetus to the Adult	This Is How A Heart Breaks: Imaging in Myocardial Disease		Stress Echo: Read with the Experts			

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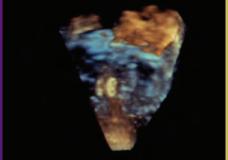


William A. Zoghbi, MD, FASE
Past President, ASE
Houston Methodist Hospital, Houston, TX

Learning Lab Co-Director



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









7:00 AM - 7:50 AM

Clinical Application of Strain Imaging – Ballroom I-II
Chairs: G. Cho. R. Grimm

7:00 AM - 7:15 AM

Strain and Cardiomyopathy *C. Breburda*

7:15 AM - 7:30 AM

Left Ventricular Strain in the Assessment of the Patient with Cancer *A. Barac*

7:30 AM - 7:45 AM

Use of Strain in Assessment of Valvular Heart Disease *S. Mayer*

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

📴 👊 Case Competition – Ballroom IV

Chairs: V. Allada, L. Tani

7:00 AM - 7:05 AM

Welcome and Introductions *V. Allada, L. Tani*

7:05 AM - 7:15 AM

CC-01: Tetralogy of Fallot with Dysplastic/Absent Pulmonary Valve Syndrome with Left Pulmonary Artery Originating from the Patent Ductus Arteriosus

A. Argarwal, L. Tani (Mentor)

7:15 AM - 7:25 AM

CC-02: Preoperative Echocardiographic Identification of an Aortopulmonary Window with Anomalous Origin of the Right Coronary Artery from the Main Pulmonary Artery *E. Paul, S. Menon (Mentor)*

7:25 AM - 7:35 AM

CC-03: Porcelain Left Atrium in Fetus with Maternal Lupus *A. Nair, N. Ayres (Mentor)*

7:35 AM - 7:45 AM

CC-04: Role of 3D Echocardiography in Left Atrioventricular Valve Repair in Patients Status Post Complete Atrioventricular Canal Defect Repair

S. Sachdeva, G. Ensing (Mentor)

7:45 AM - 7:50 AM

Recognition of Finalists and Announcement of the Winner L. Tani, V. Allada

7:00 AM - 7:50 AM

Advanced Cardiac Sonographer Boot Camp – Room 314-317

Chairs: B. Khandheria, M. Umland

7:00 AM - 7:15 AM

How To Get There *M. Bierig*

7:15 AM - 7:30 AM

How Does An Advanced Cardiac Sonographer Help My Lab *M. Umland*

7:30 AM - 7:45 AM

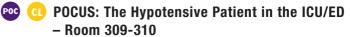
A Day In the Life of an Advanced Cardiac Sonographer: Cases & Quality

L. Elvert

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM



Chairs: B. Arva, S. Brown

7:00 AM - 7:15 AM

Right Ventricular Failure and Septic Shock A. Oren-Grinberg

7:15 AM - 7:30 AM

SAM/Dynamic Outflow Tract Obstruction G. Scalia

7:30 AM - 7:45 AM

Hypovolemic Shock with US Evidence for Hemorrhage *K. Boniface*

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

CI Hypertrophic Cardiomyopathy: The Role of Echo in Evaluation and Intervention – Room 307-308

Chairs: J. Dent. M. Galderisi

7:00 AM - 7:15 AM

The Echocardiographic Evaluation of Hypertrophic Cardiomyopathy *A. Hays*

7:15 AM - 7:30 AM

Echo-Guided Interventions in Hypertrophic Cardiomyopathy S. Goldstein

7:30 AM - 7:45 AM

Echo Guidance of Surgical Myectomy *N. Quader*

7:45 AM - 7:50 AM

Question and Answer

8:00 AM - 9:30 AM

S Complex Cases in Structural Heart Disease: Consultation with the Experts I – Ballroom I-II

Chair: W. Stewart

Panel

G. Mackensen, E. Gill, H. Herrmann, W. Stewart, L. Svensson

8:00 AM - 8:30 AM

Complex Surgical Mitral Valve Repair *D. Shook*

8:30 AM - 9:00 AM

Complex TAVR

L. Sugeng

9:00 AM - 9:30 AM

Advanced Heart Failure with High Grade Mitral Regurgitation: Repair, Replace, or Clip? *F. Asch*

8:00 AM - 9:30 AM

📴 Debates and Discussions – Ballroom IV

Chairs: M. Cohen, M. Frommelt

8:00 AM - 8:30 AM

Controversies: Indications for Pulmonary Valve Replacement in Right Ventricular Outflow Tract Dysfunction: Volume Assessment is Enough *R. Garg*

8:00 AM - 8:30 AM

Controversies: Indications for Pulmonary Valve Replacement in Right Ventricular Outflow Tract Dysfunction: Functional Measures Should be Required D. Harrild

8:30 AM - 8:50 AM

Townhall Discussion: Left Sided Obstruction and the Borderline Left Ventricle Pre and Post-Natally: How Do We Move Forward? W. Tworetzky (lead), J. Kovalchin, S. Menon, G. Shirali, A. Younoszai

8:50 AM - 9:10 AM

Townhall Discussion: Continuous Quality Improvement in the Echo Lab: How Do We Achieve It?

C. Fleishman (lead), V. Allada, C. Altman, B. Gorman, H. Ko,
A. Parthiban, T. Tacy

9:10 AM - 9:30 AM

Townhall Discussion: MRI After Echo: When Is It Needed? D. Parra (lead), J. Lu, A. Powell, B. Soriano, P. Spevak

8:00 AM - 9:30 AM

Surprise: There's Congenital Heart Disease – Room 314-317

Chairs: P. Barker, J. Kreeger

8:00 AM - 8:15 AM

The Segmental Approach *H. Carron*

8:15 AM - 8:30 AM

Tetralogy of Fallot B. Byrd

8:30 AM - 8:45 AM

Transposition of Great Arteries *N. Soni-Patel*

8:45 AM - 9:00 AM

Atrial Septal Defect and Ventricular Septal Defect Assessment S. Nay

9:00 AM - 9:15 AM

Stress Echo in Congenital Heart Disease *J. Kreeger*

9:15 AM - 9:30 AM

Question and Answer

8:00 AM - 9:30 AM

S Guidelines in Action: 3 Cases, 3 Key Points – Room 309-310

Chairs: L. Badano, T. Marwick

8:00 AM - 8:15 AM

Clinical Application of 3D *I. Badano*

8:15 AM - 8:30 AM

Evaluation of Right Ventricle and Pulmonary Hemodynamics *V. Raizada*

8:30 AM - 8:45 AM

Evaluation of Hypertension *T. Marwick*

8:45 AM - 9:00 AM

Cardiac Source of Embolism *M. Saric*

9:00 AM - 9:15 AM

Diastolic Function *A. Gopal*

9:15 AM - 9:30 AM

Question and Answer

8:00 AM - 9:30 AM



Chairs: J. Lindner, S. Mankad, T. Porter, M. Sherrer-Crosbie

IN-06: The Biophysics of Ultrasound-stimulated Microbubbles for Drug/Gene Delivery

Brandon Helfield

P2-08: Clustering of Echocardiography Variables for Data-Driven Assessment of Left Ventricular Diastolic Function in Patients with Preserved Ejection Fraction Alaa Omar

P2-141: Left Ventricular Dyssynchrony and Real Time 3 D Echocardiogram in Children Following Chemotherapy *Gilda Kadiu*

IN-03: Less is not More for Diagnosis of Cardiotoxicity: Single vs Standard Multiview Assessment of Global Longitudinal Strain *Tomoko Negishi*

IN-04: Impact of Non-Ischemic Fibrosis on Echo-evidenced Right Ventricular Function among Patients with Ischemic Mitral Regurgitation

Antonino Di Franco

IN-08: Global Longitudinal Strain in Post-Heart Transplant Patients with Normal Left Ventricular Ejection Fraction is Associated with Coronary Allograft Vasculopathy Akhil Narang

P1-06: The Enhanced Effect of Classic Nuclear Localization Signal Peptide During the Ultrasound Targeted Microbubble Destruction-Mediated Gene Transfection Rui-qiang Guo

P1-23: Right Ventricular Strain as a New Marker of Neuro-Cardiac Injury in Patients with Subarachnoid Hemorrhage *Nobuyuki Kagiyama*

10:00 AM - 11:30 AM

S Complex Cases in Structural Heart Disease: Consultation with the Experts II – Ballroom I-II

Chair: R. Hahn

Panelists: R. Hahn, H. Herrmann, S. Little, L. Svensson, M. Swaminathan

10:00 AM - 10:30 AM

Complex Mitral Clip Case *F. Gill*

10:30 AM - 11:00 AM

Post Myocardial Infarction Ventricular Septal Defect *Z. Wang*

11:00 AM - 11:30 AM

When to Intervene for Tricuspid Valve Disease in Patients Undergoing Mitral Valve Surgery

H. Michelena

10:00 AM - 11:30 AM

Prom Bench to Bedside - Ballroom IV

Chairs: L. Mertens, G. Shirali

10:15 AM - 10:30 AM

3D Echo in Hypertrophic Cardiomyopathy *J. Marek*

10:30 AM - 10:45 AM

Doppler Assessment of Ventricular/Vascular Interactions K. Hunter

10:45 AM - 11:00 AM

Echo Conductance Correlations: What Do We Know, What Do We Need To Learn?

S. Chowdhury

11:00 AM - 11:15 AM

3D Modeling and Novel Displays for Surgical Interventions *L. Olivieri*

11:15 AM - 11:30 AM

Machine Learning Approaches for Mining Speckle Tracking Big Data

P. Sengupta

10:00 AM - 11:30 AM

© Contrast: The New Millennium – Room 314-317 Chairs: J. Olson, T. Porter

10:00 AM - 10:20 AM

The Basics of Left Ventricular Opacification *R. Musarra*

10:20 AM - 10:40 AM

Perfusion Imaging: What & Why *T. Porter*

10:40 AM - 11:00 AM

Perfusion Imaging: How *J. Olson*

11:00 AM - 11:20 AM

Turning Technique into Action: Case Examples *G. Strachan*

11:20 AM - 11:30 AM

Question and Answer

10:00 AM - 11:30 AM

S The Support for the Failing Heart: Role of Echo - Room 309-310

Chairs: S. Price, R. Stainback

10:00 AM - 10:20 AM

What the Surgeon Wants to Know Before Surgery *E. Molina*

10:20 AM - 10:40 AM

Surveillance and Speed Change LVAD Imaging Protocols *G. Lin*

10:40 AM - 11:00 AM

Role of Echo Imaging for LVAD When Things Go Wrong *J. Estep*

11:00 AM - 11:20 AM

Insertion and Troubleshooting Impella and ECMO *B. Austin*

11:20 AM - 11:30 AM

Question and Answer

10:00 AM - 11:30 AM

S The Role of Echo in Evaluation of Stroke – Room 307-308

Chairs: J. Aragam, M. Saric

10:00 AM - 10:15 AM

Which Patients with Stroke Should Undergo TEE? *M. Saric*

10:15 AM - 10:30 AM

Transcranial Doppler: Role in Cryptogenic Stroke *R. Benenstein*

10:30 AM - 10:45 AM

Patent Foramen Ovale Evaluation and the Role of Closure D. Orsinelli

10:45 AM - 11:00 AM

Left Atrial Appendage Occlusion Therapies: Answered and Unanswered Questions

M. Stoddard

11:00 AM - 11:15 AM

Three Cases of Unusual Causes of Stroke *A. Hays*

11:15 AM - 11:30 AM

Question and Answer

1:00 PM - 2:30 PM

S R Emerging Therapies for Valvular Heart Disease – Ballroom I-II

Chairs: S. Little, M. Monaghan

1:00 PM - 1:15 PM

Percutaneous Mitral Valve Replacement: Tiara Valve *S. Little*

1:15 PM - 1:30 PM

Novel TAVR Valves in Development *R. Hahn*

1:30 PM - 1:45 PM

Percutaneous Tricuspid Valve Options: SCOUT Trial Percutaneous Tricuspid Valve Repair *J. Puthumana*

1:45 PM - 2:00 PM

Experience with Percutaneous Pulmonic Valve Replacement *T. Geva*

2:00 PM - 2:15 PM

Valve in Valve Approaches *M. Monaghan*

2:15 PM - 2:30 PM

Question and Answer

1:00 PM - 2:30 PM

The Circle of Life in Congenital Heart Disease: From the Fetus to the Adult – Ballroom IV

Chairs: Y. Kim, R. Michelfelder

1:00 PM - 1:15 PM

Does Ventricular Function in the Fetus Affect Function in Adult Life?

F. Crispi

1:15 PM - 1:30 PM

Assessment of the Failing Fontan *D. Goldberg*

1:30 PM - 1:45 PM

Assessment of the Fetus with Ebstein Anomaly W. Tworetzky

1:45 PM - 2:00 PM

Ebstein Anomaly in the Adult *B. Eidem*

2:00 PM - 2:15 PM

Fetal Imaging and Neuro-Developmental Outcomes Later in Life J. Rychik

2:15 PM - 2:30 PM

Rychik, W. Tworetzky

Discussion: Should ACHD Experts Participate in Fetal Counseling F. Crispi, B. Eidem, D. Goldberg, Y. Kim, R. Michelfelder, J.

1:00 PM - 2:30 PM

This Is How A Heart Breaks: Imaging In Myocardial Disease – Room 314-317

Chairs: M. Orsinelli, A. Sadeghpour

1:00 PM - 1:15 PM

Hypertensive Heart Disease *K. McGregor*

1:15 PM - 1:30 PM

Hypertrophic Cardiomyopathy *A. Venkateshvaran*

1:30 PM - 1:45 PM

Infiltrative Heart Disease *S. Phillip*

1:45 PM - 2:00 PM

Chemotherapy Induced Heart Failure

1. Sanchez

2:00 PM - 2:15 PM

Complications of Myocardial Infarction *J. Betz*

2:15 PM - 2:30 PM

Question and Answer

1:00 PM - 2:30 PM

S c1 Stress Echo: Read with the Experts – Room 307-308

Chair: P. Pellikka

Panelists: H. Feigenbaum, J. Kisslo, N. Thi Thu Hoai, N. Weissman

1:00 PM - 1:30 PM

Valvular Heart Disease *S. Maver*

1:30 PM - 2:00 PM

Contrast Perfusion K. Wei

2:00 PM - 2:30 PM

Ischemic Heart Disease *R. Weiner*

ASE is proud to announce the launch of the first echo-specific clinical data registry

ImageGuideEcho

A module under the **ImageGuideRegistry** platform

Learn more in the ASE Booth 511 Sunday, June 4th or Monday, June 5th, 9:30 - 10:15 AM



ImageGuideEcho Benefits for ASE Members:

- Avoid negative payment adjustments under MIPS
- Report on performance measures specific to echocardiography
- Take advantage of smaller patient pool for reporting requirements
- Access location-specific quality data
- Compare performance against national benchmarks
- Participate in affordable alternative to larger, more broad-based registries
- Simplify with a single interface for multi-modality labs
- Improve quality of care for echo patients
- Enjoy seamless workflow integration*
- Succeed in the changing healthcare environment

*Note that pilot phase members will employ web-based data collection.

For more information on how you can be part of the "next big thing in echo" please contact Sarah Beth Bdoyan at **SBBdoyan@asecho.org**.

Registry Partners











Congratulations

Elsevier congratulates
Alan S. Pearlman,
MD, FASE

2017 ASE Meritorious

Service Award recipient,

for his ten years of service

as JASE Editor-in-Chief.



It has been our honor to work with **Dr. Pearlman** in this capacity.



Council on Pediatric & Congenital Heart Disease Founders' Award

Jean-Claude Fouron, MD, FRCP, CM, OQ, Emeritus Professor

Meritorious Service Award

Alan S. Pearlman, MD, FASE

Outstanding Achievement in Perioperative Echocardiography Award

Robert M. Savage, MD

Physician Lifetime Achievement Award

William J. Stewart, MD, FASE

Richard Popp Excellence in Teaching Award

Muhamed Saric, MD, PhD, FASE

Sonographer Lifetime Achievement Award

Margaret M. Park, BS, ACS, RDCS, RVT, FASE

NBE shares ASE's continued commitment to quality in echocardiography. We applaud this year's honorees and their numerous contributions to the field of echocardiography and extend our congratulations on these well-deserved honors.



SATURDAY, JUNE 3RD

SPECIAL EVENTS AND NETWORKING OPPORTUNITIES

SCIENCE & TECHNOLOGY THEATER

11:30 AM - 1:00 PM

Exhibit & Poster Hall

The Diagnostic Advantage of Contrast Echocardiography

Presented by Lantheus Medical Imaging, Inc.

Join expert faculty in an interactive panel discussion on contrast echocardiography followed by a moderated Q&A session.

See the advantages contrast echocardiography offers over unenhanced echo in diagnostic outcomes, patient management, and cost effectiveness. Gain practical insight into the implementation of contrast echocardiography. Understand the impact that contrast echocardiography provides to patient diagnosis and outcomes. For more info and to register please visit http://www.lantheus.com/rsvp/.

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 28th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

EDUCATOR'S SUMMIT

3:00 - 4:30 PM

Room 302

Join in on a round-table discussion for educators teaching cardiovascular ultrasound. Discussion includes international cardiovascular ultrasound education practices, development of international advanced cardiovascular sonographer programs, educational needs in different geographical locations, and the use of social media for reaching students in different geographical locations. Attendees will receive information regarding ASE's educator resources for use in educational programs.

PRESIDENT'S RECEPTION

4:30 - 6:30 PM

Exhibit & Poster Hall

All attendees are invited to celebrate ASE 2017 at the President's Reception, hosted by ASE President, Allan Klein, MD, FASE. This is an opportunity to network with colleagues and friends while learning more about the newest equipment and services in the cardiovascular field. Nearly 50 exhibitors will be showcasing their products. Complimentary hors d'oeuvres and 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.

ASE FOUNDATION 8TH ANNUAL RESEARCH AWARDS GALA

7:00 - 11:00 PM

Hippodrome Theatre

Baltimore, MD

The premier annual fundraiser for the ASE Education and Research Foundation is the 8th Annual Research Awards Gala. The "Opening Night" theme is perfect for honoring ASE's awards recipients while raising funds to support cardiovascular ultrasound research. Event proceeds support research activities that advance the progress and future of our field. Tickets are required. For more information, visit the ASE Foundation booth, located outside the Exhibit & Poster Hall on Level 100.

IMAGES FROM THE HEART GALLERY

ASEF Booth, Level 100

A special juried showcase of photographs will be on display Friday – Monday. View the world through the eyes, and photos, of ASE members taken while they traveled across the world to participate in various medically-related humanitarian events. Photos will be available for purchase to benefit the Foundation. Stop by to meet with the photographers during the Member Reception on Monday evening, 5:30-6:30 PM on the Outdoor Terrace.

SUNDAY, JUNE 4TH

SPECIAL EVENTS AND NETWORKING OPPORTUNITIES

SCIENCE & TECHNOLOGY THEATER

6:00 - 7:00 AM

Exhibit & Poster Hall

The Path to Better Patient Care: Studies, Cases and Solutions for Improved Cardiovascular Ultrasound

Presented by Philips

This session will highlight three perspectives on innovations in cardiovascular ultrasound - a global study, clinical cases, and a pre and post surgery solution - all of which have impacted the way care is delivered. You will learn about results of a global, multi-center study trial for cardiovascular ultrasound; the impact of live 3D TEE on interventional cardiology using real-world clinical cases; and creating a total solution for surgery - complementary use of cardiovascular ultrasound in pre and post scenarios.

Breakfast 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 28th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

ASE AWARDS PRESENTATION AND 28TH ANNUAL EDLER LECTURE

7:30 - 9:30 AM

Ballroom I-II



Susan E. Wiegers, MD, FASE, Senior Associate Dean of Faculty Affairs and Professor of Medicine at Lewis Katz School of Medicine at Temple University, Philadelphia, PA, will present "The Point of Care" as the 28th Annual Edler Lecturer. In addition to being a Past President of ASE, Dr. Wiegers has been involved in numerous

roles including serving as course co-director for the ASE's ASCeXAM/ReASCE Review Course from 2009-2011; as chair of the 2011 Scientific Sessions; and as co-chair of the joint ASE/ACC session at the ACC's annual Scientific Sessions in 2012. She was awarded the Richard Popp Excellence in Teaching award in 2007. She has a long record of service on ASE committees, including the Scientific Sessions Planning Committee, the Awards Committee, and as chair of the Education Committee. The Edler Lecture was created in 1990 in honor of the founder of echocardiography, Inge Edler, MD.

LIFETIME ACHIEVEMENT AWARDS

The Lifetime Achievement Award recognizes an individual who has had a lifetime of outstanding achievements in the field of cardiovascular ultrasound and has served as a role model through service, research, and teaching. This individual has a career in cardiovascular ultrasound spanning at least 25 years and is recognized at local, national, and international levels.



William J. Stewart, MD, FASE, Cleveland Clinic, Cleveland, Ohio has been named as the 2017 Physician Lifetime Achievement Award recipient. Dr. Stewart is a leading valve expert with patients coming from all around the world for his expert opinion. He was an early pioneer in the development of intraoperative transesophageal

echocardiography and was instrumental in the initial innovation with epicardial echo. He has published over 220 scientific articles in leading medical journals and has authored 19 chapters in medical textbooks. Dr. Stewart served as ASE's Treasurer from 1999 to 2001. Dr. Stewart exemplifies this award in his dedication to intraoperative echo, valve disease, serving ASE, as well as his love for humanity.



The 2017 Sonographer Lifetime
Achievement Award recipient is
Margaret (Koko) M. Park, BS, ACS,
RDCS, RVT, FASE, Cleveland Clinic,
Cleveland, Ohio. For more than 40
years Koko has promoted excellence
through her work as a sonographer,
researcher, and educator. Whether it is
the daily education of a sonographer or a

cardiac fellow in the lab, providing clinical instruction to a sonography student, or presenting invited lectures at local, state, and national meetings, Koko is always ready to take the opportunity to teach about cardiovascular ultrasound. Research has been a part of her career from the beginning and she is widely published in the area of cardiovascular ultrasound. Her achievements and her example as a role model through her service embodies the spirit of this award.

MERITORIOUS SERVICE AWARD



ASE is pleased to recognize Alan S.

Pearlman, MD, FASE, University of
Washington Medical Center,
Seattle, Washington, as the 2017
recipient of the Meritorious Service
Award. Dr. Pearlman has served as the
Editor-in-Chief of the Journal of the
American Society of Echocardiography
(JASE) for the past 10 years and will be

stepping down at the end of 2017. The impact factor for JASE has seen a steady increase during the time that Dr. Pearlman has been Editor which is a direct reflection on his tireless work and devotion to the publication. He has made multiple improvements to JASE and will be honored for his impact on the Journal and its corresponding impact on the field of CV care. Dr. Pearlman has been dedicated to the advancement of cardiovascular ultrasound and ASE for his entire career. He has served ASE in many capacities, including being President from 1994-1996, and Chair of the Advocacy Committee before becoming the JASE Editor-in-Chief. The ASE Meritorious Service Award recognizes individual members for their substantial and generous efforts to the Society's betterment.

RICHARD POPP EXCELLENCE IN TEACHING AWARD



Described as a masterful educator and teacher with a contagious enthusiasm for echocardiography, **Muhamed Saric, MD, PhD, FASE, New York University, New York, New York**, has been named the 17th annual recipient of the Richard Popp Excellence in Teaching Award. Dr. Saric has a way of presenting complex topics in a very clear and concise fashion while

creating an environment of curiosity and learning. 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



Jean Claude Fouron, MD, FRCP(c), CM, OQ, from University of Montreal, Quebec, Canada has been named as the 15th recipient of the ASE Council on Pediatric and Congenital Heart Disease Founders' Award. Dr. Fouron's work has changed the way fetal cardiologists, obstetricians, and maternal-fetal medicine specialists practice.

Observations now considered "routine knowledge" came from his remarkable work. This award recognizes continued major scholarly contributions to the field of pediatric echocardiography. Dr. Fouron will make a few short remarks during the Council on

Pediatric and Congenital Heart Disease Business meeting on Saturday, June 3rd, 1:00 - 2:30 PM in Ballroom IV.

OUTSTANDING ACHIEVEMENT IN PERIOPERATIVE ECHOCARDIOGRAPHY AWARD



Robert M. Savage, MD, McLeod Healthcare, Emeritus Faculty, Clinic Cleveland Clinic Lerner College of Medicine & (retired) Vice-Chair, Department of Cardiothoracic Anesthesiology, Florence, SC, has been named the 5th recipient of the Outstanding Achievement in Perioperative Echocardiography Award. Dr. Savage's

career has been dedicated to developing the field of perioperative echo. He has a unique perspective from the specialties of both cardiology and anesthesiology. He pioneered echo's role in emergency ECMO and ventricular assist insertion, and in fact, directed the emergency response teams throughout the Cleveland Clinic for many years. Dr. Savage was one of the founding members of the ASE Council on Perioperative Echocardiography. 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.

🔞 🕕 POSTER SESSION 1 (P1)

9:00 AM - 4:00 PM

Exhibit & Poster Hall

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

Moderated Posters: 12:00 PM - 1:15 PM

TOPICS

Contrast Echocardiography and New Technology....... Posters P1-01 through P1-21

Critical Care Ultrasound /

Point of Care Ultrasound..... Posters P1-22 through P1-27

Pediatric and Adult Congenital

Heart Disease Posters P1-28 through P1-67

Clinical Cases: Pediatric

Patients P1-68 through P1-73

Intraprocedural Echocardiography (Operating Room and Interventional Lab) / TEE Posters P1-74 through P1-85

3D EchocardiographyPosters P1-86 through P1-111

Valvular Heart DiseasePosters P1-112 through P1-149

Clinical Cases:

Adult PatientsPosters P1-150 through P1-179

CHALK TALKS

9:30 - 10:15 AM & 2:45 - 3:30 PM Exhibit & Poster Hall

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, Steven Lester, MD, FASE, will be available to answer all of your questions about **Right Heart Assessment**. The afternoon break will be dedicated to the **Basics of Strain Imaging** with James Thomas, MD, FASE.

SCIENCE & TECHNOLOGY THEATER

11:45 AM - 1:15 PM

Exhibit & Poster Hall

New Methods in the Diagnosis and Treatment of Mitral Regurgitation

Presented by Siemens Healthineers

Please join Siemens Healthineers and our esteemed speakers for a unique clinical discussion and luncheon. Hear from cardiovascular thought leaders as they discuss using improved quantification tools in echocardiography to better assess and stage mitral regurgitation (MR) as well as how to guide MR therapies in real-time.

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 28th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

2017 KALMANSON LECTURE

1:15 - 1:45 PM

Ballroom I-II



The ASE Foundation is honored to recognize Bogdan A. Popescu, MD, PhD, FASE, from the University of Medicine and Pharmacy in Bucharest, Romania as the 2017 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. Popescu will present his lecture entitled "Tissue Doppler: Our Window Into Diastolic Function" during the Assessment of Diastolic Function in Special Populations Joint ASE/EACVI symposium.

REACHING THE SUMMIT: SONOGRAPHER INVESTIGATOR'S COMPETITION & CAREER CONVERSATION

1:15 - 2:45 PM

Room 314-317

Created to highlight sonographer-led research, the ASE Foundation's annual Sonographer Investigator's Award 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.

- Courtney J. Cassidy, RDCS, Children's Hospital Colorado, Aurora, CO - "Right Atrial Dysfunction in Pediatric Kawasaki Disease Patients"
- Ling Li, RDMS, University of Nebraska Medical Center, Omaha, NE "Assessment of Right Ventricular Mechanics and Volumes in the Fetal Heart Using 3D Echocardiography"
- Gilda Kadiu, RDCS, Children's Hospital of Michigan, Detroit, MI "Speckle Tracking Echocardiography Following Hybrid Stage 1 Procedure for Infants with Hypoplastic Left Heart Syndrome"
- Leah M. Wright, BsC, DMU-Cardiac, University of Tasmania, Hobart, Australia "Progression of Pulmonary Artery Pressure and RV Function as Predictors of Outcome in Pulmonary Arterial Hypertension"

FELLOW AND EARLY CAREER MEMBER NETWORKING RECEPTION

2:45 - 3:30 PM

Room 301

Fellows and early career physician and sonographer members 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.

ECHOVATION CHALLENGE

5:00 - 6:30 PM

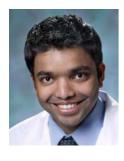
Ballroom I-II

Following the inaugural launch of Echovation Challenge in 2016, ASE has renewed its mission of accelerating innovation and shaping the future of cardiovascular ultrasound. This year's new game format, designed by Partho Sengupta, MD, FASE, and the task force, will add some exciting new aspects. The incentive prize competition features teams showcasing their novel approaches, technologies, and processes in echocardiography for startup funding.



Selected from a large number of applicants, five semi-finalists will present their solutions in this exciting Shark Tank-style session, with **ASE Past President Randolph P. Martin, MD, FASE, FACC, FESC**, serving as emcee. An esteemed Expert Reaction Panel, including Ted Abraham, MD, FASE,

David Adams, ACS, RCS, RDCS, Regina Druz, MD, FACC, and James Thomas, MD, FASE, will comment on the presentations and add their unique insights. Audience members will also have a chance to vote for their favorites and ask questions of the finalists; the top three winners will be awarded cash prizes totaling \$10,000.



The session will also feature a special keynote address by **Kapil Parakh, MD, MPH, PhD.** Dr. Parakh is a practicing cardiologist who is currently leading efforts at Google to provide high quality health information to a billion users while creating the infrastructure for decision support tools. He is also

the cofounder of Health for America, an award winning nonprofit on health innovation. Previously, he was a White House Fellow at the VA and worked on a broad range of issues from increasing access to improving health outcomes across the system.

To add to the festivities the event will include cocktails and refreshments for the audience. Come and cheer on your favorite team and help us "crown" the winner of the 2017 challenge!



ASE proudly recognizes our International Alliance
Partners (listed alphabetically)

Argentinian Federation of Cardiology ASEAN Society of Echocardiography Asian-Pacific Association of Echocardiography **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 Japanese Society of Echocardiography Korean Society of Echocardiography Mexican Society of Echocardiography and Cardiovascular Imaging (SOMEICV) Philippine Society of Echocardiography Saudi Arabian Society of Echocardiography (SASE)

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.

Thai Society of Echocardiography

Vietnamese Society of Echocardiography

MONDAY, JUNE 5TH

SPECIAL EVENTS AND NETWORKING OPPORTUNITIES

(P2) OPOSTER SESSION 2 (P2)

9:00 AM - 4:00 PM

Exhibit & Poster Hall

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

Moderated Posters: 12:00 PM - 1:15 PM

TOPICS

Value of Echocardiography

(Quality and Cost) Posters P2-01 through P2-06

Ventricular Function /

Myocardial Mechanics...... Posters P2-07 through P2-54

Doppler / Hemodynamics ... Posters P2-55 through P2-69

Outcomes Research / Comparative Effectiveness /

Clinical Trials Posters P2-70 through P2-83

Vascular Disease Posters P2-84 through P2-93

Diseases of the Aorta Posters P2-94 through P2-97

Ischemic Heart DiseasePosters P2-98 through P2-112

Echocardiography in SOE / Arrhythmias /

Echocardiography in Systemic Disease

(DM, HTN, Obesity, Cancer) / Pericardial /

Primary MyocardialPosters P2-125 through P2-148

Clinical Cases:

Adult PatientsPosters P2-149 through P2-178

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, William Zoghbi, MD, FASE, will discuss **Noninvasive Evaluation of Native Valvular Regurgitation**. The afternoon break will feature Dale Burkett, MD, Shahryar Chowdhury, MD, Michael DiMaria, MD, Wyman Lai, MD, MPH, FASE, Beth Printz, MD, PhD, FASE, and Ritu Sachdeva, MBBS, FASE, discussing **Choosing an Academic Career in Pediatric Echo**.

SCIENCE & TECHNOLOGY THEATER

11:45 AM - 1:15 PM

Exhibit & Poster Hall

The Power of cSound™: Productivity Elevated

Presented by GE Healthcare

Simplifying your day. Facilitating complex 4D protocols. Helping you focus on what matters most. Discover the technology innovations enabled by GE Healthcare's cSoundTM beamforming platform on the VividTM E95. Join us as we present "Productivity Elevated" — a look at some of the latest advancements in cardiovascular ultrasound. From the adult echo lab to pediatrics to structural intervention.

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 28th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

ARTHUR E. WEYMAN YOUNG INVESTIGATOR'S AWARD COMPETITION AND 18TH ANNUAL FEIGENBAUM LECTURE

3:30 - 5:30 PM

Ballroom I-II

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.

- Geraldine Ong, MD, Cardiovascular Research Foundation, New York, NY - "Diastolic Dysfunction is a Multivariable Predictor of Rehospitalization Following Transcatheter Aortic Valve Replacement: A PARTNER 2 SAPIEN 3 Substudy"
- Federico Moccetti, MD, Oregon Health & Science University, Portland, OR "Ultrasound Molecular Imaging of Endothelial Activation and Platelet Adhesion in Remote Arteries after Myocardial Infarction: Implications for Reducing Risk for Remote Recurrent Atherosclerotic Events"
- Darae Kim, MD, Severance Cardiovascular Hospital, Seoul, South Korea "Effect of

Continuous Positive Airway Pressure Therapy on Left Ventricular Diastolic Function in Patients with Severe Obstructive Sleep Apnea (CPAP-OASIS) assessed by Tissue Doppler, 2D Speckle Tracking and Exercise Hemodynamics: A Randomized Sham Controlled Clinical Trial"

Jang-Won Son, MD, PhD, Yeungnam University Medical Center, Daegu, South Korea - "Impact of Left Ventricle Vortex Flow Guided Anticoagulation Therapy for Preventing Apical Thrombus Formation in Patients with Acute Myocardial Infarction. The INNOVATION Multicenter Prospective Randomized Clinical Trial"



Howard M. Leong-Poi, MD, FASE, Head of the Division of Cardiology at St. Michael's Hospital and Associate Professor of Medicine at the University of Toronto Toronto, Ontario, Canada, will deliver the 18th Annual Feigenbaum Lecture, "The Evolution of Contrast Echocardiography: A Journey From Diagnostic to

Therapeutic Applications." Dr. Leong-Poi has successfully established and developed a unique and innovative research program on novel diagnostic and therapeutic applications for contrast-enhanced ultrasound and targeted microbubbles for gene and cell-based therapies in cardiovascular diseases. His presentation will focus on ultrasound-mediated gene delivery and highlights of his career path which has been shaped by echocardiography, microbubbles, and ASE. The Feigenbaum 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.

MEMBER RECEPTION

5:30 - 6:30 PM

Outdoor Terrace, Level 300

All attendees are invited to this complimentary reception. Enjoy beverages and hors d'oeuvres while connecting with colleagues and friends.

TUESDAY, JUNE 6TH SPECIAL EVENTS AND NETWORKING OPPORTUNITIES

SCIENCE & TECHNOLOGY THEATER

11:30 AM - 1:00 PM

Exhibit & Poster Hall

Mitral Regurgitation Guidelines: ACC/AHA and ASE Re-Align!

Presented by Abbott

Join renowned faculty in echocardiography to learn about the latest mitral regurgitation guidelines, and how the new ASE and ACC/AHA guidelines complement each other. Topics covered will include how to incorporate and integrate guidelines into clinical practice, tips for accurate diagnosis of MR, and how imaging has changed the structural world.

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 28th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

ASE FOUNDATION AWARDS AND GRANTS



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

2017 ASE FOUNDATION TOP 25

The presentation of original research from around the world is an integral component of ASE's annual meeting. A special group of investigators were selected as the ASE Foundation's Top 25. These early career abstract presenters were selected by the Abstract Chairs based on the scientific merit of their research projects and were awarded \$1,000 from the Foundation for travel expenses.

- Shae Anderson, MD, Emory University School of Medicine, Children's Healthcare of Atlanta, Sibley Heart Center Cardiology, Atlanta, GA
- Renzo JC Calderon-Anyosa, MD, Children's Hospital of Philadelphia, Philadelphia, PA
- Baljash Cheema, MD, Northwestern University Feinberg School of Medicine, McGaw Medical Center, Chicago, IL
- Seunghyun Choi, PhD, University of Ulsan College of Medicine, Asan Medical Center, Seoul. South Korea
- Antonino Di Franco, MD, Weill Cornell Medical College, New York, NY
- David Elison, MD, University of Washington, Seattle, WA
- Prabhakaran Gopalakrishnan, MD, Aultman Hospital, North Canton, OH
- Sassan Hashemi, MD, Children's Healthcare of Atlanta, Atlanta, GA
- Brandon Helfield, PhD, University of Pittsburgh, Pittsburgh, PA
- Nobuyuki Kagiyama, MD, University of Pittsburgh, Pittsburgh, PA
- Amara Majeed, MD, Eastern Virginia Medical School, Norfolk, VA

- Tiffany Mao, MD, Saint Luke's Mid America Heart Institute, Kansas City, MO
- Wadi Mawad, MD, The Hospital for Sick Children, Toronto, ON, Canada
- Diego Medvedofsky, MD, University of Chicago, Chicago, IL
- Thomas S. Metkus, MD, Johns Hopkins Hospital, Baltimore, MD
- Prashant Minocha, MD, University of Miami/ Jackson Memorial Hospital, Miami, FL
- Shun Nishino, MD, Miyazaki Medical Association Hospital, Miyazaki, Japan
- Alaa M. Omar, MD, Icahn School of Medicine at Mount Sinai, New York, NY
- Rupesh Ranjan, MD, Albert Einstein Medical Center, Philadelphia, PA
- Sudarat Satitthummanid, MD, Massachusetts General Hospital, Boston, MA and Chulalongkorn University and Cardiac Center, King Chulalongkorn Memorial Hospital, Bangkok, Thailand
- Jeremy Stone, MD, University of Chicago, Chicago, IL
- Marija Vukicevic, PhD, Methodist Hospital, Houston, TX
- Allen J. Weiss, DO, Mount Sinai St. Lukes-Roosevelt Hospital Center, New York, NY
- Satoshi Yamaguchi, MD, Heart Institute, Cedars-Sinai Medical Center, Los Angeles, CA
- Yirong Zhou, MD, Wright State University, Davton. OH

2017 TOMTEC INNOVATOR RESEARCH TRAVEL GRANT

Akhil Narang, MD, from the University of Chicago in Chicago, IL, is the recipient of the 2017 TOMTEC Innovator Research Travel Grant. Supported by a grant to the ASE Foundation from TOMTEC Corporation, this annual award of \$4,000 is given to assist a promising young researcher presenting his/her work at the ASE Scientific Sessions. For more than 20 years, TOMTEC has driven innovations in echocardiography, and the ASE Foundation thanks them for investing in the young researchers who will continue to drive the field forward.

2017 ALAN D. WAGGONER STUDENT SCHOLARSHIP AWARDS

The Alan D. Waggoner Student Scholarship program was established in 2001 in recognition of Mr. Waggoner's professional achievements and service to ASE. Funding from the ASE Foundation provides a limited number of \$1,000 scholarship awards for students enrolled in a cardiac ultrasound program accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in the United States or by an equivalent Canadian or external ultrasound program. Also included with each scholarship award is complimentary registration for the recipient to attend the ASE 2017 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 2017 scholarship award recipients will be recognized during ASE's Annual Awards Presentation and Edler Lecture from 7:30 -9:30 AM, Sunday, June 4 in Ballroom I-II.

- Katie Bergevin Bellevue College DUTEC Program, Bellevue, WA
- Stacey Brinkerhoff Seattle University Diagnostic Ultrasound Program, Seattle, WA
- Debra Courtney Sentara College of Health Sciences CVT Program, Chesapeake, VA
- Heather Dreaher Hoffman Heart & Vascular Institute School of Cardiac Ultrasound, Hartford, CT
- Łyndi Foreman LSU Health Sciences Center Cardiovascular Sonography Program, New Orleans, LA
- Heather Harvey Alvin Community College DMS Program, Alvin, TX
- Allison Huver Mayo School of Health Sciences Echocardiography Program, Rochester, MN
- Erika Mall South Hills School of Business & Technology DMS Program, State College, PA
- Michelle McMenamy Molloy College CVT Program, Rockville Centre, NY

- Brandon Mayes Johns Hopkins University School of Cardiac Sonography, Baltimore, MD
- Angelica Petrisis Hoffman Heart & Vascular Institute School of Cardiac Ultrasound, Hartford, CT
- George Platt University of Arkansas for Medical Sciences DMS Program, Little Rock, AR
- Anne Reiner Sentara College of Health Sciences CVT Program, Chesapeake, VA
- Kristy Ricca Clemson CV Imaging Leadership Program, Greenville, SC
- Autumn Ridlen John A. Logan College Cardiac DMS Program, Carterville, IL
- Rebecca Warren Bellevue College DUTEC Program, Bellevue, WA
- Lin Zhu Lackawanna College Cardiac Sonography Program, Scranton, PA

2017 ULTRAECHO, 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 2017 student travel grant has been awarded to **Shamichael Huntsberry, Louisiana State University Health Sciences Center, New Orleans, LA**. This award will be recognized during the Council on Cardiovascular Sonography Business Meeting, on Saturday, June 3 at 8:00 AM in Room 314-317.

2017 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 2017 student travel grant has been awarded to **Katelyn Fortier, Hoffman Heart & Vascular Institute School of Cardiac Ultrasound, Hartford, CT**. This award will be recognized during the Council on Cardiovascular Sonography Business Meeting, on Saturday, June 3 at 8:00 AM in Room 314-317.

2017 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

- Jamie Harrington, MD Columbia University Medical Center, New York, NY
- Adam Christopher, MD Children's Hospital of Pittsburgh of UPMC, Pittsburgh, PA

COUNCIL ON VASCULAR ULTRASOUND TRAVEL GRANT AWARD RECIPIENTS

- Xuanyi Jin, MD Mayo Clinic, Scottsdale, AZ
- Zardasht Jaff, MBChB, FRCPC Queens University, Kingston, ON, Canada

COUNCIL ON PERIOPERATIVE ECHOCARDIOGRAPHY TRAVEL GRANT AWARD RECIPIENTS

- Bo Xu, MD Heart and Vascular Institute, Cleveland Clinic, Cleveland, OH
- Priti Mehla, MD Yale-New Haven Hospital, New Haven, CT

COUNCIL ON CARDIOVASCULAR SONOGRAPHY TRAVEL GRANT AWARDS

- Gilda Kadiu, RDCS Children's Hospital of Michigan, Detroit, MI
- Ian Crandall, BS, MS, RCS Yale-New Haven Hospital, New Haven, CT

KATANICK SCHOLARSHIP AWARD

Katanick Scholarship Award will be awarded to **Marjan Miri**, **Grossmont Community College**, **El Cajon**, **CA**. This award includes a \$1,000 student scholarship for the highest ranking student sonographer candidate nominated for ASEF scholarship awards and up to \$500 in travel reimbursement to attend the ASE Scientific Sessions. This award was named to honor the legacy of Sandy Katanick, RN, RVT, CAE, who retired as CEO of the Intersocietal Accreditation Commission after over 25 years of service to the field.

ADAMS GLOBAL SERVICE AWARD

The Adams Global Service Award will be awarded to **Yan Wang, RDCS, FASE, from the Children's Hospital of Philadelphia in Philadelphia, PA**. This \$1,500 travel grant award will be presented on an annual basis to one sonographer mission volunteer, in honor of David B. Adams, ACS, RCS, RDCS, FASE, previously of Duke University Medical Center, Durham, North Carolina. Mr. Adams has contributed to the success of the ASEF humanitarian missions with his international mission experience, clinical skills, and leadership abilities.

ASE is Pleased to Offer Its Newest Educational Products at ASE 2017



- 2nd Edition Cardiovascular Sonographer Registry Review Guide
- Advanced Cardiac Sonographers Registry Review Guide
- 2nd Edition Best of ASE Volume 1: Introduction to Diastology DVD/Online
- Best of ASE Volume 10: Vascular Ultrasound DVD/Online
- Echocardiographic Assessment of Aortic Valve Stenosis (Poster, Binder and Flip Chart Insert, and Pocket Guide)
- Evaluation of Valvular Regurgitation (Poster, Binder and Flip Chart Insert, and Pocket Guide)
- Self-Study Program: Pediatric and Congenital Heart Disease
- Self-Study Program IV DVD

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

ASE Headquarters Booth #511

Saturday June 3 4:30 – 6:30 PM

Sunday, June 4 9:00 AM – 4:00 PM

Monday, June 5 9:00 AM - 4:00 PM

ASE Products Sales Booth Level 300

Friday, June 2 12:00 – 5:00 PM

Saturday, June 3 . . . 6:30 AM – 4:30 PM

Sunday, June 4 6:30 AM — 6:30 PM

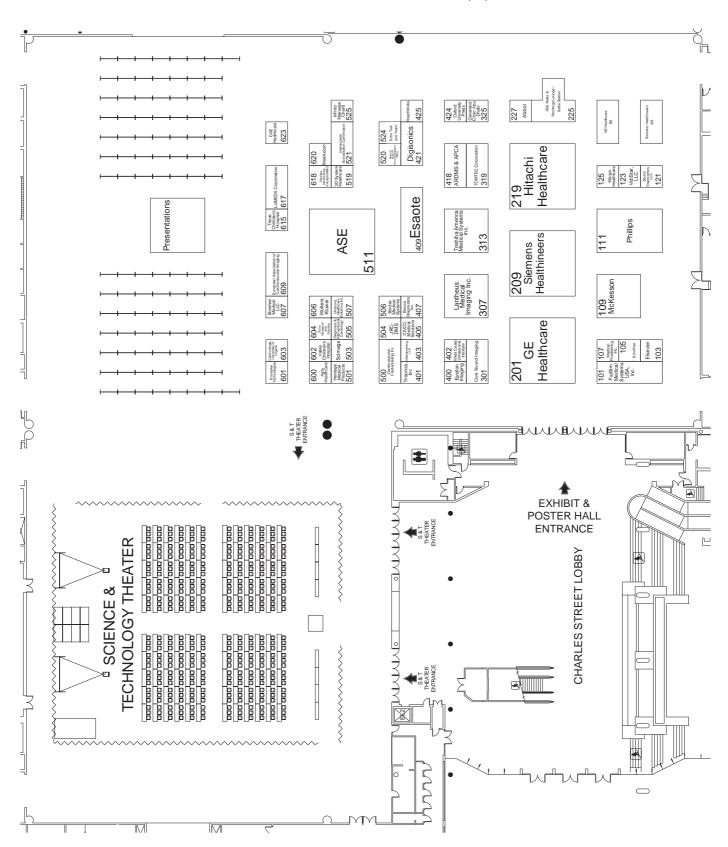
Monday, June 5 6:30 AM – 5:30 PM

Tuesday, June 6 6:30 AM – 2:30 PM



AMERICAN SOCIETY OF ECHOCARDIOGRAPHY JUNE 3-5, 2017

BALTIMORE CONVENTION CENTER - HALLS A, B, C



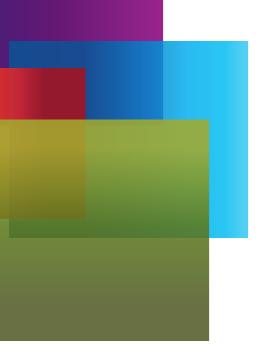


EXHIBIT & POSTER HALL

EXHIBIT & POSTER HALL HOURS

SATURDAY, JUNE 3 RD	
President's Reception	4:30 - 6:30 PM
SUNDAY, JUNE 4 TH	9:00 AM - 4:00 PM
MONDAY, JUNE 5 TH	9:00 AM - 4:00 PM

EXHIBIT & POSTER HALL BREAK SCHEDULE

SUNDAY, JUNE 4 TH Coffee Breaks	9:30 – 10:15 AM 2:45 – 3:30 PM
Lunch Break	11:45 – 1:15 PM
MONDAY, JUNE 5 TH Coffee Breaks	9:30 – 10:15 AM 2:45 – 3:30 PM
Lunch Break	11:45 AM – 1:15 PM

SCIENCE & TECHNOLOGY THEATER SCHEDULE

Breakfast and lunch are provided by ASE and are included in all Scientific Sessions registration fees, but space and food are first come, first served.

SATURDAY, JUNE 3RD

11:30 AM - 1:00 PM

The Diagnostic Advantage of Contrast Echocardiography

Presented by Lantheus Medical Imaging, Inc.

SUNDAY, JUNE 4TH

6:00 - 7:00 AM

The Path to Better Patient Care: Studies, Cases and Solutions for Improved Cardiovascular Ultrasound

Presented by Philips

11:45 AM - 1:15 PM

New Methods in the Diagnosis and Treatment of Mitral Regurgitation

Presented by Siemens Healthineers

MONDAY, JUNE 5TH

11:45 AM - 1:15 PM

The Power of cSound™: Productivity Elevated

Presented by GE Healthcare

TUESDAY, JUNE 6TH

11:30 AM - 1:00 PM

Mitral Regurgitation Guidelines: ACC/AHA and ASE Re-Align!

Presented by Abbott

These sessions are not part of the official ASE 28th 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 100 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 #511

As the largest organization representing the cardiovascular ultrasound community, ASE is a vibrant and progressive organization. Visit the ASE Headquarters booth #511 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 flash 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. Learn how to apply to be a FASE, about ASE social media and how to start your own social media presence, ASE's advocacy objectives, and discuss ASE issues with the ASE president.

MEET FACE TO FASE

Are you interested in becoming a Fellow of the American Society of Echocardiography (FASE) but have questions about whether you may qualify? Stop by the ASE Booth #511 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 3RD

4:30 - 5:00 PM

Meet ASE President Allan L. Klein, MD, FASE

4:30 - 5:30 PM

Learn How to Use Twitter to Advance Your Career Sharon Mulvagh, MD, FASE and Amer Johri, MD, FASE

Public Relations Task Force members

SUNDAY, JUNE 4TH

9:30 - 10:15 AM

Questions on MACRA, MIPs, and other new healthcare policies?

Michael Main, MD, FASE and Geoffrey Rose, MD, FASE

ASE Advocacy Committee members

Learn more about the new ASE Echo Registry Sherif F. Nagueh, MD, FASE and Deborah A. Agler, ACS, RDCS, FASE Registry Committee members

11:45 AM - 12:45 PM

Face to FASE – Learn how to achieve the FASE designation

Maureen McDonald, RDCS, FASE, FASE Advisory Committee Member

2:45 - 3:30 PM

❖ Learn more about ASE's new case reports iournal CASE

L. Leonardo Rodriguez, MD, FASE, Co-Editor of *CASE*

MONDAY, JUNE 5[™]

9:30 - 10:15 AM

Face to FASE – Learn how to achieve the FASE designation

Fadia Makarem, RT, RCS, FASE, FASE Advisory Committee Member

Learn more about the new ASE Echo Registry Sherif F. Nagueh, MD, FASE and Deborah A. Agler, ACS, RDCS, FASE Registry Committee members What does it take to get involved in an ASE Committee or Task Force? Robin Wiegerink, ASE CEO and Mary Alice **Dilday, ASE Vice President of Internal Relations**

11:45 AM - 12:45 PM

❖ Face to FASE – Learn how to achieve the FASE designation

Mary Alice Dilday, ASE Vice President of **Internal Relations**

2:45 - 3:30 PM

Learn How to Use Twitter to Advance Your Career Amer Johri, MD, FASE Public Relations Task Force member

3:15 PM

- Drawing for the Echo Bingo Prizes
- Announcement of the ASE Foundation **Cardiovascular Challenge Winners and Chain Reaction Winners**

ECHO BINGO

Join in the fun! Each attendee will receive a set of ECHO Bingo Cards in their Conference Bag at Registration. Visit the exhibitors in the Exhibit & Poster Hall with a new bingo card each day. The exhibiting company will stamp your card. Bring your stamped card, completed either by row, column, or diagonally, to the ASE Headquarters Booth #511 to be entered into the drawing. Play all three cards! The drawing will be held on Monday, June 5 in the Exhibit & Poster Hall during the afternoon break 2:45-3:30 PM. Must be present to win.

First prize package includes:

- Complimentary full meeting registration for 2018 ASE Scientific Sessions
- ❖ ASE membership through December 31, 2018
- Hotel accommodations during 2018 ASE Scientific Sessions
- Prize is transferable, but all elements of the prize must be utilized by the same individual.
- ❖ VALUE OVER \$1550!

Second Prize: ASF Guideline Reference Book

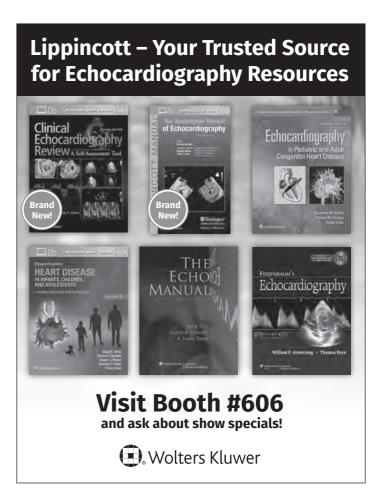
Third Prize: Pocket Guideline Bundle

ECHO AROUND THE WORLD

Located at the ASE Headquarters booth #511, visit Echo Around the World and explore literature, courses, and information from echocardiography societies worldwide. View pictures and information on ASEF's recent missions to China, Philippines, Kenya and Cuba. Learn about ASE's International Alliance Partners and their upcoming activities.

FREE DEMOS OF ECHO TEST AND TEACH APPLICATION

Are you challenged to ensure consistent quality echocardiograms? Do you need the freedom of a handson, real-world training experience without being tied to an imaging device? Echo Test and Teach is your answer. Designed through the expert guidance of Harvey Feigenbaum, MD, FASE, and founder of ASE, this application enhances the skills of sonographers and physicians in the measurement and interpretation of echocardiograms. It also supports quality improvement standards, including variability and correlation between different modalities in the measurement and interpretation of cardiovascular ultrasound images. Earn up to 10 AMA PRA Category 1 Credits[™] per year. Visit their booth #524 in the Exhibit & Poster Hall on Level 100 for a FREE DEMO.





Lantheus Medical Imaging presents

The Diagnostic Advantage of Contrast Echocardiography

Efficient Implementation	Anita M. Kelsey, MD, FACC, FASE Saint Francis Hospital and Medical Center, Hartford, CT
Improving Echo Image Quality	Margaret M. Park, BS, ACS, RVT, RDCS, FASE Cleveland Clinic Heart and Vascular Institute, Cleveland, OH
Impact on Patient Care	Kevin Wei, MD, FACC, FASE Oregon Health & Science University, Portland, OR



Saturday, June 3, 2017

11:30 a.m. - 1:00 p.m. Lunch provided · SDMS credit available

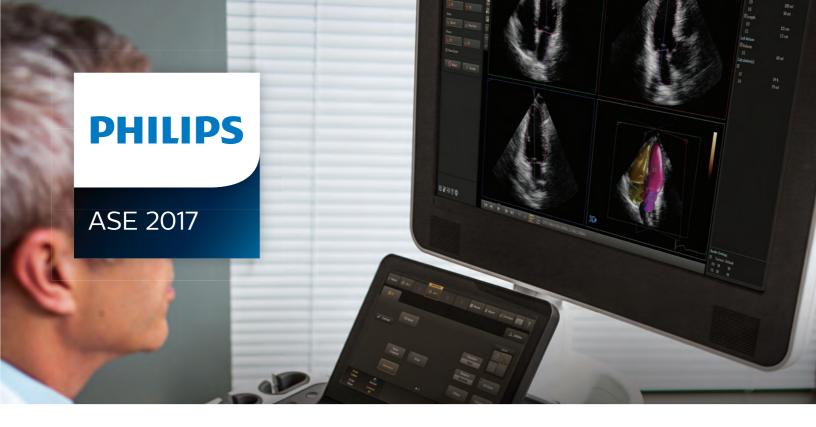
Science and Technology Theater Baltimore Convention Center Baltimore, MD

Join expert faculty in an interactive panel discussion on contrast echocardiography followed by a moderated Q&A session.

See the advantages contrast echocardiography offers over unenhanced echo in diagnostic outcomes, patient management, and cost effectiveness. Gain practical insight into the implementation of contrast echocardiography. Understand the impact that contrast echocardiography provides to patient diagnosis and outcomes.

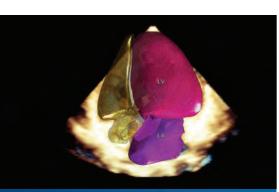
Lunch is provided by ASE and is included in all Scientific Sessions registration fees, but space and boxed lunches are first-come, first served. These sessions are not part of the official ASE 28th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed or affiliated with ASE.

In accordance with the PhRMA Code on Interactions with Healthcare Professionals and individual state compliance, attendance at this educational program is limited to healthcare professionals. Accordingly, attendance by guests or spouses is not permitted.



Join us for breakfast at the ASE Science and Technology Theater

Current and emerging innovations in echocardiography



Sunday, June 4, 2017 6:00 am – 7:00 am EST ASE Science and Technology Theater

Enhanced breakfast will be served. There is no cost to attend.

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

The path to better patient care: studies, cases, and solutions for improved cardiovascular ultrasound

This session will highlight three perspectives on innovations in cardiovascular ultrasound – a global study, clinical cases, and a pre- and post-surgery solution – all of which have impacted the way care is delivered. You will learn about:

- Results of a global, multi-center study trial for cardiovascular ultrasound
- The impact of Live 3D TEE on interventional cardiography using real-world clinical cases
- Creating a total solution for surgery complementary use of cardiovascular ultrasound in pre and post scenarios

Moderated by Mark Monaghan

Echo Lab Director, Kings College Hospital, London

Presented by Daniel Berson, MD, DO

Cardiovascular Anesthesiology, PA

David Liang, MD, PhD

Stanford University Medical Center, CA

Roberto M. Lang, MD, Professor of Medicine, Director, Noninvasive Cardiac Imaging Laboratory, University of Chicago

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Visit us at ASE Booth 209

New Methods in the Diagnosis and Treatment of Mitral Regurgitation

Sunday, June 4 | 11:45 a.m.-1:15 p.m.
ASE 2017 Annual Meeting Science and Technology Theater

During your time at the American Society of Echocardiography (ASE) 2017 Annual Meeting, please join Siemens Healthineers and our esteemed speakers for a unique clinical discussion and luncheon.

Hear from cardiovascular thought-leaders as they discuss using improved quantification tools in echocardiography to better assess and stage mitral regurgitation (MR) as well as how to guide MR therapies in real-time.

We look forward to seeing you there and at Siemens Healthineers booth 209 in the exhibition hall.

For more information, visit usa.siemens.com/methods.

Siemens Healthineers.
Engineering success.
Pioneering healthcare. Together.



This activity is not a part of the official ASE 28th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed or affiliated with ASE.



ASE 2017



Productivity Elevated

Discover the technology innovations enabled by GE Healthcare's cSound™ software beamforming platform on the Vivid™ E95. Join us as we present "Productivity Elevated" – a look at some of the latest advancements in cardiovascular ultrasound.

Simplifying your day. Facilitating complex 4D protocols. Helping you focus on what matters most.

Please join us for an educational lunch symposium:

Monday, June 5, 2017 11:45 am – 1:15 pm Baltimore Convention Center

From the adult echo lab to pediatrics to structural intervention.







For more information, stop by our booth #201.



MITRAL REGURGITATION GUIDELINES: ACC/AHA and ASE Re-Align!



Baltimore Convention Center Charles Street Lobby, Exhibit Hall A Science & Technology Theater

PRESENTATIONS

Everything Old is New Again:

Realignment of the Guidelines for Mitral Regurgitation

William Zoghbi, MD, Houston Methodist Hospital

Accurate Diagnosis: Always the First Step

Judy Hung, MD, Massachusetts General Hospital

Incorporating the Guidelines into Practice

James D. Thomas, MD, Northwestern

How Imaging Changed the Structural World!

Rebecca Hahn, MD, Columbia University Medical Center

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 or affiliated with ASE.

Abbott Vascular

EXHIBITOR LOCATIONS

LISTED ALPHABETICALLY

Company	Booth
3D Systems, Healthcare	519
Abbott	227
Agfa HealthCare	600
American Registry for Diagnostic Medical Sonography (ARDMS) and Alliance for Physician Certification & Advancement (APCA)	418
American Society of Echocardiography (ASE)	511
ASE Relax & Recharge Lounge / Selfie Station	225
Biodex Medical Systems, Inc.	506
Bracco Diagnostics, Inc.	407
CAE Healthcare	623
Cardiovascular Credentialing International (CCI)	500
CardioVillage, University of Virginia	603
CIVCO Medical Solutions	405
Cleveland Clinic Abu Dhabi	325
Core Sound Imaging, Inc.	301
Diagnostic & Interventional Cardiology	505
Digisonics	421
EchoPixel	105
Echo Research and Practice	604
Echo Test and Teach - Ke Labs, Inc.	524
Elsevier	103
Enovative Technologies	601
Epsilon Imaging, Inc.	400
Esaote	409
European Association of Cardiovascular Imaging (EACVI)	609
Flexible Informatics-EncaptureMD	618
FUJIFILM Medical Systems U.S.A., Inc.	101
GE Healthcare	201
HeartWorks	425

Company	Booth
Heritage Medical Products, Inc.	501
Hitachi Healthcare	219
Infinity Massage Chairs	525
Intersocietal Accreditation Commission (IAC)	521
Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS)	504
Lantheus Medical Imaging Inc.	307
LUMEDX	617
McKesson	109
MedAxiom	620
Medical Positioning, Inc.	107
Medstreaming	403
Merge Healthcare	125
National Board of Echocardiography (NBE)	520
Oxford University Press	424
Philips	111
ScImage, Inc.	503
Sheehan Medical LLC	607
Siemens Healthineers	209
Sound Ergonomics, LLC	121
Texas Children's Hospital	615
TOMTEC Corporation	319
Toshiba America Medical Systems, Inc.	313
Trisonics, Inc.	401
UltraLinq Healthcare Solutions, Inc.	507
Valley Children's Hospital	602
VidiStar, LLC	123
West Coast Ultrasound Institute	402
Wolters Kluwer	606

EXHIBITOR LOCATIONS

LISTED NUMERICALLY

Company	Booth
FUJIFILM Medical Systems U.S.A., Inc.	101
Elsevier	103
EchoPixel	105
Medical Positioning, Inc.	107
McKesson	109
Philips	111
Sound Ergonomics, LLC	121
VidiStar, LLC	123
Merge Healthcare	125
GE Healthcare	201
Siemens Healthineers	209
Hitachi Healthcare	219
ASE Relax & Recharge Lounge / Selfie Station	225
Abbott	227
Core Sound Imaging, Inc.	301
Lantheus Medical Imaging Inc.	307
Toshiba America Medical Systems, Inc.	313
TOMTEC Corporation	319
Cleveland Clinic Abu Dhabi	325
Epsilon Imaging, Inc.	400
Trisonics, Inc.	401
West Coast Ultrasound Institute	402
Medstreaming	403
CIVCO Medical Solutions	405
Bracco Diagnostics, Inc.	407
Esaote	409
American Registry for Diagnostic Medical Sonography (ARDMS) and Alliance for Physician Certification & Advancement (APCA)	418
Digisonics	421

Company	Booth
Oxford University Press	424
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3D Systems Healthcare	 519
5381 South Alkire Circle	

Littleton, CO 80127 **United States**

Phone: 303-273-5344

simbionix.com

3D Systems Healthcare solutions improve outcomes which benefit patients and surgeons. Our global team works with customers to navigate technologies and provide support for surgical planning, training, device design, personalized medical technologies and 3D printing. We are dedicated to helping medical professionals train for, plan and practice complex medical procedures.





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Phone: 864-421-1600 agfahealthcare.com

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American Registry for Diagnostic Medical Sonography (ARDMS) and Alliance for Physician Certification & Advancement (APCA)418

1401 Rockville Pike

Suite 600

Rockville, MD 20852

United States

Phone: 800-541-9754 (ARDMS); 800-943-1709 (APCA)

ARDMS.org APCA.org

The American Registry for Diagnostic Medical Sonography® (ARDMS) 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.

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.

American Society of Echocardiography (ASE)511

2100 Gateway Centre Boulevard Suite 310

Morrisville, NC 27650

United States

Phone: 919-861-5574 Fax: 919-882-9900 Email: ASE@asecho.org

ASEcho.org



ASE Relax & Recharge Lounge / Selfie Station225

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Phone: 800-224-6339 biodex.com/ultrasound

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Phone: 800-326-0268

cci-online.org

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P.O. Box 800711 Charlottesville, VA 22908 **United States**

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Phone: 800-445-6741

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Cleveland Clinic Abu Dhabi325

Al Maryah Island Abu Dhabi **United Arab Emirates** Phone: 971-50-446-1517

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Diagnostic & Interventional Cardiology......505

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United States

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Phone: 844-273-7766 echopixeltech.com

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Echo Research and Practice 604

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Phone: 44 (0)1454 642230

echorespract.com

Echo Research and Practice is an open access journal aiming to be the premier international journal for physicians, sonographers, nurses and other allied health professionals practicing echocardiography and other cardiac imaging modalities. The journal publishes quality clinical and basic research, reviews, videos, education materials and case reports.

Echo Test and Teach - Ke Labs, Inc......524

3500 Depauw Boulevard

Suite 1080

Indianapolis, IN 46268

United States

Phone: 317-824-1225

kelabs.com

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Phone: 734-369-5100 epsilon-imaging.com

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esaoteusa.com

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France

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Phone: 800-399-7035 encapturemd.com

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GE Healthcare......201

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Phone: 866-281-7545 **gehealthcare.com**

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HeartWorks425

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inventivemedical.com

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Phone: 443-973-3265 intersocietal.org

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Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS)504

6021 University Boulevard Suite 500 Ellicott City, MD 21043 **United States**

Phone: 443-973-3251

ircdms.org

The JRC-DMS makes accreditation recommendations for diagnostic medical sonography (DMS) programs to the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Programmatic accreditation is awarded to programs who through a self study and site visit demonstrate substantial compliance to published Standards and Guidelines specific to DMS.





Lantheus Medical Imaging Inc307

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, is headquartered in North Billerica, Massachusetts with offices in Puerto Rico and Canada.

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Phone: 510-903-2092

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Phone: 404-338-2317

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Kansas City, MO 64108

United States

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Medstreaming403

164th Avenue NE Suite 200 Redmond, WA 98116 United States

Phone: 206-724-2044 **medstreaming.com**

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Phone: 262-912-3431

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National Board of Echocardiography (NBE).....520

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Raleigh, NC 27607 United States

Phone: 919-861-5582 echoboards.org

The National Board of Echocardiography, Inc. (NBE) is a not-for-profit corporation established in 1996 to develop and administer examinations in Clinical Echocardiography, recognize those physicians who successfully completed our examination, and develop a certification process that will publicly recognize those physicians who have completed an approved training program in echocardiography.

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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 work-related injuries in healthcare personnel with a particular focus on ultrasound. Our services include educational programs, worksite evaluations, accreditation compliance programs and design consulting. Products include ergonomic chairs, arm support devices and a line of exam tables.

Texas Children's Hospital.....615

6621 Fannin Street Houston, TX 77030 **United States**

Phone: 832-824-1000

texaschildrens.org

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Phone: 704-554-1289

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Phone: 800-421-1968 medical.toshiba.com

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Phone: 559-353-7058 valleychildrens.org

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Phone: 781-449-7200

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West Coast Ultrasound Institute......402

291 S. La Cienega Boulevard Los Angeles, CA 90211 United States

Phone: 310-289-5123

wcui.edu

West Coast Ultrasound Institute is college of Health Sciences with programs in Pediatric Cardiac Ultrasound, Cardiovascular Ultrasound, Diagnostic Medical Sonography, Magnetic Resonance Imaging (MRI), Cardiovascular Technicians, and Nursing. We have multiple campus locations and hundreds of affiliations with medical providers throughout Southern California and Arizona.

Wolters Kluwer......606

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Phone: 215-521-8300

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100% of every donation received goes back out into the field.

Join the ASE Foundation in Baltimore at the Annual ASE Scientific Sessions Visit the Foundation Booth located outside of the Exhibit & Poster Hall to learn more.

SATURDAY, JUNE 3

10:00 AM - 5:00 PM Sign up for the Cardiovascular Challenge*

Help Start a Chain Reaction with a donation to #YourPriority

ASE Foundation Booth

Images from the Heart Gallery Opening 10:00 AM

ASE Foundation Booth

7:00 PM - 11:00 PM 8th Annual ASE Foundation Research Awards Gala:

Celebrating Cardiovascular Ultrasound Research

Hippodrome Theatre at the France-Merrick Performing Arts Center

Private event; tickets required



*Thank you to our Cardiovascular Challenge sponsor, Studycast®!

SUNDAY, JUNE 4

7:30 AM - 9:30 AM Join us to congratulate the 2017 ASEF Travel Grant and Scholarship Recipients

Opening Plenary: Ballroom I-II

9:00 AM - 4:00 PM Log your steps for the Cardiovascular Challenge* and check on your Chain Reaction!

ASE Foundation Booth

1:15 PM - 2:45 PM 2017 Sonographer Investigator's Award Competition, supported by the ASE Foundation

Room 314-317

MONDAY, JUNE 5

Last chance to log your steps for the Cardiovascular Challenge*! 1:15 PM

Last chance to contribute to a Chain Reaction! ASE Foundation Booth

1:15 PM - 2:45 PM Making a Difference Around the World: Echo and the ASE Foundation

Room 314-317

2:45 PM - 3:30 PM Announcement of Cardiovascular Challenge & Chain Reaction Winners

Exhibit & Poster Hall

3:30 PM - 5:30 PM 2017 Arthur E. Weyman Young Investigator's Award Competition

ASE Foundation Research Results Lecture: "Noninvasive Assessment of the

Hemodynamic Significance of Coronary Stenosis Using Fusion of 3D Echocardiography

and Cardiac Computed Tomography" by Victor Mor-Avi, PhD, FASE

supported by the ASE Foundation and NBE Ballroom I-II

5:30 PM - 6:30 PM Meet the 2016 photographers! Last chance to view the Images from the Heart Gallery

Member Reception on the Outdoor Terrace



PRESENTS the 8th Annual

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Celebrating Cardiovascular Ultrasound Research

Thank You to the Evening's Supporters

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BENEFACTOR LEVEL TABLE CAPTAINS

Carolyn Altman, MD, FASE for Texas Children's Hospital Federico Asch, MD, FASE & Neil Weissman, MD, FASE, Co-Captains for MedStar Research Institute

Jose Banchs, MD, FASE & Edward Gill, MD, FASE, Co-Captains

Richard Grimm, DO, FASE

Rebecca Hahn, MD, FASE

Sanjiv Kaul, MD, FASE for Knight Cardiovascular Institute

Allan Klein, MD, FASE

McLeod Regional Medical Center

Vera Rigolin, MD, FASE

Geoffrey Rose, MD, FASE

Raymond Stainback, MD, FASE

Lissa Sugeng, MD, FASE

7:00 - 11:00 pm | Saturday, June 3, 2017 Hippodrome Theatre at the France-Merrick Performing Arts Center Baltimore, MD

ASEFoundation.org



As the largest global organization for cardiovascular ultrasound imaging, the American Society of Echocardiography 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), a helpline for legislative coding and reimbursement issues, an image library, and other career resources. ASE membership through December 31, 2017 is included with most nonmember registrations for the ASE 28th Annual Scientific Sessions.

CONTACT US

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

Phone: 1-919-861-5574 Fax: 1-919-882-9900

Email: ASE@ASEcho.org

ASEcho.org
ASEFoundation.org
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BOARD, COUNCIL, AND COMMITTEE MEETINGS

FRIDAY, JUNE 2ND

ASE Board of Directors	3:30 – 5:30 PM	Peale A-C Hilton Baltimore
CASE Editorial Board	5:00 – 6:00 PM	303
Pediatric and Congenital Heart Disease Council Steering Committee	6:30 – 9:00 PM	301

SATURDAY, JUNE 3RD

Council on Perioperative Echocardiography Business Meeting	8:00 – 8:15 AM	Ballroom I-II
Council on Cardiovascular Sonography Business Meeting	8:00 – 8:20 AM	314-317
ASE Foundation Annual Appeal Committee	8:00 – 9:30 PM	301
Committee Chairs Meeting	10:00 – 11:00 AM	302
Workflow & Lab Management Task Force	10:00 – 11:30 AM	311
Membership Steering Committee	10:00 – 12:00 PM	301
Public Relations Task Force	11:00 – 12:00 PM	312
FASE Advisory Committee	11:30 AM - 12:30 PM	302
Sonographer Council Steering Committee	1:00 – 2:30 PM	302
International Relations Advisory Committee	1:00 – 2:30 PM	311
Industry Roundtable Committee	1:15 – 2:45 PM	301
Council on Pediatric and Congenital Heart Disease Business Meeting	2:30 – 3:00 PM	Ballroom IV
Council on Vascular Ultrasound Meet & Greet	2:30 – 3:30 PM	313
WASE Normal Values Study	3:00 – 4:30 PM	303
Nominating Committee	3:00 – 4:00 PM	301

SUNDAY, JUNE 4TH

Initiative to Standardize Deformation Imaging	9:30 – 11:30 AM	303
COPE Steering Committee	10:15 – 11:45 AM	311
Bylaws & Ethics Committee	11:45 AM — 12:45 PM	303
International Leadership Luncheon	11:45 AM — 1:15 PM	301-302
Advocacy Committee	2:00 - 3:30 PM	301
Awards Committee	2:30 - 3:30 PM	311
CME Committee	2:30 - 3:30 PM	302
Council on Vascular Ultrasound Steering Committee	2:45 – 3:45 PM	312
JASE Editorial Board	4:00 – 5:30 PM	303

MONDAY, JUNE 5[™]

Governance Task Force	7:00 – 8:00 AM	303
Council on Vascular Ultrasound Business Meeting	8:00 – 8:15 AM	307-308
Scientific Sessions Task Force	8:00 – 9:00 AM	313
Research Committee	9:00 - 10:30 AM	301
Structural Heart Task Force	10:00 – 11:00 AM	311
COA ACS Board Meeting	10:30 – 11:30 AM	313
Guidelines Committee	11:45 – 1:15 PM	301
Innovation Competition Task Force	12:30 – 1:30 PM	312
ASE Registry Committee	1:15 – 2:45 PM	311
Education Committee	2:30 - 3:30 PM	302
Point of Care Task Force	3:30 – 4:30 PM	311

TUESDAY, JUNE 6TH

Finance Committee	7:00 – 8:00 AM	311
Scientific Sessions Program Committee	11:30 AM - 1:00 PM	301
Pediatric Echocardiography Lab Directors	11:30 AM – 1:00 PM	302

ASE EDUCATION AND RESEARCH FOUNDATION

The ASE Education and Research 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 to solicit individuals, companies, and foundations to support its efforts. The ASE Foundation met 91% of its \$250,000 fundraising goal for the 2016 Annual Appeal, raising \$228,682.

All contributions to the Foundation support the following initiatives:

- Demonstrating the Value of Cardiovascular Ultrasound
- Guideline Translations and Global Dissemination
- Global Health Initiatives and Humanitarian Events
- Patient Awareness
- Research Investigator Support
- Research Studies
- Travel Grants and Scholarships

Stop by the ASE Foundation booth, outside the Exhibit & Poster Hall on Level 100 to:

- Learn more about fundraising events being hosted in Baltimore, such as the Annual Research Awards Gala and the Cardiovascular Challenge
- View the photo exhibition showcasing mission pictures
- Pick up your "I Donated!" sticker
- Inquire about volunteer opportunities
- Purchase an ASEF bracelet
- Learn more about ASEF and become part of the "Chain Reaction" at ASE 2017

Look for ASEF Taskforce 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!



COMPETE WITH YOUR FEET – CARDIOVASCULAR CHALLENGE

Get moving with the ASE Foundation! Sponsored by StudyCast®, the ASEF will be hosting a "pedometer challenge" during the meeting. ASEF is highlighting physical activity, which can dramatically lower an individual's risk of cardiovascular disease, improve mental health, and lower the risk of obesityrelated diseases. Key areas around the convention center will display step targets. Record your steps taken at the Conference each day and compete to log the most steps. You must visit the ASEF Booth outside the Exhibit & Poster Hall on Level 100 by 12:00 PM on Monday, June 5, to log your steps for a chance to win. The first prize, a free hotel room, will go to the person with the highest step total. Second place will receive a \$100 Amazon gift card. The person with the third highest step count will receive an ASEF hat. The winner will also be featured in an upcoming issue of the ASEF eNewsletter! For more information visit the ASFF Booth.

IMAGES FROM THE HEART GALLERY

Back this year, ASEF is presenting a curated exhibition of photos taken by ASE members as they traveled the world participating in humanitarian events. ASE members were encouraged to enter photographs that captured faces of people met along the way, landscapes, cultural observations, etc. and to write a few words about the heartfelt memories and what the photos meant to them. Stop by the ASEF Booth outside the Exhibit & Poster Hall on Level 100 (During the Member Reception, the photos will be moved to Level 300.) to view the photos and stories submitted this year. Want to take these photos home? Many will be available for purchase for a donation to the Foundation in the photographer's name.



THANK YOU - CUMULATIVE GIVING RECOGNITION

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This prestigious designation is only conferred upon a peer review of credentials specific to the field of cardiovascular ultrasound. ASE is proud to recognize these members for their dedication and accomplishments. Listed below are 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 #511. For the first time, new inductees will be recognized at the ASE Awards Session on Sunday morning at 7:30 AM. Join us to recognize their accomplishment!

FASE LOUNGE - ROOM 324-226

SATURDAY, JUNE 3RD - MONDAY, JUNE 5TH 9:00 AM - 4:00 PM

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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 FASE

Are you interested in becoming a Fellow of the American Society of Echocardiography (FASE) but have guestions about whether you may qualify? Stop by the ASE Booth #511 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.

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