American Society of Echocardiography 29th Annual Scientific Sessions

SEE THE SOUND HEAR THE SCIENCE

222-26 SHVILE Gaylord Opryland Resort & Convention Center

★ FINAL PROGRAM ★

Making

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.

INJECTABLE SUSPENSION

DEFINITY® ¥& (Perflutren Lipid Microsphere)

CONTRAINDICATIONS

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

IMPORTANT SAFETY INFORMATION

WARNING: Serious **Cardiopulmonary Reactions**

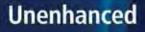
Serious cardiopulmonary reactions, including fatalities, have occurred uncommonly during or following perflutren-containing microsphere administration [see Warnings and Precautions (5.1)]. Most serious reactions occur within 30 minutes of administration.

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

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

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

DEFINITY® impact management and cost



Most Used

To order Call 1-800-299-3431 or visit www.DEFINITYimaging.com

References: 1. Kurt, M, et al. J. Am Coli. Cardiol 2009;53 802-810. 2. @ 2017 DR/Decision Resources, LLC All rights reserved. Reproduction, distribution, transmission or publication is prohibited. Reprinted with permission: 3 Embase and Medline Search, June 27, 2016. 4. Data on file, Lantheus Medical Imaging, Inc.

g a Diagnostic Difference

cardiac diagnosis, patient
 effectiveness in echocardiography¹

DEFINITY®

Most Studied

Most Trusted



Lantheus Medical Imaging[®]

CEENNEY and corporate logo display are registered trademarks of Lantheus Medical Imaging, Ir ID 2018 Lantheus Medical Imaging, Inc. All rights reserved. JASL-0118 – January 2018 DEFINITY For (Perflutren Lipid Microsphere) INJECTABLE SUSPENSION

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 border.

DOSING AND ADMINISTRATION

Important Administration Instructions

- DEFINITY® is intended for administration only after activation in the VIALMIX® apparatus. Before injection, this product must be activated and prepared according to the instructions outlined below.
- DEFINITY[®] may be injected by either an intravenous (IV) bolus or infusion. Do not administer DEFINITY[®] by 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

<u>Bolus</u>

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 $\mathsf{DEFINITY}^{\circledast}$ 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), hypertension, hypotension, dyspnea, hypoxia, chest pain, respiratory distress, stridor, wheezing, loss of consciousness, and convulsions [see Adverse Reactions].

Hypersensitivity Reactions

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

Shock, bronchospasm, throat tightness, angioedema, edema (pharyngeal, palatal, mouth, peripheral, localized), swelling (face, eye, lip, tongue, upper airway), facial hypoesthesia, rash, urticaria, pruritus, flushing, and erythema have occurred in patients with no prior exposure to perflutren-containing microsphere products [*see Adverse Reactions*]. Always have cardiopulmonary resuscitation personnel and equipment readily available prior to DEFINITY® administration and monitor all patients for hypersensitivity reactions.

Systemic Embolization

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

Ventricular Arrhythmia Related to High Mechanical Index

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

ADVERSE REACTIONS

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

 Serious Cardiopulmonary Reactions [see Warnings and Precautions]

• Hypersensitivity Reactions [see Warnings and Precautions] Clinical Trials Experience

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

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

Serious Adverse Reactions

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

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

Table 1. New-Onset Adverse Reactions Occurring in $\geq 0.5\%$ of All DEFINITY®-Treated Subjects

	DEFINITY®	
	(N=17	716)
Total Number of Adverse Reactions	269	
Total Number of Subjects with an		
Adverse Reaction	144	(8.4%)
Body system		
Preferred term	n	(%)
Application Site Disorders	11	(0.6)
Injection Site Reactions	11	(0.6)
Body as a Whole	41	(2.4)
Back/renal pain	20	(1.2)
Chest pain	13	(0.8)
Central and peripheral nervous		
system disorder	54	(3.1)
Headache	40	(2.3)
Dizziness	11	(0.6)
Gastrointestinal system	31	(1.8)
Nausea	17	(1.0)
Vascular (extracardiac) disorders	19	(1.1)
Flushing	19	(1.1)
N=Sample size 1716 subjects who DEFINITY®	received	activated

 $\ensuremath{\mathsf{n}}\xspace{-1mu}$ n=Number of subjects reporting at least one Adverse Reaction

Other adverse reactions that occurred in ${\leq}0.5\%$ 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 relably 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. fatique.

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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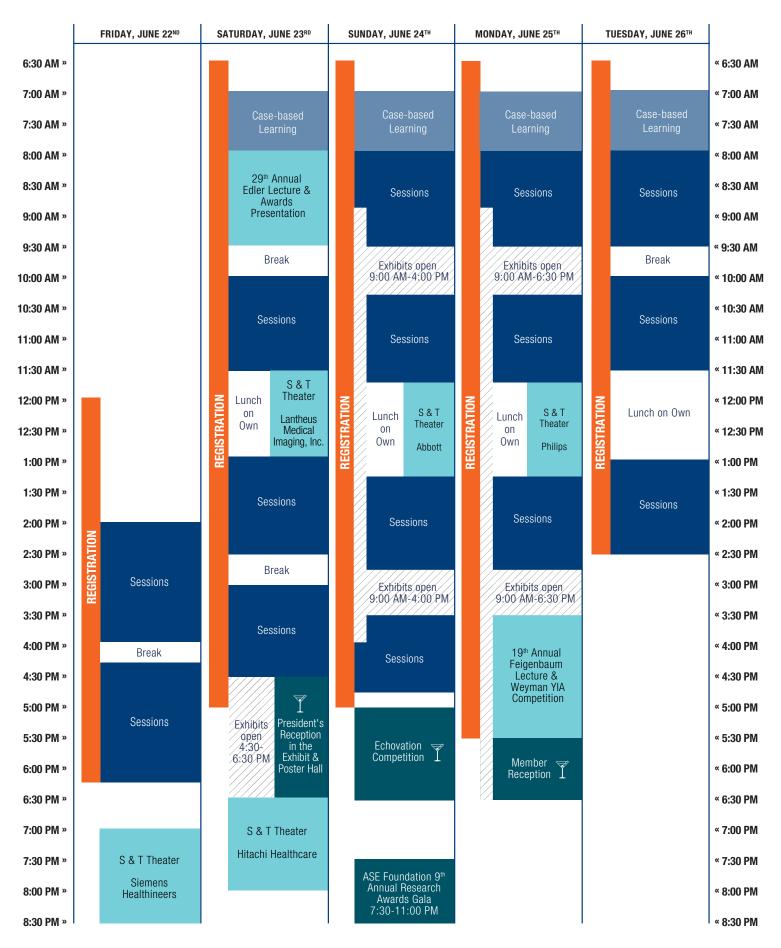
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PROGRAM INFORMATION

***** CONFERENCE AT A GLANCE *****





Download the ASE Courses

Stay up-to-date on ASE 2018 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.

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ASE 2018 Program Chair Sunil V. Mankad, MD, FASE



ASE 2018 Sonographer Co-Chair Merri L. Bremer, EdD, RN, RDCS, ACS, FASE

Dear Friends & Colleagues,

On behalf of the entire Scientific Sessions Planning Committee, we warmly welcome you to the 29th Annual ASE Scientific Sessions. We have created a very exciting program that will prove worthwhile and fulfilling for all attendees. Our theme, "See the Sound, Hear the Science," captures the essence of Nashville, also known as the "Music City," and more importantly defines our commitment to scholarship in the field of echocardiography. This meeting is the premier cardiovascular ultrasound educational event of the year and includes a record number of abstract and poster presentations highlighting the latest science.

Expert faculty will present novel sessions on **adapting guidelines** into practice, **lab management** and **career development** for both sonographers and physicians including a panel discussion on **Pathways to Leadership for Women in ASE**. An **IAC Boot Camp** is being offered on Friday, to educate and assist you with your accreditation questions and concerns. Join us on Saturday morning to learn about the use of **social media** to ensure that we, and others, "see" the value and utility of echocardiography.

We are proud to provide educational opportunities for those who need to advance their knowledge in specific areas that are becoming increasingly important for the general echocardiographer, such as **adult congenital** heart disease, strain imaging, multimodality imaging, and new clinical applications for stress echo in valve disease and cardiomyopathy. You will also notice that we are providing cutting-edge information on new technology and clinical integration of 4D imaging, echo in heart failure, assessment of valve disease, contrast echocardiography, and echo in oncology. There are a diverse array of dedicated sessions for pediatric specialists and those who specialize in circulation imaging as well as perioperative echo, point of care ultrasound, and the use of echo in structural heart interventions. The 3rd Echovation Challenge, on Sunday afternoon, will provide an opportunity to enjoy a fun shark tank-style session as we look at innovative ideas in echo. An interesting case-based session on Sunday, The Best of CASE, features cases from ASE's new online journal CASE. Chalk Talks allow for dynamic interactions with luminaries in the field and will occur throughout the meeting with two additional learning opportunities on Saturday this year. Please plan to join in on the **Brian Haluska Sonographer** Research Award and Young Investigator's Award Competitions on Monday afternoon. Echo Jeopardy and Pediatric Echo Jeopardy are back! Look for these ever popular fast-paced sessions Saturday afternoon.

Mark K. Friedberg, MD, FASE, will deliver the **19th Annual Feigenbaum Lecture**, "Echocardiographic Insights into the Stressed Right Ventricle: A Whole Hearted Story," on Monday afternoon. Immediate Past President, Allan L. Klein, MD, FASE, will present the **Edler Lecture**, "Dermatology of the Heart: Tales from the Pericardial Sac," on Saturday morning. On Sunday, Jan D'hooge, MSc, PhD, will deliver the **Kalmanson Lecture**, "Technological Advances Driving a New Era for Tissue Doppler Imaging" and James Kirkpatrick, MD, FASE, will present "Ethical Challenges in the Practice of Echocardiography: What is Right and How Do We Do It?" the first ever **Richard E. Kerber Ethics/Humanitarian Lecture** in memory of our Past President, Richard Kerber, MD, FASE.

★ WELCOME (CONT.) ★

The **Exhibit & Poster Hall** serves as our gathering place to view the latest in technology and learn more in the industrysupported Science and Technology Theater sessions. Visit over **470 posters** detailing the latest research, including moderated posters.

But that's not all! The ASE Foundation's Annual Research Awards Gala on Sunday evening will celebrate individual and Foundation achievements. The ticketed reception before the Gala, with a Tennessee Waltz theme, will take place on Delta Island in the middle of the atrium at the Gaylord. There are numerous networking opportunities for career development interspersed throughout the program.

On behalf of the ASE 2018 Scientific Session Program Committee and the Board of Directors, welcome to Nashville!

★ ASE 2018 PROGRAM COMMITTEE ★



Sunil Mankad, MD, FASE Chair



Theodore Abraham, MD. FASE Abstract Co-Chair

Craig Fleishman, MD,

FASE



Ricardo Benenstein, MD, FASE

Merri Bremer, EdD,

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Steven Goldstein,

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Alina Nicoara, MD,

Perioperative Council

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Vera Rigolin, MD,

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FASE

Abstract Chair



Thomas Porter, MD, FASE Member at Large





Matt Umland, ACS, **RDCS, FASE**

Member at Large



★ 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.

IMAGING ESSENTIALS 🟮

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.

PEDIATRIC/CONGENITAL 😳

The ASE Council on Pediatric and Congenital Heart Disease has created 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 🕑

The Perioperative Track has been designed by the ASE Council on Perioperative Echocardiography and brings together cardiac anesthesiologists, sonographers, cardiologists and surgeons with the goal of sharing knowledge in cardiovascular care and perioperative/periprocedural echocardiography. The topics of these sessions will include decision-making in mechanical circulatory support, current trends in tricuspid valve regurgitation, present and future of percutaneous mitral valve therapy, implementation of the new guidelines in perioperative practice, and overview of emerging cutting-edge technology in perioperative cardiac imaging.

POINT OF CARE 🔤

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. Two special sessions are planned for Friday afternoon, POCUS Extra Cardiac Imaging Workshop and New Frontiers of POCUS. There are also sessions on understanding ultrasound outside the echo lab and evaluating the hypertensive patient in the ICU and emergency department.

SYMPOSIA S

The 2018 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 🗷

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

CIRCULATION C

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. Topics such as carotid imaging will be covered from basics to advanced techniques. Additional state-of-the-art and cutting-edge technologies will be covered as well in what promises to be an exciting session. You won't want to miss the special session on Friday, June 22, Vascular Screening: Carotid, Aorta, Ankle-Brachial Index.

ASE is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. For detailed information, please download the ASE Courses app or visit ASEScientificSessions.org.

★ REGISTRATION INFORMATION ★

ATTENDEE REGISTRATION

The ASE Registration Counter is located in the Presidential Lobby on Level 2 of the Gaylord Opryland Resort & Convention Center. Attendees may pick up their conference materials and name badge at this location.

REGISTRATION HOURS

Friday, June 22 nd	.12:00 Noon - 6:15 PM
Saturday, June 23 rd	6:30 AM - 5:00 PM
Sunday, June 24 th	6:30 AM - 5:00 PM
Monday, June 25 th	6:30 AM - 5:30 PM
Tuesday, June 26 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.

Faculty name badges are available at the ASE Registration Counter during registration hours.

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 29th Annual ASE Scientific Sessions.

SPEAKER READY ROOM

The Speaker Ready Room is located in Lincoln Room C-D on the Presidential Mezzanine Level and staffed with technicians to assist faculty with uploading and previewing presentations. It is open during the following times:

Friday, June 22 nd	. 12:00 PM – 5:00 PM
Saturday, June 23 rd	6:00 AM – 5:00 PM
Sunday, June 24 th	6:30 AM – 4:30 PM
Monday, June 25 th	6:30 AM – 4:30 PM
Tuesday, June 26 th	. 6:30 AM – 12:00 PM

★ CLAIMING CONTINUING EDUCATION CREDIT ★

To claim your CME credit for the 29th Annual ASE Scientific Sessions, please follow these steps using Mozilla Firefox, Google Chrome, or Safari browsers. **Internet Explorer will not work.**

THE DEADLINE TO CLAIM CREDIT FOR THIS CONFERENCE IS AUGUST 28, 2018.

ASE Members:

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

Nonmembers:

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

To Claim Credit:

- 3. On the ASEUniversity homepage, click My Account at the top right of the page.
- 4. Under My Account, click Add Access Code on the left sidebar and enter the code, "29thASE"
- 5. Verify your registration information. Please be sure to use the same information that you used to register for the event.
- 6. Once verified, click CE Information tab and Take Exam button to claim your CME credit. CME credits are not earned until the entire evaluation has been completed.
- 7. Your certificate will be available for immediate download and can also be found under My Account in the My Transcripts.

Remember to enter your ABIM, ABP, and/or ABA number and birthdate if you choose to have MOC and/or MOCA points for this meeting submitted to ABIM, ABP, and/or ABA. There is a space for this information on the first page of the evaluation.

INTERACTIVE SESSIONS: ASK QUESTIONS

The ASE Courses app contains detailed information on each of ASE's live courses. You will find faculty, agendas, exhibitors, networking events, and more. Use the app on site to create your own event schedule and receive notifications of special activities. You can download the app by going to the appropriate link below or by searching for ASE Courses in the Apple or Google Play store. iOS: http://apple.co/2oQyl3z

Android: http://bit.ly/2pfalJD

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

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



★ FACILITY INFORMATION ★

The Gaylord Opryland Resort & Convention Center's physical address is:

2800 OPRYLAND DRIVE NASHVILLE, TENNESSEE 37214

Lying almost in the center of Tennessee on the Cumberland River, the vibrant and growing capital city of Nashville shines as a leading center of higher education. Appropriately known as the "Athens of the South," there is even a Nashville Parthenon. Nashville is perhaps best known, however, as the capital of country music, as proven by such attractions as the famous Music Row district and Country Music Hall of Fame. Other sites such as the Hermitage and Belle Meade Plantation also add to the history and diversity of this great city. Additionally, The District, a 20-block area in downtown, has been the nightlife epicenter for decades, as well as a popular destination for Nashville's growing food scene, specialty shopping, and many entertainment options. Learn more and plan your after-session activities at VisitMusicCity.com!

FIRST AID

An emergency medical professional will be available during the hours of the ASE 2018 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 Presidential Lobby on Level 2 of the convention center.

LUGGAGE STORAGE

Luggage storage will be available at the Gaylord Opryland Resort & Convention Center in the Presidential Lobby near the ASE Registration Counter on Tuesday, June 26.

FEDEX OFFICE PRINT & SHIP CENTER

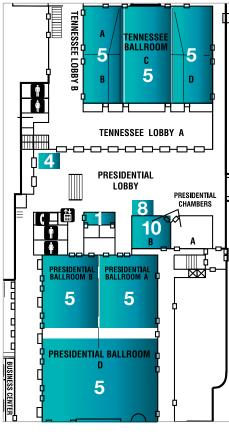
Gaylord Opryland provides you with an office away from the office. FedEx Office is centrally located next to the Presidential Ballroom in the Convention Center, offering convenient access for any type of print job, no matter the size or service required. For last-minute changes or projects, the business center offers 24-hour self-service printing and copying. Hours of operation are Monday – Sunday, 6:00 AM to 9:00 PM.

CONTACT INFORMATION:

Phone: 615-391-0381 Guest Fax Number: 615-885-3054



★ FACILITY MAP ★



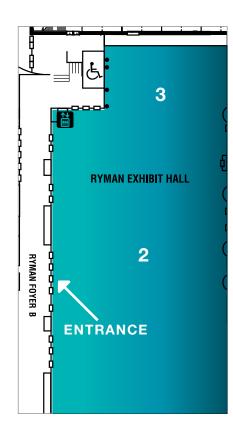
LEVEL 1



- 2. EXHIBIT & POSTER HALL
- 3. SCIENCE & TECHNOLOGY THEATER
- 4. ASE FOUNDATION BOOTH
- 5. SESSION ROOMS
- 6. FASE LOUNGE
- 7. SPEAKER READY ROOM
- 8. ASE PRODUCTS BOOTH
- 9. LEARNING LABS
- **10. COMMITTEE MEETINGS**



MEZZANINE LEVEL



LOWER LEVEL

★ PROGRAM INFORMATION & REGULATIONS ★

FOOD FUNCTIONS

ASE will provide continental breakfast in the Presidential Lobby by the Registration Counter 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 24 and Monday, June 25 and in the Tennessee Lobby, on Friday, June 22, Saturday, June 23, and Tuesday, June 26. 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 the Lower Level, ASE will provide boxed meals during each lunch session on a first come, first served basis (max. 350 participants). Various refreshments may also be available for the evening sessions. See page 79 of this program for a detailed theater schedule.

INTERNET ACCESS

Complimentary Wi-Fi is available in the Gaylord Opryland Resort & Convention Center. Please use the following log-in information:

Network: ASE2018 Password: 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 when attending sessions. 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 in the Presidential Lobby on Level 2 of the Gaylord Opryland Resort & 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 2018 Scientific Sessions, either by video, still or digital photography, audio or any other recording or reproduction mechanism without prior written permission from ASE. 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 are allowed, but should avoid showing presentation slides. Please use #ASE2018 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

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 2018 Scientific Sessions.

★ EDUCATION INFORMATION ★

TARGET AUDIENCE

The ASE 29th 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 guality 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, veterinarians, radiologists, research scientists, primary care practitioners, residents and fellows in training, students, and nurses. Attendees are encouraged to interact with available faculty, and also to take advantage of the opportunity to gain new expertise.

DISCLAIMER

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

COMMERCIAL SUPPORT DISCLOSURE STATEMENT

EDUCATIONAL GRANTS

This activity is supported in part by educational grants from: Abbott, Actelion Pharmaceuticals, Edwards Lifesciences, Lantheus Medical Imaging, Inc., and Medtronic.

IN-KIND DONATIONS

This activity is supported in part by in-kind donations from: FUJIFILM Medical Systems U.S.A., Inc., GE Healthcare, Philips, Siemens Healthineers, and Unetixs.

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 practice-improvement measures.
- ★ Define the role of echo specifically in the guidance of non-surgical procedures.
- Discuss best practices in education for sonographer and physician staff, cardiology fellows, and sonography students and management of echocardiographic laboratories.
- Describe the lab accreditation process and standards for clinical practice and quality improvement.
- ★ Explain the primary uses of echocardiography in the areas of critical care and emergency medicine.
- ★ Apply new technologies such as 3-D and stress echo for advanced assessment of valve disease.
- Integrate qualitative and quantitative echocardiography for better understanding of physiology and anatomy of cardiac surgical patients in order to optimize practice performance and patient outcomes.

★ EDUCATION INFORMATION ★

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.

ASE is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. ASE designates the 29th Annual ASE Scientific Sessions for a maximum of **30.5** *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 22, 2018 = 4.0 June 23, 2018 = 7.0 June 24, 2018 = 6.5 June 25, 2018 = 7.5 June 26, 2018 = 5.5

Successful completion of this CME activity enables the participant to earn up to 30.5 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 24 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 30.5 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 EchocardiographyTM (NBE) requires 15 hours of echocardiography specific CME for both ReASCE[®] and RePTE[®] recertification. This activity contains 30.5 *AMA PRA Category 1 CreditsTM* that can be used toward recertification requirements. ARDMS, CCI, and Sonography Canada recognize ASE's certificates and have agreed to honor the credit hours toward their registry requirements for sonographers.

All or a portion of this educational activity may meet the CME requirement for IAC Echocardiography accreditation. This activity is eligible for Section 1 credits in the Royal College of Physicians and Surgeons of Canada's Maintenance of Certification (MOC) Program. Participants must log into MAINPORT to claim this activity.

DISCLOSURE

The American Society of Echocardiography is committed to ensuring that its educational mission and all educational programs are not influenced by the special interests of any corporation or individual, and its mandate is to retain only those speakers whose financial interests can be effectively resolved to maintain the goals and educational integrity of the program. While a monetary or professional affiliation with a corporation does not necessarily influence a speaker's presentation, the 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 2018 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 29th Annual Scientific Sessions have agreed to the following:

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

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

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

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

RELATIONSHIP CODES

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

Akhter, N	Epsilon (1)
Aronson, L	
	(full company list available upon request)
Becher, H	Bracco (2), (4), (1); Springer (8); Philips (8)
Beckman, J	Astra Zeneca (2); Janssen (2); Sanofi (2)
Bourque, D	Lantheus Medical (1)
Crandall, I	Lantheus (2)
DeMaria, A	Bracco (8); Trust Inc (8)
Estep, J	Abbott (2), (8); Medtronic (2)
Faletra, F	Philips (8)
	DiA Imaging (2); Sono Gene (2)
Garcia, M	Elsevier (6); Wolters Kluwer (6); Pfizer (3)
Gillam, L	Medtronic (8); Edwards Lifesciences (8)
Green, T	Siemens Medical Solutions, USA (1);
	Lantheus Medical Imaging (2)
Hill, J	Philips Healthcare (1)
Hoit, B	Philips Medical (1)
lvy, D	Actelion (2); United Therapeutics (2); Lilly (2)
Kelsey, A	Lantheus Medical Imaging (1)
Khalique, O	Edwards Lifesciences (1); Jenavalve (2)
Kisslo, J	Philips Medical Systems (2), (7);
	General Electric (2), (4); Novaseed (7)
	Lantheus Medical Imaging (1)
	Philips (1), (2); Tomtec (4)
Leong-Poi, H	Lantheus Medical Imaging (1);
	Bracco Diagnostics (4)

★ASE 2018 FACULTY DISCLOSURE INFORMATION (CONT.) ★

Lindman, B Edwards Lifesciences (4); Roche Diagnostics (2), (4); Medtronic (2)
Martin, R Bay Labs (3); Medtronic (1); Edwards (1)
Meece, RPhilips Healthcare (1); Abbott (SJM) Healthcare (1)
Mitchell, C Davies Publishing, Inc (8); Wolters Kluwer (6); Elsevier (6); JRC-DMS (8)
Monaghan, M 4Tech (2); NeoVasc (2); Philips (7); Tomtec (7)
Nakatani, SHitachi Co. (4); Canon Medical Systems Co. (4)
Nihoyannopoulos, P National Kapodistrian University of Athens, Faculty of Medicine (8)
Nyman, CEdwards Lifesciences Ltd (1), (3)
Park, MLantheus Medical Imaging (1); Northwest Imaging Forums (1)
Parthiban, AEdwards (4); Philips (4)
Passeri, J Medtronic (2); Edwards Lifesciences (2)
Patel, Amit Astellas (4), (1); Philips (4); General Electric (4); Myocardial Solutions (4)
Porter, T Bracco Imaging (8), (4); Lantheus Medical Imaging (8), (4)
Roberson, D Philips Ultrasound (1)
Rosen, D Federal Lobbyist
(full company list available upon request)
Rudski, L GE (3) Sarano, M Edwards LLC (4)
Sengupta, P HeartSciences (2); Hitachi Aloka (2)
Shook, DEdwards Lifesciences (8), (4); Boston Scientific (8)
Sinkovskaya, EGE Healthcare (2)
Sugeng, LBracco (7); Philips (2); Siemens (2), (1);
Toshiba (7); Hitachi (4), (1)
Vannan, M Siemens (4), (1); Lantheus (4), (1); Abbott (4), (1); Medtronic (4)

NO DISCLOSURES

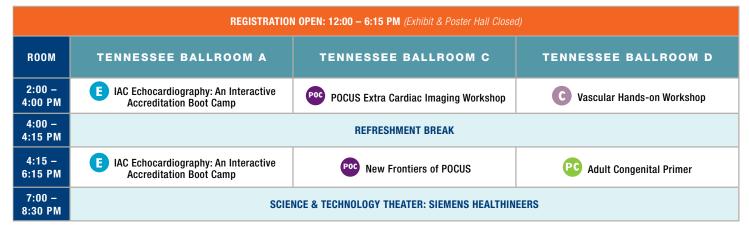
Abe, Y; Abraham, T; Acquatella, H; Adams, D; Addetia, K; Agler, D; Agrawal, V; Albers, A; Alfirevic, A; Allada, V; Altman, C; Amuthan, V; Anderson, B; Aragam, J; Arita, T; Armstrong, W; Arya, B; Asch, F; Assuncao, B; Astbury, J; Aurigemma, G; Avenatti, E; Ayres, N; Badano, L; Bailey, A; Banchs, J; Barker, P; Benenstein, R; Bharucha, T; Bhat, A; Bhatia, R; Bichell, D; Bienvenu, L; Bierig, M; Biga, C; Blauwet, L; Border, W; Bradsher, K; Bremer, M; Brook, M; Bughrara, N; Burgess, P; Burzynski, J; Byrd, B.; Byrd, B.; Carron, H; Cavalcante, J; Chidsey, G; Cobey, F; Cohen, M; Coleman, D; Collins, K; Corretti, M; Davidson, B; Davis, A; DeCara, J; de Freitas, R; DeGroff, C; Dent, J; Desai, M; D'hooge, J; Diaz-Gomez, J; Dillenbeck, A; DiMaria, M; Dimas, V; Dinh, V; Dokainish, H; Donal, E; Donofrio, M; Dorfman, A; Douglas, P;

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Dragulescu, A; Drant, S; Duce, L; Eberhardt, R; Edvardsen, T; Edwards, N; Eidem, B; Ensing, G; Etes, A; Fair, J; Fanola, C; Feigenbaum, H; Ferencik, M; Fey, B; Fine, N; Finley, A; Fleishman, C; Forsha, D; Fowler, B; Freed, B; Freud, L; Friedberg, M; Frommelt, M; Frommelt, P; Galderisi, M; Ganame, J; Gardin, J; Garg, R; Geva, T; Gill, E; Glyde, K; Goldstein, S; Gorcsan, J; Gordon, T; Gorman, B; Govind, S; Grimm, R; Gutierrez-Fajardo, P; Hahn, R; Hamburg, N; Han, Y; Harper, R; Harrild, D; Hassan, F; Hatch, L; Hays, A; Helfinstine, K; Hernandez, A; Hornberger, L; Horton, K; Hua, L; Hughes-Doichev, R; Hung, J; Irani, W; Jain, R; Janardhanan, R; Jankowski, M; Janssen, D; Johri, A; Jone, P; Kasliwal, R; Kasprzak, J; Katz, W; Kaul, S; Kavanaugh-McHugh, A; Keane, M; Khoo, N; Kim, E; Kim, J; King, M; Kinno, M; Kinsara, A; Kirkpatrick, J; Klein, A; Ko, H; Kolias, T; Kort, S; Koulogiannis, K; Koutrolou-Sotiropoulou, V; Kovalchin, J; Kramer, C; Kreeger, J; Kronzon, I; Kruse, E; Kumar, P; Kutty, S; Ky, B; LaBounty, T; Labovitz, A; Lai, W; Lanspa, M; Lester, S; Levine, J; Levine, R; Levinson, A; Lewin, M; Lin, B; Lindner, J; Little, S; Litwin, S; Liu, J; Liu, R; Lopez, L; Lorber, R; Lu, J; Lui, G; Mackensen, G; Magalski, A; Maganti, K; Main, M; Malkowski, M; Mangion, J; Mankad, R; Mankad, S; Marcoff, L; Marcus, R; Mark, J; Marshall, J; Marwick, T; Marx, G; Maskatia, S; Mathias, Jr., W; Matiasz, R; Mawad, W; Mayer, S; McIlwain, E; McMahon, C; Mendes, L; Menon, S; Mercer-Rosa, L; Michelfelder, E; Mikolaj, M; Miller, F; Mills, J; Mobasseri, S; Mohabir, P; Mohan, J; Moon-Grady, A; Morhy, S; Morris, S; Moslehi, J; Mousavi, N; Mukherjee, M; Mulvagh, S; Muniz, J; Muraru, D; Nagueh, S; Nanda, N; Nagvi, T; Narang, A; Nay, S; Nesbitt, G; Nesser, H; Nicoara, A; Nikravan, S; Nixon, J; Nkomo, V; Nyrnes, S; Ogunyankin, K; Oh, J; Olson, J; Omran, A; Orsinelli, D; Orsinelli, M; Palma, R; Pandian, N; Parashar, S; Park, S; Parra, D; Patel, A; Patel, D; Patil, P; Pearlman, A; Pedra, S; Pellett, A; Pellikka, P; Phelan, D; Phillip, S; Picard, M; Pinto, N; Pislaru, S; Plana, J; Plastino, M; Poh, K; Popescu, B; Popovic, Z; Poppas, A; Powell, A; Prado, A; Pressman, G; Pretorius, M; Puchalski, M; Puthumana, J; Quader, N; Quartermain, M; Quinones, M; Quiroz, R; Rabischoffsky, A; Raissi, S; Rakowski, H; Rampoldi, M; Rangarajan, V; Ratzlaff, R; Renew, J; Richards, B; Rigolin, V; Roberts, B; Roberts, M.; Rodrigues, A; Rodriguez, L; Roemer, S; Ronderos, R; Rose, G; Ryan, T; Rychik, J; Sachdeva, R; Sade, L; Safi, L; Sanchez, L; Sanders, S; Saric, M; Sarwal, A; Satou, G; Sawada, S; Saxena, R; Scalia, G; Schaaf, J; Scherer, M; Scherrer-Crosbie, M; Schiller, N; Schuster, A; Scott, N; Sebag, I; Sengupta, S; Senior, R; Seward, J; Shah, A; Shah, S; Shamoun, F; Shea, E; Sheu, R; Shillcutt, S; Shirali, G; Shivalkar, B; Shrivastava, S; Shu, X; Siegel, R; Skoczylas, M; Slesnick, T; Smiseth, O; Sniecinski, R; Soni-Patel, N; Soriano, B; Sorrell, V; Soslow, J; Spencer, K; Srivastava, S; Stainback, R; Stern, K: Stewart, W: Swaminathan, M: Tacy, T: Tajik, J: Tanaka, H: Taub, C: Taylor, B; Taylor, C; Taylor, M; Thaden, J; Thavendiranathan, P; Thomas, J; Topilsky, Y; Tsang, W; Tucay, E; Tworetzky, W; Umland, M; Vainrib, A; Vaitenas, I; Valente, A; Van Houten, T; Velazguez, E; Venkateshvaran, A; Vieira, M; Villanueva, F; Voigt, J; Vora, M; Wahi, S; Wang, Z; Warmsbecker, J; Wei, K; Weissman, N; Welch, T; Wells, B; West, C; Weyman, A; Wiegers, S; Wiener, D; Wilansky, S; Wiley, B; Wodzinski, B; Woo, A; Wood, M; Woolf, A; Wright, R; Yoerger-Sanborn, D; Young, L; Zekry, S; Zhou, X; Zhu, T; Zielinski, A; Zimmerman, K; Zoghbi, W

★ SCHEDULE AT A GLANCE ★

FRIDAY, JUNE 22ND





Linda D. Gillam, MD, FASE

The National Board of Echocardiography is delighted to recognize our Immediate Past President Linda D. Gillam, MD, FASE as the first recipient of ASE's Mentorship Award. We extend our congratulations on this well-deserved honor.



NATIONAL BOARD OF ECHOCARDIOGRAPHY, INC.

Society of Critical Care Medicine



Critical Care ECHOCARDIOGRAPHY Review Course

November 6-8, 2018 Loews Chicago O'Hare Hotel Rosemont, Illinois, USA Ideal for intensivists, advanced practice providers, cardiologists, fellows in training, sonographers, and hospitalists

CE/CME AVAILABLE

The new Critical Care Echocardiography Review Course is a live two-anda-half-day course held in partnership between the Society of Critical Care Medicine and the American Society of Echocardiography. This course will educate attendees in all aspects of echocardiography in critically ill patients and help attendees prepare for the critical care echocardiography board examination offered by the National Board of Echocardiography.

Course benefits include:

- Preparation for the new critical care echocardiography board examination
- Review by highly skilled faculty, including intensivists, cardiologists, critical care anesthesiologists, pulmonologists, surgeons, emergency medicine physicians, and cardiac sonographers
- Valuable information for staying up to date on the latest in ultrasound and echocardiography education, as well as team-based care to keep skills relevant
- Incorporation of clinical practice acumen with available published guidelines, expert consensus, and evidence-based recommendations

For more information and to register, visit sccm.org/echoreview.



★ FRIDAY, JUNE 22 SCHEDULE ★

2:00 PM - 4:00 PM

POCUS Extracardiac Imaging Workshop – Tennessee Ballroom C

Chairs: J. Diaz-Gomez, M. Lanspa

2:00 PM – 2:15 PM Abdominal Ultrasound *V. Dinh*

2:15 PM – 2:30 PM Lung Ultrasound *P. Mohabir*

2:30 PM – 2:45 PM Vascular Ultrasound/Access *J. Astbury*

2:45 PM – 4:00 PM Hands-on Workshop

2:00 PM - 4:00 PM

C Vascular Hands-on Workshop – Tennessee Ballroom D

Chairs: R. Benenstein, M. Skoczylas Speakers: B. Fowler, M. Skoczylas

2:00 PM - 6:15 PM

E IAC Echocardiography: An Interactive Accreditation Boot Camp – Tennessee Ballroom B Speakers: M. Bremer, B. Gorman, P. Burgess

4:15 PM - 6:15 PM

Chairs: H. Ko, J. Lu

4:15 PM – 4:35 PM Basic Segmental Anatomy of Congenital Heart Disease *H. Ko*

4:35 PM – 4:55 PM Evaluation of Intracardiac Shunts *G. Lui*

4:55 PM – 5:15 PM Echocardiography in the ACHD Patient with Tetralogy of Fallot *A. Valente*

5:15 PM - 5:35 PM

Echocardiographic Evaluation of Systemic Right Ventricle in Transposition of the Great Arteries: CCTGA, Senning, Mustard *J. Soslow*

5:35 PM - 5:55 PM

Echocardiographic Evaluation of the Adult with Single Ventricle *R. de Freitas*

5:55 PM - 6:15 PM

Discussion (How Do I Evaluate the New Patient in My Echo Lab?)

4:15 PM - 6:15 PM

New Frontiers of POCUS – Tennessee Ballroom C Chairs: J. Diaz-Gomez, M. Lanspa

4:15 PM - 4:25 PM

Differentiating POCUS from Conventional Echocardiography *B. Wiley*

4:25 PM - 4:40 PM

Usefulness of Echo: Contrast in Critically III Patients *H. Leong-Poi*

4:40 PM – 4:55 PM

Systolic and Diastolic Ventricular Function in Sepsis *B. Arya*

4:55 PM – 5:10 PM Application of Transesophageal Echocardiography in Cardiac Arrest *J. Fair*

5:10 PM – 5:25 PM Question and Answer

5:25 PM – 5:35 PM Board Certification in Critical Care Echo: Why We Need It *A. Hernandez*

5:35 PM – 5:50 PM Point of Care Ultrasound in Neurocritical Care *A. Sarwal*

5:50 PM – 6:00 PM Echocardiography to Assess Renal Perfusion *M. Lanspa*

6:00 PM – 6:15 PM Question and Answer

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



Serving the ASE membership for more than 20 years, IAC has been the leader in offering accreditation programs that ensure facilities are providing the highest level of quality patient care. IAC-accredited facilities benefit from:

- **Comprehensive Case Review:** IAC is the only CMS-approved accrediting body that provides a clinical peer review of case studies (with pathology) for diagnostic quality, report accuracy and report completeness.
- Quality Improvement Tool: Facilities use the tool to assess their case studies and final reports and receive a quantitative report targeting opportunities for continuous process improvement. Physicians may use the IAC QI Tool to satisfy a component of MIPS performance measures under the improvement activity category.
- Lower Cost: IAC accreditation is a cost-effective solution for your facility, offering discounts and a single application for multi-site facilities. For details, visit *intersocietal.org/iac/about/programs.htm*.

About IAC

The IAC is a nonprofit organization in operation to evaluate and accredit facilities that provide diagnostic imaging and procedure-based modalities, thus improving the quality of patient care provided in private offices, clinics and hospitals where such services are performed.

Committed to its mission through a rigorous peer review process, the IAC has granted accreditation to more than 14,000 sites since its inception in 1991. IAC accreditation is widely respected within the medical community, as illustrated by the support of more than 40 national medical societies.

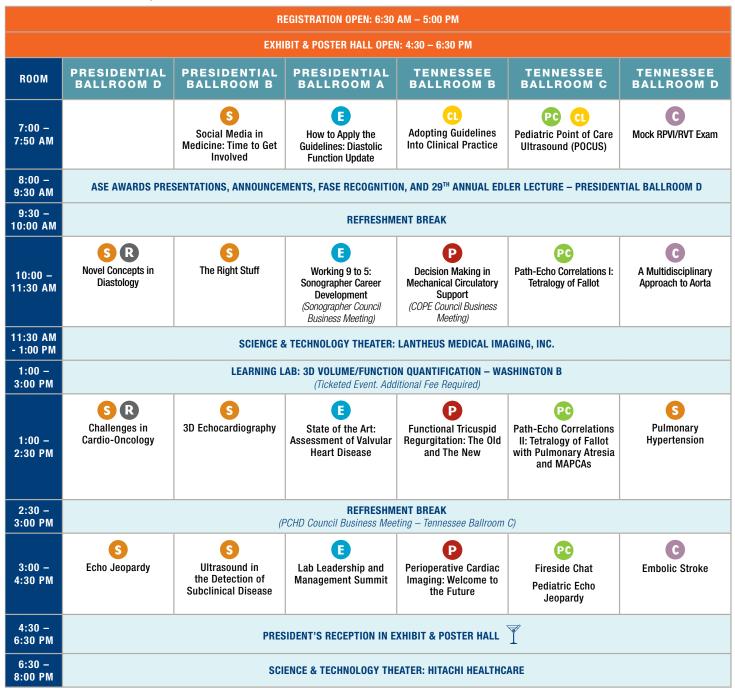


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★ SCHEDULE AT A GLANCE ★

SATURDAY, JUNE 23RD



ASE Guideline Essentials in your hands

FEATURES

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 - » Recommendations for Noninvasive Evaluation of Native Valvular Regurgitation
 - » Recommendations for the Evaluation of Left Ventricular Diastolic Function by Echocardiography
 - » Recommendations for Cardiac Chamber Quantification by Echocardiography in Adults
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in Booth #606

7:00 AM - 7:50 AM Adopting Guidelines Into Clinical Practice -Tennessee Ballroom B

Chairs: F. Asch, N. Weissman

7:00 AM – 7:15 AM Aortic Stenosis *W. Zoghbi*

7:15 AM – 7:30 AM Valvular Regurgitation *M. Sarano*

7:30 AM – 7:45 AM Cardiac Source of Embolism *M. Saric*

7:45 AM – 7:50 AM Question and Answer

7:00 AM - 7:50 AM

How to Apply the Guidelines: Diastolic Function Update – Presidential Ballroom A

Chairs: C. Kramer, L. Rodriguez

7:00 AM – 7:15 AM Basics of Diastolic Function: The Measurements *J. Hill*

7:15 AM – 7:25 AM Review of the Guideline: Key Points *A. Pellett*

7:25 AM – 7:40 AM Applying the Guideline: Cases *D. Bourque*

7:40 AM – 7:50 AM Question and Answer

7:00 AM – 7:50 AM **C** Mock RPVI/RVT Exam – Tennessee Ballroom D Speakers: B. Fowler, E. Kim, L. Sanchez 7:00 AM - 7:50 AM

Construction of Care Ultrasound (POCUS) – Tennessee Ballroom C Chairs: C. DeGroff, A. Kavanaugh-McHugh

7:00 AM – 7:15 AM Focus in Neonatal Intensive Care Unit *L. Dupree Hatch*

7:15 AM – 7:30 AM Focus in Pediatric Intensive Care Unit *S. Morhy*

7:30 AM – 7:45 AM Focus in the Emergency Department *J. Burzynski*

7:45 AM – 7:50 AM Question and Answer

7:00 AM - 7:50 AM

Social Media in Medicine: Time to Get Involved – Presidential Ballroom B Chairs: J. Kirkpatrick, S. Mulvagh

7:00 AM – 7:12 AM Why Use Social Media in Medicine? *A. Narang*

7:12 AM – 7:24 AM Social Media Platforms: Which One Should I Pick? *M. Swaminathan*

7:24 AM – 7:36 AM Social Media Pitfalls and Mistakes *A. Johri*

7:36 AM – 7:50 AM Question and Answer

8:00 AM - 9:30 AM

S ASE Awards Presentations, Announcements, FASE Recognition, and 29th Annual Edler Lecture – Presidential Ballroom D

State of ASE *V. Rigolin*

Board of Directors Induction and Announcements *V. Rigolin*

FASE Recognition *V. Rigolin, N. Skubas*

Edler Lecture: Dermatology of the Heart: Tales from the Pericardial Sac *A. Klein*

Award Presentations and Recognitions *V. Rigolin*

Incoming President's Address *J. Lindner*

10:00 AM – 11:30 AM C A Multidisciplinary Approach to Aorta – Tennessee Ballroom D Chairs: R. Kasliwal. F. Shamoun

10:00 AM – 10:15 AM Update on Acute Aortic Syndrome *K. Maganti*

10:15 AM – 10:30 AM Non-Atherosclerotic Disease *N. Hamburg*

10:30 AM – 10:45 AM Peri-Surgical Imaging of the Aorta *R. Sheu*

10:45 AM – 11:00 AM Abdominal Aortic Aneurysm: Contemporary Imaging and Management *F. Shamoun*

11:00 AM – 11:15 AM An Aortic Center's Approach to the Patient with Thoracic Aneurysm (Marfan/LDS/Bicuspid) *C. Fanola*

11:15 AM – 11:30 AM Question and Answer

10:00 AM - 11:30 AM

Decision Making in Mechanical Circulatory Support – Tennessee Ballroom B

Chairs: A. Nicoara, S. Shillcutt

10:00 AM – 10:15 AM COPE Council Business Meeting *A. Finley*

10:15 AM – 10:30 AM Right Ventricular Dysfunction in Left Ventricular Assist Devices *S. Shillcutt*

10:30 AM – 10:45 AM Tricuspid Regurgitation in Left Ventricular Assist Devices *A. Finley*

10:45 AM – 11:00 AM Utility of Echo in Temporary Circulatory Support *F. Cobey*

11:00 AM – 11:15 AM Graduating from Temporary Circulatory Support: Predictors of Successful Weaning *M. Pretorius*

11:15 AM – 11:30 AM Question and Answer

10:00 AM - 11:30 AM

S R Novel Concepts in Diastology – Presidential Ballroom D

Chairs: S. Lester, M. Quiñones

10:00 AM – 10:15 AM New Diastolic Concepts *O. Smiseth*

10:15 AM - 10:30 AM

Diastology in HFpEF *S. Shah*

10:30 AM - 10:45 AM

OA-01: Performance of Diastolic Function Classification Systems to Predict Incident Death or Hospitalization for Heart Failure in a VA Population *Y. Han*

10:45 AM - 11:00 AM

Echo Doppler Estimation of Left Ventricular Filling Pressure *B. Popescu*

11:00 AM - 11:15 AM

Diastolic Stress Testing *P. Pellikka*

11:15 AM – 11:30 AM When Echo is Not Enough for Diastology: Multimodality *S. Shah*

10:00 AM - 11:30 AM

Path-Echo Correlations I: Tetralogy of Fallot – Tennessee Ballroom C

Chairs: D. Bichell, T. Geva, L. Young

10:00 AM – 10:20 AM Pathology *S. Sanders*

10:20 AM – 10:35 AM Fetal Imaging and Innovations to Predict Post-natal Severity *S. Srivastava*

10:35 AM – 10:50 AM Pre-operative Imaging: What Did I Forget? *C. Taylor*

10:50 AM – 11:05 AM Intervention: When to Dilate, When to Stent *D. Janssen*

11:05 AM – 11:20 AM Surgery: Transannular Patch or Valve Sparing or Something in Between *D. Bichell*

11:20 AM – 11:30 AM Question and Answer

10:00 AM - 11:30 AM

S The Right Stuff – Presidential Ballroom B Chairs: L. Rudski, N. Schiller

10:00 AM – 10:15 AM Right Ventricular Measurements *R. Saxena*

10:15 AM – 10:30 AM Arrhythmogenic Right Ventricular Dysplasia *D. Yoerger Sanborn*

10:30 AM – 10:45 AM Carcinoid *G. Chidsey*

10:45 AM - 11:00 AM

Right Ventricular Infarction *M. Corretti*

11:00 AM – 11:15 AM Adverse Effects of Pacing on the Right Ventricle *J. DeCara*

11:15 AM – 11:30 AM Question and Answer

10:00 AM - 11:30 AM

Working 9 to 5: Sonographer Career Development – Presidential Ballroom A

Chairs: C. Mitchell, S. Wiegers

10:00 AM – 10:20 AM Council on Cardiovascular Sonography Business Meeting *C. Mitchell*

10:20 AM – 10:35 AM Sonographer Career Pathways *M. Roberts*

10:35 AM – 10:50 AM Advanced Cardiac Sonography (ACS): A New Career *M. Umland*

10:50 AM – 11:05 AM ASE Mentoring Program *M. Orsinelli*

11:05 AM – 11:30 AM Panel Discussion: Pathways to Leadership for Women in ASE *Panelists: D. Adams, P. Knoll, C. Mitchell, N. Weissman, S. Wiegers*

1:00 PM - 2:30 PM

S 3D Echocardiography – Presidential Ballroom B *Chairs: V. Rigolin, B. Lin*

1:00 PM – 1:15 PM 3D Assessment of Left Ventricle and Left Atrial Volumes *L. Sugeng*

1:15 PM – 1:30 PM 3D Assessment of Mitral Valve Pathology *A. Rabischoffsky*

1:30 PM – 1:45 PM 3D to Guide Mitral Valve Interventions *D. Shook*

1:45 PM - 2:00 PM

3D Assessment of Right Heart Pathology: Right Ventricle and Tricuspid Valve *L. Badano*

2:00 PM - 2:15 PM

3D Artifacts and Pitfalls *X. Shu*

2:15 PM – 2:30 PM

Question and Answer

1:00 PM - 2:30 PM

S Challenges in Cardio-Oncology – Presidential Ballroom D

Chairs: J. DeCara, J. Plana

1:00 PM - 1:20 PM

Decreased Strain and Normal Ejection Fraction after Anthracycline Therapy *B. Assuncao, J. Banchs*

1:20 PM – 1:40 PM Acute Myocarditis Post Checkpoint Inhibitor Therapy *J. Liu, J. Moslehi*

1:40 PM – 2:00 PM Coronary Artery Disease in the Post Radiation Patient *J. Kasprzak, I. Sebag*

2:00 PM – 2:15 PM Valves in the Post Radiation Patient *V. Rangarajan, W. Stewart*

2:15 PM – 2:30 PM Role of Multimodality Imaging

M. Ferencik, J. Moslehi

1:00 PM - 2:30 PM

P Functional Tricuspid Regurgitation: The Old and The New – Tennessee Ballroom B Chairs: G. Mackensen, R. Sniecinski

1:00 PM – 1:15 PM Functional Tricuspid Regurgitation: Case Presentation *R. Sniecinski*

1:15 PM – 1:30 PM Imaging of the Tricuspid Valve for Procedural Guidance *A. Nicoara*

1:30 PM - 1:45 PM

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

1:45 PM - 2:00 PM

Functional Tricuspid Regurgitation: Repair, Replace, or Ignore *B. Taylor*

2:00 PM - 2:15 PM

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

2:15 PM - 2:30 PM

Functional Tricuspid Regurgitation Case Presentation: What Actually Happened? *R. Sniecinski*

1:00 PM - 2:30 PM

 Path-Echo Correlations II: Tetralogy of Fallot with Pulmonary Atresia and MAPCAs –
 Tennessee Ballroom C Chairs: C. Altman, D. Janssen, D. Parra

1:00 PM - 1:20 PM

Pathology *S. Sanders*

1:20 PM – 1:35 PM Fetal Imaging: Wait, Where are the Pulmonary Arteries? *L. Freud*

1:35 PM – 1:50 PM Pre-Procedure Multimodality Imaging J. Lu

1:50 PM – 2:05 PM Surgical Approaches to Unifo

Surgical Approaches to Unifocalization *D. Bichell*

2:05 PM – 2:30 PM

Case for Discussion + Management *D. Bichell, D. Janssen, D. Parra*

1:00 PM - 2:30 PM

S Pulmonary Hypertension – Tennessee Ballroom D Chaira: D. Cutiarraz, Faiarda, S. Wahi

Chairs: P. Gutierrez-Fajardo, S. Wahi

1:00 PM - 1:15 PM

Overview of Pulmonary Hypertension: WHO Classification *B. Freed*

1:15 PM – 1:30 PM Echo Findings in Pulmonary Hypertension *P. Gutierrez-Fajardo*

1:30 PM - 1:45 PM

Systemic Diseases *M. Mukherjee*

1:45 PM - 2:00 PM

Pulmonary Hypertension Secondary to Left Ventricular Disease *A. Hays*

2:00 PM - 2:15 PM

Multimodality Imaging *Y. Han*

2:15 PM – 2:30 PM Question and Answer

1:00 PM - 2:30 PM

State of the Art: Assessment of Valvular Heart Disease – Presidential Ballroom A

Chairs: R. Harper, V. Nkomo

1:00 PM - 1:15 PM

Qualitative and Semi-Quantitative Evaluation of Mitral and Aortic Regurgitation *E. Shea*

1:15 PM - 1:30 PM

Quantitative Evaluation of Mitral and Aortic Regurgitation *A. Dillenbeck*

1:30 PM - 1:45 PM

Echocardiographic Assessment of Mitral Stenosis *C. West*

1:45 PM – 2:00 PM Echocardiographic Assessment of Aortic Stenosis *N. Edwards*

2:00 PM – 2:15 PM Echocardiographic Assessment of Prosthetic Valves *R. Meece*

2:15 PM – 2:30 PM Question and Answer

1:00 PM - 3:00 PM

Learning Lab: 3D Volume/Function Quantification – Washington B

(Ticketed Event. Additional Fee Required) Chairs: T. Green, M. Vannan

3:00 PM - 3:30 PM

Fireside Chat – Tennessee Ballroom C *Fireside Interviewer: S. Sanders Fireside Dignitary: G. Marx*

3:00 PM - 4:30 PM

S Echo Jeopardy – Presidential Ballroom D Host: J. Gorscan, Co-chair: S. Mankad

Team 1: *C. Kramer, C. Taub*

Team 2: B. Anderson, V. Sorrell

Team 3: J. Kasprzak, K. Zimmerman

3:00 PM - 4:30 PM

C Embolic Stroke – Tennessee Ballroom D Chairs: J. Aragam, S. Park

3:00 PM - 3:15 PM

Carotid Stenosis, Vertebro-Subclavian Stenosis and Trans-Cranial Doppler *R. Benenstein*

3:15 PM - 3:30 PM

Carotid/Aortic Plaque: Characterization and Clinical Significance *A. Johri*

3:30 PM – 3:45 PM Patent Foramen Ovale: Controversy and Closure *K. Addetia*

3:45 PM – 4:00 PM

The Role of Echo in Left Atrial Appendage Closure: Current Imaging *M. Saric*

4:00 PM – 4:15 PM

TEE and Unusual Cardiac Sources of Emboli *J. Aragam*

4:15 PM – 4:30 PM Question and Answer

3:00 PM - 4:30 PM

Lab Leadership and Management Summit – Presidential Ballroom A

Chairs: K. Helfinstine, E. Valazquez

3:00 PM – 3:15 PM How to Herd Cats: Managing the Echo Lab Team *J. Marshall*

3:15 PM – 3:30 PM How to Implement Practice Change *M. Bierig*

3:30 PM – 3:45 PM How to Manage Performance Improvement *S. Phillip*

3:45 PM – 4:00 PM Question and Answer

4:00 PM – 4:30 PM Panel Discussion: Quality vs. Quantity in the Current Healthcare Environment *Moderator: K. Helfinstine M. Bierig, S. Lester, J. Marshall, S. Phillip*

3:30 PM - 4:30 PM

Pediatric Echo Jeopardy – Tennessee Ballroom C

Chairs: M. Brook, D. Harrild

Team Johnny Cash A. Bhat, J. Lu, B. Richards, G. Satou

Team George Jones J. Kovalchin, C. McMahon, S. Morris, N. Soni

Team Willie Nelson A. Dragulescu, S. Drant, J. Kreeger, D. Parra

3:00 PM - 4:30 PM

Perioperative Cardiac Imaging: Welcome to the Future – Tennessee Ballroom B Chairs: F. Cobey, A. Finley

3:00 PM – 3:20 PM Perioperative TEE: Current Status and Future Directions *J. Mark*

3:20 PM – 3:40 PM Best of Both Worlds: Fusion Imaging in Catheter-based Procedures *M. Monaghan*

3:40 PM - 4:00 PM

Role of Artificial Intelligence and Telemedicine in Perioperative Imaging *P. Sengupta*

4:00 PM – 4:20 PM Point of Care 3D Printing in the Operating Room: Are We There Yet? *S. Little*

4:20 PM – 4:30 PM Question and Answer

3:00 PM - 4:30 PM

S Ultrasound in the Detection of Subclinical Disease – Presidential Ballroom B

Chairs: W. Irani, M. Mukherjee

3:00 PM – 3:15 PM

Vascular Ultrasound: Intima-media Thickness, Vascular Compliance, Vaso Vasorum Imaging *N. Hamburg*

3:15 PM – 3:30 PM Screening Echocardiogram in Athletes *S. Litwin*

3:30 PM – 3:45 PM Strain as an Early Warning Sign in Cardiac Disease *T. Marwick*

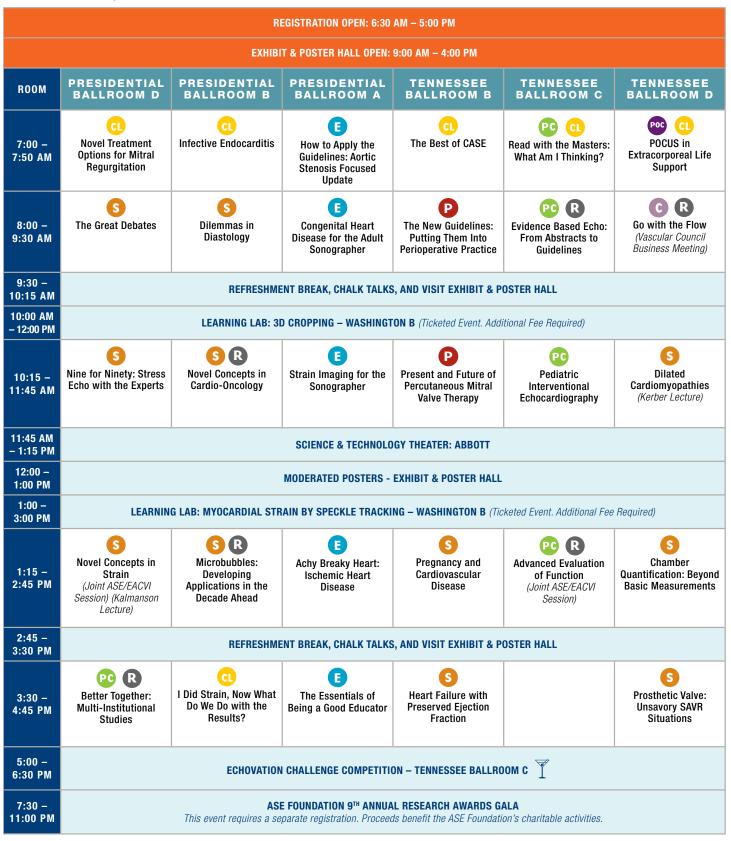
3:45 PM – 4:00 PM Echo Screening in Genetic and Heritable Diseases *J. DeCara*

4:00 PM – 4:15 PM Population Based Screening in the Developing World *S. Sengupta*

4:15 PM – 4:30 PM Question and Answer

★ SCHEDULE AT A GLANCE ★

SUNDAY, JUNE 24TH



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★ SUNDAY, JUNE 24 SCHEDULE ★

7:00 AM - 7:50 AM

How to Apply the Guidelines: Aortic Stenosis Focused Update – Presidential Ballroom A

Chairs: F. Miller, J. Warmsbecker

7:00 AM - 7:10 AM

Low Flow, Low Gradient Aortic Stenosis with Reduced Ejection Fraction *I. Crandall*

7:10 AM - 7:20 AM

Low Flow, Low Gradient Aortic Stenosis with Preserved Ejection Fraction *K. Glyde*

7:20 AM - 7:40 AM

Applying the Guidelines: Cases *B. Anderson*

7:40 AM – 7:50 AM Question and Answer

7:00 AM - 7:50 AM

 Infective Endocarditis – Presidential Ballroom B

Chairs: Y. Abe, M. Keane

7:00 AM – 7:12 AM Masqueraders of Vegetations/Abscess *J. Aragam*

7:12 AM - 7:24 AM

Complications of Infective Endocarditis: Complementary Role of TTE/TEE *P. Patil*

7:24 AM – 7:36 AM

Role of Multimodality Imaging in Diagnosis of Infective Endocarditis (MR/CT/PET) *V. Sorrell*

7:36 AM – 7:50 AM Question and Answer

7:00 AM - 7:50 AM

C. Novel Treatment Options for Mitral Regurgitation – Presidential Ballroom D Chairs: F. Asch, G. Scalia

7:00 AM – 7:12 AM Complex Clip Cases *Z. Wang*

7:12 AM - 7:24 AM

Percutaneous Mitral Valve Replacement *S. Little*

7:24 AM – 7:36 AM Novel Techniques for Functional Mitral Regurgitation *S. Zekry*

7:36 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

ec cl. POCUS in Extracorporeal Life Support – Tennessee Ballroom D

Chairs: B. Arya, R. Ratzlaff

7:00 AM - 7:15 AM

POCUS Applications in Venoarterial Extracorporeal Membrane Oxygenation *J. Renew*

7:15 AM - 7:30 AM

POCUS Applications in Venovenous Extracorporeal Membrane Oxygenation *M. Vora*

7:30 AM - 7:50 AM

Panel Discussion J. Renew, M. Vora

7:00 AM - 7:50 AM

CC CL Read with The Masters – What am I Thinking? – Tennessee Ballroom C

Chairs: N. Ayres, M. Cohen, P. Frommelt

7:00 AM – 7:15 AM

Case Presentation *J. Kreeger*

7:15 AM - 7:30 AM

Case Presentation *H. Ko*

7:30 AM - 7:45 AM

Case Presentation *B. Richards*

7:45 AM – 7:50 AM Question and Answer

★ SUNDAY, JUNE 24 SCHEDULE ★

7:00 AM - 7:50 AM

 The Best of CASE – Tennessee Ballroom B Chairs: A. Alfirevic, K. Zimmerman

7:00 AM - 7:10 AM

Post Mitral Valve Replacement: Paravalvular Leak or Unroofed Coronary Sinus *L. Duce*

7:10 AM - 7:20 AM

Percutaneous Repair of Severe Eccentric Mitral Regurgitation Due To Medial Commissural Flail: Challenges for Imaging and Intervention *E. Avenatti*

7:20 AM - 7:30 AM

Aorto-Right Ventricular Fistula Post-TAVR A. Vainrib

7:30 AM – 7:40 AM

Post-Ablation Right Atrial Dissection in Ebstein's Anomaly *F. Hassan*

7:40 AM - 7:50 AM

Question and Answer

8:00 AM - 9:30 AM

E Congenital Heart Disease for the Adult Sonographer – Presidential Ballroom A

Chairs: M. King, J. Kreeger

8:00 AM - 8:15 AM

Introduction to the Segmental Approach *S. Nay*

8:15 AM - 8:30 AM

Anatomy and Physiology of Cardiac Shunts: Atrial Septal Defect, Ventricular Septal Defect, Patent Ductus Arteriosus *H. Ko*

8:30 AM - 8:45 AM

Case Example: Evaluation of Tetralogy of Fallot *N. Soni–Patel*

8:45 AM - 9:00 AM

Case Example: Evaluation of Transposition of the Great Arteries *H. Carron*

9:00 AM - 9:15 AM

Stress Echocardiography in Congenital Heart Disease *B. Fey*

9:15 AM – 9:30 AM Question and Answer

8:00 AM - 9:30 AM

S Dilemmas in Diastology – Presidential Ballroom B

Chairs: J. Oh, M. Quinones

8:00 AM - 8:30 AM

Diastology Debate Pro Guidelines: *S. Nagueh* Con Guidelines: *A. Labovitz*

8:30 AM - 8:45 AM

Elderly with Normal Heart *A. DeMaria*

8:45 AM - 9:00 AM

What Do We Do if There is Co-existent Mitral Valve Disease *S. Mobasseri*

9:00 AM – 9:15 AM

Atrial Fibrillation *S. Shrivastava*

9:15 AM - 9:30 AM

Heart Transplant *G. Aurigemma*

8:00 AM - 9:30 AM

C R Evidence Based Echo: From Abstracts to Guidelines – Tennessee Ballroom C

Chairs: G. Marx, M. Puchalski

8:00 AM - 8:01 AM

P1-17: Coronary Anomalies in Patients with Bicuspid Aortic Valve *M. Fuchs*

8:01 AM - 8:02 AM

P1-18: Speckle Tracking Echocardiography Detects Early Myocardial Dysfunction in Young Patients with Duchenne Muscular Dystrophy *K. DeWeert*

8:02 AM - 8:03 AM

P1-19: Prognostic Significance of Tissue Doppler Imaging Derived Myocardial Performance Index in Pediatric Patients with Dilated Cardiomyopathy *L. Wright*

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8:03 AM - 8:04 AM

P1-20: Impact of Early Versus Late Onset Fetal Atrial Level Restriction on Postnatal Transplant-Free Survival in Hypoplastic Left Heart Syndrome: A Single-Center Study of Fetal Echocardiograms *S. Fuchs*

8:04 AM - 8:05 AM

P1-21: Early Fetal Echocardiography Can Identify Most Severe Cardiac Pathology *K. Haberer*

8:05 AM - 8:06 AM

P1-22: Left Atrial Strain is Impaired in Childhood Cancer Survivors Exposed to Anthracyclines *R. Loar*

8:06 AM - 8:07 AM

P1-23: Intervendor Reproducibility of Global Left Ventricular 2D Speckle Tracking Strain in the Structurally Normal Heart in Infants and Children *S. Ramlogan*

8:07 AM – 8:08 AM

P1-24: Hypoplastic Left Heart Syndrome Speck Tracking Echocardiography Atrial Conduit Strain and Strain Rate is Related to Ventricular Diastolic Changes: A Longitudinal Study *L. Lin*

8:08 AM - 8:09 AM

P1-25: Inter-Vendor Reproducibility of Two-Dimensional Layer Specific Right Ventricular Global Longitudinal Strain in Children *D. Aly*

8:09 AM - 8:10 AM

P1-26: Ventricular Function in a Large Cohort of Healthy, Term Newborns Assessed by Advanced Echocardiography: Establishment of Normal Values and Z-scores *A. Sillesen*

8:10 AM – 8:11 AM

P1-27: Right Atrioventricular Function and Exercise Performance in Youth with Repaired Tetralogy of Fallot *S. Bhatt*

8:11 AM - 8:12 AM

P1-28: Pressure Recovery Corrected Doppler Gradients Accurately Predict Subsequent Catheterization Gradients in Congenital Pulmonic Valve Stenosis: Doppler Echocardiography and Cardiac Catheterization Correlative Study *K. Mowers*

8:12 AM - 8:13 AM

P1-29: Congenital Heart Abnormalities Associated with Loss of Function Filamin A Gene Mutations *M. Chen*

8:13 AM - 8:14 AM

P1-30: Right Ventricular and Atrial Diastolic Function and their Relation to Impaired Exercise Capacity in Ebstein Anomaly *Y. Akazawa*

8:14 AM - 8:15 AM

P1-31: Systematic Cycles of Testing and Training Can Improve Reproducibility and Decrease Variability in Ejection Fraction Measurement in a High Volume Pediatric Echocardiography Laboratory *R. France*

8:15 AM - 8:30 AM

The Best Echo Articles of the Past Year *T. Slesnick*

8:30 AM - 8:45 AM

TEE Guidelines: What's Changed? What's New? *M. Puchalski*

8:45 AM - 9:00 AM

3D Echo in Congenital Heart Disease: How Best To Use These Guidelines *D. Roberson*

9:00 AM - 9:15 AM

Ultrasound Enhancing Agents (Contrast) Guidelines: Ready For Pediatrics? *S. Kutty*

9:15 AM - 9:30 AM

Discussion: What is Next? (Next Set of Guidelines/Scientific Statements That Should Be Developed)

8:00 AM - 9:30 AM

C R Go with the Flow – Tennessee Ballroom D Chairs: A. Johri, R. Quiroz

· · · · · · ,

8:00 AM - 8:15 AM

Vascular Ultrasound Council Business Meeting *R. Quiroz*

8:15 AM - 8:30 AM

Abstract Update A. Johri

8:30 AM - 8:42 AM

Severe, Asymptomatic Carotid Stenosis in High Risk Patients: Now What? *R. Eberhardt*

8:42 AM - 8:54 AM

Peripheral Vascular Disease Screening *J. Beckman*

8:54 AM - 9:06 AM

Should Echocardiography Routinely Screen for Abdominal Aortic Aneurysm? What the Interpreting MD Needs to Know *T. Naqvi*

9:06 AM - 9:30 AM

Stump The Masters: Case-based J. Beckman, N. Hamburg, E. Kim

8:00 AM - 9:30 AM

S The Great Debates – Presidential Ballroom D Chair: R. Martin

8:00 AM - 8:30 AM

The Pandian–Douglas Debate: Stress Echo is the Preferred Modality to Evaluate Chest Pain PRO: *N. Pandian* CON: *P. Douglas*

8:30 AM - 9:00 AM

Echo Screening in Athletes: Echo Should be Used in Pre– Participation Athletic Screening PRO: *M. Wood* CON: *A. Magalski*

9:00 AM - 9:30 AM

Strain Should Be a Part of the Comprehensive Echocardiogram PRO: *T. Abraham* CON: *I. Kronzon*

8:00 AM - 9:30 AM

P The New Guidelines: Putting Them Into Perioperative Practice – Tennessee Ballroom B Chairs: A. Nicoara, M. Taylor

8:00 AM – 8:15 AM Assessment of Mitral Regurgitation: How to Integrate the New Guidelines *M. Taylor*

8:15 AM – 8:30 AM Aortic Stenosis: Incorporate Gradient, Flow and Ejection Fraction *J. Hung*

8:30 AM - 8:45 AM

Severe Chronic Secondary Mitral Regurgitation: Replacement for All? *A. Shah*

8:45 AM - 9:00 AM

Diastolic Function in the Perioperative Period: New Versus Old Guidelines *M. Swaminathan*

9:00 AM - 9:30 AM

Question and Answer

10:00 AM - 12:00 PM

Learning Lab: 3D Cropping – Washington B

(Ticketed Event. Additional Fee Required) Chairs: R. Lang, W. Tsang Lab Assistants: P. Burgess, T. Gordon, C. Kramer, E. Kruse, B. Lin, B. Roberts, M. Yamat, K. Zimmerman

10:15 AM - 11:45 AM

S Dilated Cardiomyopathies – Tennessee Ballroom D

Chairs: A. Schuster, M. Vieira

10:15 AM - 10:17 AM

Introduction of Richard E. Kerber Ethics/Humanitarian Lecture *A. Pearlman*

10:17 AM - 10:45 AM

Kerber Lecture: Ethical Challenges in the Practice of Echocardiography: What is Right and How Do We Do It? *J. Kirkpatrick*

10:45 AM - 11:00 AM

Chagas Guidelines *H. Acquatella*

11:00 AM - 11:15 AM

Chagas Case Discussion *A. Rodrigues*

11:15 AM - 11:30 AM

Stress *A. Prado*

11:30 AM - 11:45 AM

Sarcoid and Other Zebras *J. Kisslo*

10:15 AM - 11:45 AM

Solution Ninety: Stress Echo with the Experts – Presidential Ballroom D

Chairs: N. Pandian, S. Parashar

10:15 AM – 10:35 AM Ischemic Heart Disease Cases *S. Mulvagh*

10:35 AM – 10:55 AM

Non-Ischemic Heart Disease Cases *K. Koulogiannis*

10:55 AM - 11:15 AM

Contrast Cases Speaker: J. Olson Panelists: W. Armstrong, N. Fine, S. Sawada

10:15 AM - 11:45 AM

S R Novel Concepts in Cardio-Oncology – Presidential Ballroom B

Chairs: J. Gardin, M. Scherrer-Crosbie

10:15 AM - 10:30 AM

Multimodality Imaging in Cardio-Oncology: MR/PET *P. Thavendiranathan*

10:30 AM - 10:45 AM

Novel Drugs/Immunotherapy/Mechanisms of Cardiac Damage *J. Moslehi*

10:45 AM - 11:00 AM

Novel Indices of Cardiac Dysfunction in Cardio-Oncology *M. Scherrer-Crosbie*

11:00 AM - 11:10 AM

OA-02: Dexrazoxane Preferentially Mitigates Adverse Changes in Cardiac Structure and Function in Female Children with Sarcoma Receiving High-Dose Anthracycline Therapy *H. Narayan*

11:10 AM - 11:25 AM

Don't Forget About the Pericardium *A. Klein*

11:25 AM - 11:40 AM

Long-term Follow Up Imaging; Imaging of the Cancer Survivor *K. Maganti*

11:40 AM - 11:45 AM

Question and Answer

10:15 AM - 11:45 AM

Pediatric Interventional Echocardiography – Tennessee Ballroom C

Chairs: D. Harrild, C. McMahon

10:15 AM - 10:30 AM

Patent Ductus Arteriosus Closure with Echocardiographic Guidance *R. Garg*

10:30 AM - 10:45 AM

Echo Support for Catheter-based Ventricular Assist Devices *V. Dimas*

10:45 AM - 11:00 AM

Echo Guidance for Periventricular Ventricular Septal Defect Closure *A. Bhat*

11:00 AM - 11:15 AM

Echo Support of Percutaneous Valve Interventions: Everywhere Except the Right Ventricle Outflow Tract *S. Pedra*

11:15 AM - 11:30 AM

What I Need From My Imager: The Importance of Communication *V. Dimas*

11:30 AM - 11:45 AM

Question and Answer

10:15 AM - 11:45 AM

Present and Future of Percutaneous Mitral Valve Therapy – Tennessee Ballroom B

Chairs: O. Khalique, G. Mackensen

10:15 AM - 10:30 AM

Present and Future of Percutaneous Mitral Therapy *J. Passeri*

10:30 AM - 10:45 AM

Image Guided Therapy with TEE for Mitral Valve-In-Valve (Degenerated Bioprosthetic) or Valve-In-Ring *C. Nyman*

10:45 AM - 11:00 AM

Percutaneous Valve in Native Valve with and Without MAC *G. Mackensen*

11:00 AM - 11:15 AM

Percutaneous Mitral Valve Repair with the MitraClip Therapy: Outside of A2/P2 *I. Kronzon*

11:15 AM - 11:30 AM

Percutaneous Repair of the Mitral Valve Other Than MitraClip *D. Shook*

11:30 AM - 11:45 AM

Question and Answer

10:15 AM - 11:45 AM

Strain Imaging for the Sonographer – Presidential Ballroom A

Chairs: D. Patel, B. Shivalkar

10:15 AM - 10:30 AM

Strain 101: The Basics *T. Van Houten*

10:30 AM - 10:45 AM

Illustrative Strain Cases: Amyloid, Hypertrophic Cardiomyopathy, Chemotherapy *J. Hill*

10:45 AM - 11:00 AM

Right Ventricular Strain *L. Sanchez*

11:00 AM – 11:15 AM How to Incorporate Strain Imaging in Your Lab *K. Bradsher*

11:15 AM – 11:30 AM How to Get Reimbursed for Strain *M. Umland*

11:30 AM – 11:45 AM Question and Answer

1:15 AM - 2:45 PM

Achy Breaky Heart: Ischemic Heart Disease – Presidential Ballroom A

Chairs: D. Orsinelli, A. Venkateshvaran

1:15 PM – 1:30 PM Complications of Myocardial Infarction *R. Harper*

1:30 PM - 1:45 PM

Interesting Cases: Mimickers of Ischemic Heart Disease (Apical Ballooning, Myocardial Bridging) *A. Venkateshvaran*

1:45 PM - 2:00 PM

Challenges of Using Contrast in Stress Echocardiography *T. Gordon*

2:00 PM - 2:15 PM

Multimodality Testing for Coronary Artery Disease: Which Test is Best? *P. Burgess*

2:15 PM - 2:30 PM

Spontaneous Coronary Artery Dissection (SCAD) *S. Mulvagh*

2:30 PM – 2:45 PM

Question and Answer

1:15 PM - 2:45 PM

R Advanced Evaluation of Function (Joint ASE/ EACVI Session) – Tennessee Ballroom C

Chairs: T. Bharucha, C. Fleishman

1:15 PM - 1:30 PM



Cardio-Oncology: Should Strain be Performed on All At-Risk Oncology Patients? *W. Border*

1:30 PM - 1:45 PM

Cardiac Resynchronization: Picking the Winners *D. Forsha*

1:45 PM - 2:00 PM

High Frame Rate Imaging *S. Nyrnes*

2:00 PM - 2:15 PM

Strain and Ventricular-Ventricular Interaction in Single Ventricle Physiology *N. Khoo*

2:15 PM - 2:30 PM

OA-04: Insights into Mechanisms of Decreasing Cardiac Function in Single Right Ventricle from Novel Three-Dimensional Principal Strain Analysis *T. Sato*

2:30 PM - 2:45 PM

Question and Answer

1:15 PM - 2:45 PM

S Chamber Quantification: Beyond Basic Measurements – Tennessee Ballroom D Chairs: R. Lang, T. Zhu

1:15 PM – 1:30 PM WASE Study *F. Asch*

1:30 PM – 1:45 PM Normal Echo Values in the Korean Population *S. Park*

1:45 PM – 2:00 PM Normal Population That Don't Fit The Guidelines: Pregnancy, Athletes, Liver Disease, Anemia *C. Taub*

2:00 PM – 2:15 PM 3D: When Do You Use 3D For Heart Chambers *M. Monaghan*

2:15 PM – 2:30 PM

Poor Reproducibility of Echo Left Ventricular Ejection Fraction *J. Gorcsan*

2:30 PM – 2:45 PM Artificial Intelligence *P. Sengupta*

1:15 PM - 2:45 PM

S R Microbubbles: Developing Applications in the Decade Ahead – Presidential Ballroom B

Chairs: F. Villanueva, K. Wei

1:15 PM - 1:30 PM

OA-03: Delayed Enhancement Imaging with Intravenous Definity Droplets to Selectively Enhance the Myocardial Infarct Zone: Correlation with Delayed Enhancement Magnetic Resonance Imaging in a Large Animal Model *T. Porter*

1:30 PM - 1:50 PM

Thrombolysis *W. Mathias*

1:50 PM - 2:10 PM

Remote Ischemia Detection *J. Lindner*

2:10 PM - 2:30 PM

The Diagnostic High MI Impulse-Targeted Therapeutic Applications and Side Effects *T. Porter*

2:30 PM – 2:45 PM Question and Answer

1:15 PM - 2:45 PM

S Novel Concepts in Strain (Joint ASE/EACVI Session) – Presidential Ballroom D

Chairs: T. Edvardsen, J. Thomas



1:15 PM – 1:45 PM Kalmanson Lecture: Technological Advances Driving a New Era for Tissue Doppler Imaging *J. D'hooge*

1:45 PM - 2:00 PM

Cardiac Work *O. Smiseth*

2:00 PM - 2:15 PM

Vendor Standardization *J. Voigt*

2:15 PM – 2:30 PM

Diastolic Strain *S. Nagueh*

2:30 PM - 2:45 PM

Stress Testing *T. Abraham*

1:15 PM - 2:45 PM

S Pregnancy and Cardiovascular Disease – Tennessee Ballroom B Chairs: L. Blauwet, N. Scott

1:15 PM – 1:30 PM

Normal Changes in Pregnancy *S. Sengupta*

1:30 PM - 1:45 PM

Complications: Peripartum Cardiomyopathy *J. Kim*

1:45 PM - 2:00 PM

Coronary Complications of Pregnancies *M. Wood*

2:00 PM - 2:15 PM

Aortopathies in Pregnancies *A. Albers*

2:15 PM - 2:30 PM

Problems With Mechanical Prosthetic Valves In Pregnancy: Is There A Role For Echo? *A. Poppas*

2:30 PM - 2:45 PM

Question and Answer

1:00 PM - 3:00 PM

Learning Lab: Myocardial Strain by Speckle Tracking – Washington B

(Ticketed Event. Additional Fee Required) Chairs: A. Dillenbeck, R. Grimm Lab Assistants: A. Davis, J. Hill, C. Kramer, S. Philip, M. Rampoldi, B. Roberts, M. Umland, A. Woolf

3:30 PM - 4:45 PM

R Better Together: Multi-Institutional Studies – Presidential Ballroom D

Chairs: A. Powell, S. Srivastava

3:30 PM – 3:45 PM Pediatric Heart Network Echo Z-Score Project: So What's Actually Normal

L. Lopez

3:45 PM - 4:00 PM

CHSS Anomalous Aortic Origin of Coronary Arteries Cohort: Standardized Acquisition *R. Lorber*

4:00 PM - 4:15 PM

ASE's ImageGuideEcho Registry – The New Frontier *M. Desai*

4:15 PM – 4:30 PM Fetal Heart Society: Lessons Learned *M. Donofrio*

4:30 PM – 4:45 PM

OA-05: Longitudinal Change in Echocardiographic Parameters of Cardiac Function in Childhood Cancer Survivors: A Multicenter Study *W. Border*

3:30 PM - 4:45 PM

S Heart Failure With Preserved Ejection Fraction – Tennessee Ballroom B

Chairs: J. Kisslo, R. Levine

3:30 PM - 3:42 PM

Physiology of Diastole: What is Heart Failure with Preserved Ejection Fraction? *E. Velazquez*

3:42 PM - 3:54 PM

Diastolic Stress Test *L. Rodriguez*

3:54 PM - 4:06 PM

Echocardiographic Assessment of Hemodynamics *H. Dokainish*

4:06 PM - 4:18 PM

Hypertensive Heart Disease *K. Poh*

4:18 PM - 4:30 PM

When the Guidelines Fail: What To Do with Discrepant Diastolic Function Data *J. Dent*

4:30 PM - 4:45 PM

Question and Answer

3:30 PM - 4:45 PM

I Did Strain, Now What Do We Do with the Results? – Presidential Ballroom B

Chairs: T. Abraham, O. Smiseth

3:30 PM - 3:42 PM

Cases: Cardio-Oncology *N. Mousavi*

3:42 PM - 3:45 PM

Cases: Cardio-Oncology *L. Sade*

3:45 PM – 3:57 PM

Cases: Right Ventricle and Left Atrial *S. Raissi*

3:57 PM - 4:00 PM

Cases: Right Ventricle and Left Atrial *E. Donal*

4:00 PM - 4:12 PM

Cases: Normal Ejection Fraction, Normal Heart, Reduced Strain *M. Kinno*

4:12 PM – 4:15 PM

Cases: Normal Ejection Fraction, Normal Heart, Reduced Strain *T. Marwick*

4:15 PM – 4:27 PM Cases: Aortic Stenosis, Mitral Regurgitation *R. Matiasz*

4:27 PM – 4:30 PM Cases: Aortic Stenosis, Mitral Regurgitation *S. Nakatani*

4:30 PM - 4:42 PM

Cases: Abnormal Strain with Family Medical History of Cardiac Disease *N. Fine*

4:42 PM - 4:45 PM

Cases: Abnormal Strain with Family Medical History of Cardiac Disease *V. Amuthan*

3:30 PM - 4:45 PM

S Prosthetic Valve: Unsavory SAVR Situations – Tennessee Ballroom D

Chairs: S. Pislaru, R. Ronderos

3:30 PM – 3:42 PM Prosthesis Patient Mismatch *G. Scalia*

3:42 PM – 3:54 PM Bioprosthetic Valve Thrombosis *S. Pislaru*

3:54 PM - 4:06 PM

Use of TTE/TEE and Other Modalities in Mechanical Heart Valve Complications *M. Mikolaj*

4:06 PM - 4:18 PM

Prosthetic Heart Valves: Guidelines for Management. When Do I Get an Echo? *J. Mills*

4:18 PM – 4:30 PM Quantifying Abnormalities in Prosthetic Abnormalities *W. Zoghbi*

4:30 PM – 4:45 PM Question and Answer

3:30 PM - 4:45 PM

The Essentials of Being a Good Educator – Presidential Ballroom A

Chairs: S. Goldstein, P. Knoll

3:30 PM – 3:45 PM

How to Develop Goals and Objectives *K. Helfinstine*

3:45 PM - 4:00 PM

How to Give Effective Feedback *P. Knoll*

4:00 PM - 4:15 PM

Innovative Delivery of Education *M. Orsinelli*

4:15 PM – 4:30 PM

Competency-Based Education *T. Ryan*

4:30 PM - 4:45 PM

Panel Discussion: Educating Across Learners (Fellows, Students, ACS, Staff) *S. Goldstein, Moderator Panelists: K. Helfinstine, P. Knoll, M. Orsinelli, T. Ryan*

5:00 PM - 6:30 PM

S R Echovation Challenge – Tennessee Ballroom C

Chair: P. Sengupta Moderator: R. Martin Expert Reaction Panel: P. Douglas, R. Popp, J. Thomas, N. Weissman, K. Zimmerman



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Booth Information Sessions

SUNDAY, JUNE 24

10:00 – 10:45 AM ImageGuide Registry Overview and Q&A

1:45-2:30 PM

ImageGuideEcho & Innovation: How the Registry Impacts the Future of the Echo Field

2:45-3:30 PM

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

MONDAY, JUNE 25

11:45 AM – 12:30 PM Value of the ImageGuide Registry: How Enrolling Will Positively Impact Your Institution

1:00–1:45 PM ImageGuideEcho International Interest Discussion

2:45–3:30 PM ImageGuide Registry Overview and Q&A – Encore Presentation EST. 2017

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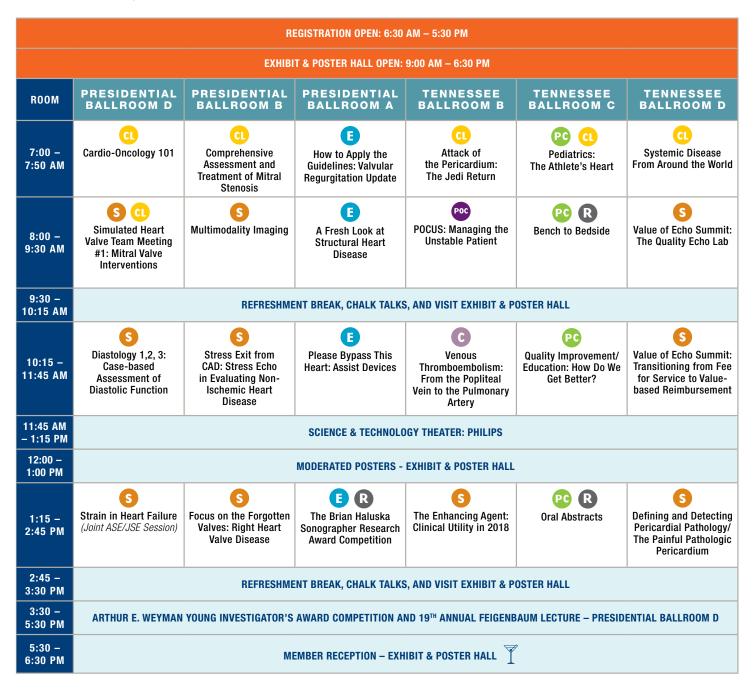
Learn more about these modules and how they can help your practice. Visit booth #326 in the Exhibit & Poster Hall for a demo and talk one-on-one with the experts who helped create them!





★ SCHEDULE AT A GLANCE ★

MONDAY, JUNE 25TH



GE Healthcare

IMPROVE YOUR ECHOCARDIOGRAPHY WORKFLOW

Learn more by visiting the GE Healthcare booth, #306, at ASE 2018 in Nashville, TN



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7:00 AM - 7:50 AM

Attack of the Pericardium: The Jedi Return – Tennessee Ballroom B

Chair: J. Dent

7:00 AM – 7:20 AM

State-of-the-Art Assessment and Treatment of Pericarditis *A. Klein*

7:20 AM – 7:40 AM

What's New in Multimodality Imaging for Pericardial Disease? *R. Janardhanan*

7:40 AM - 7:50 AM

Discussion Panelists: R. Janardhanan, A. Klein

7:00 AM - 7:50 AM

Cardio-Oncology 101 – Presidential Ballroom D *Moderators: J. Banchs, E. Tucay*

7:00 AM - 7:10 AM

Scope of the Problem *J. Plana*

7:10 AM - 7:20 AM

What Is the Cardio-Oncology Team? How It Comes Together *J. Banchs*

7:20 AM - 7:30 AM

Necessary Workflow Changes: Order Sets, Training, Performing Echo *L. Hua*

7:30 AM - 7:40 AM

Interpretation and Reporting: What is Normal Strain? *N. Akhter*

7:40 AM – 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

Comprehensive Assessment and Treatment of Mitral Stenosis – Presidential Ballroom B

Chairs: H. Nesser, K. Poh

7:00 AM – 7:15 AM Rheumatic, Calcific, and Post-Radiation Mitral Stenosis *A. Omran*

7:15 AM – 7:30 AM Quantitation of Mitral Stenosis at Rest and Stress *W. Katz*

7:30 AM - 7:40 AM

Echo Guidance in Percutaneous Interventions for Mitral Stenosis *N. Quader*

7:40 AM – 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

E How to Apply the Guidelines: Valvular Regurgitation Update – Presidential Ballroom A Chairs: J. Marshall, W. Zoghbi

7:00 AM - 7:15 AM

Use of Cardiac Magnetic Resonance in Assessment of Valvular Regurgitation *P. Thavendiranathan*

7:15 AM – 7:30 AM

How to Evaluate Secondary Mitral Regurgitation: What's New? *M. Park*

7:30 AM - 7:40 AM

Pros and Cons of 3D Echocardiography in Valvular Regurgitation *E. Kruse*

7:40 AM – 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

Pediatrics: The Athlete's Heart – Tennessee Ballroom C

Chairs: D. Coleman, J. Ganame

7:00 AM - 7:15 AM

Effect of Conditioning on Cardiac Structure and Function *B. Eidem*

7:15 AM - 7:30 AM

Differentiating Normal from Cardiomyopathy *S. Menon*

7:30 AM - 7:45 AM

Role of Echo vs. MRI *J. Soslow*

7:45 AM – 7:50 AM Question and Answer

7:00 AM - 7:50 AM

 Systemic Disease From Around the World – Tennessee Ballroom D

Chairs: H. Acquatella, J. Mohan

7:00 AM – 7:15 AM Eosinophilic Disease *K. Ogunyankin*

7:15 AM – 7:30 AM Systemic Infections: Chagas and Beyond *R. Marcus*

7:30 AM – 7:40 AM Carcinoid Heart Disease *D. Muraru*

7:40 AM – 7:50 AM Question and Answer

8:00 AM - 9:30 AM

A Fresh Look at Structural Heart Disease – Presidential Ballroom A

Chairs: K. Horton, R. Siegel

8:00 AM – 8:15 AM What Is a Structural Heart Disease Program? *R. Jain*

8:15 AM – 8:30 AM Meet Your Structural Heart Team *K. Horton*

8:30 AM – 8:45 AM Pre- and Post-Procedure Imaging of TAVR *J. Warmsbecker*

8:45 AM – 9:00 AM Pre- and Post-Procedure Imaging of TMVR *S. Pislaru*

9:00 AM – 9:15 AM Pre- and Post-Procedure Imaging of Closure Devices *K. Collins*

9:15 AM – 9:30 AM Question and Answer

8:00 AM – 9:30 AM **Bench to Bedside – Tennessee Ballroom C** *Chairs: A. Dorfman, W. Lai*

8:00 AM – 8:15 AM

Ultrasound Contrast and Therapeutic Intervention *S. Kutty*

8:15 AM – 8:30 AM 3D Modeling and Enhanced Reality for Surgical Intervention *J. Muniz*

8:30 AM – 8:45 AM Echo Flow Dynamics *W. Mawad*

8:45 AM – 9:00 AM Machine Learning and Image Interpretation *P. Sengupta*

9:00 AM - 9:15 AM

OA-06: Disordered Intraventricular Vortex Formation and Increased Energy Loss in Transplanted Hearts is Noted in the Absence of Active Rejection *J. Nyce*

9:15 AM – 9:30 AM

Question and Answer

8:00 AM - 9:30 AM

S Multimodality Imaging – Presidential Ballroom B

Chairs: S. Govind, R. Janardhanan

8:00 AM – 8:15 AM

Economics of Making A Choice *M. Desai*

8:15 AM – 8:30 AM Fusion or Confusion Imaging? *F. Faletra*

8:30 AM – 8:45 AM Multimodality Imaging of the Aorta *S. Goldstein*

8:45 AM – 9:00 AM Assessment of Masses *K. Maganti*

9:00 AM – 9:15 AM When to Consider MRI for Adult Congenital Heart Disease *R. Janardhanan*

9:15 AM – 9:30 AM Question and Answer

8:00 AM - 9:30 AM POCUS: Managing the Unstable Patient -Tennessee Ballroom B

Chair: A. Hernandez

8:00 AM – 8:15 AM Evaluating the Patient with Dyspnea *A. Levinson*

8:15 AM – 8:30 AM Point of Care Volume Assessment *S. Nikravan*

8:30 AM – 8:40 AM Question and Answer

8:40 AM – 8:55 AM Algorithms for the Hypotensive Patient *J. Diaz–Gomez*

8:55 AM – 9:05 AM Algorithms for the Hypoxemic Patient *M. Lanspa*

9:05 AM – 9:20 AM Algorithms for Cardiac Arrest *N. Bughrara*

9:20 AM – 9:30 AM Question and Answer

8:00 AM - 9:30 AM

Simulated Heart Valve Team Meeting #1: Mitral Valve Interventions – Presidential Ballroom D

Chairs: G. Mackensen, V. Nkomo Panelist: A. Shah

8:00 AM - 8:30 AM

Case 1 – Failed Surgical Mitral Valve Repair: Percutaneous MitraClip, Valve-In-Ring or REDO Surgery and Replacement? *R. Sheu*

8:30 AM - 9:00 AM

Case 2 – Severe Mitral Stenosis and MAC: Transcatheter Valve-In-Native Valve or Surgical Replacement? *E. Gill*

9:00 AM - 9:30 AM

Case 3 – Degenerated Bioprosthetic Mitral Valve and Paravalvular Leak: Percutaneous Options or REDO Surgery? *M. Saric* 8:00 AM - 9:30 AM

S Value of Echo Summit: The Quality Echo Lab – Tennessee Ballroom D

Chairs: B. Byrd, D. Wiener

8:00 AM – 8:15 AM Ensuring Quality in the Echo Lab *M. Malkowski*

8:15 AM – 8:30 AM Quality in Perioperative Echo *G. Mackensen*

8:30 AM – 8:45 AM Appropriate Use of Appropriate Use *R. Bhatia*

8:45 AM – 9:00 AM Imaging and Information Technology Management of the Echo Lab *K. Spencer*

9:00 AM – 9:15 AM A Practical Guide To Peer Review *R. Grimm*

9:15 AM – 9:30 AM Question and Answer

10:15 AM - 11:45 AM

 Diastology 1, 2, 3: Assessment of Diastolic Function – Presidential Ballroom D Chairs: A. Kinsara, J. Nixon

10:15 AM – 10:30 AM What Do the New Guidelines Say? *B. Popescu*

10:30 AM – 10:45 AM Assessing Diastolic Function in Hypertrophic Cardiomyopathy *S. Lester*

10:45 AM – 11:00 AM Pulmonary Vein Doppler: The Truth Shall be Revealed *G. Pressman*

11:00 AM – 11:15 AM Use and Misuse of Tissue Doppler Imaging *M. Quinones*

11:15 AM - 11:30 AM

Importance of Valsalva Maneuver, Left Atrial Size, and Pulmonary Hypertension *G. Nesbitt*

11:30 AM - 11:45 AM

Question and Answer

10:15 AM - 11:45 AM

Please Bypass This Heart: Assist Devices – Presidential Ballroom A

Chairs: E. McIlwain, R. Stainback

10:15 AM – 10:30 AM Overview of Ventricular Assist Device Types *A. Davis*

10:30 AM – 10:45 AM How to Image Ventricular Assist Devices (Pre, Post, and Ramp) *M. Rampoldi*

10:45 AM – 11:00 AM Ventricular Assist Device Complications *S. Roemer*

11:00 AM – 11:15 AM Use of Contrast with Assist Devices *J. Warmsbecker*

11:15 AM – 11:30 AM Extracorporeal Membrane Oxygenation *B. Roberts*

11:30 AM – 11:45 AM Question and Answer

10:15 AM - 11:45 AM

Quality Improvement/Education: How Do We Get Better? – Tennessee Ballroom C *Chairs: R. Sachdeva, T. Tacy*

10:15 AM - 10:30 AM

Appropriate Use Criteria for Pediatric Echoes: What About Inappropriate Non-ordering? *K. Stern*

10:30 AM – 10:45 AM Integrating Quality Improvement into Workflow of the Echo Lab *A. Parthiban*

10:45 AM – 11:00 AM Resource Utilization: Value vs. Volume

M. Quartermain

11:00 AM – 11:15 AM Echo Boot Camp: Is Simulator Training the New Standard Of Education? *S. Maskatia*

11:15 AM – 11:30 AM Competency Testing In Pediatric Echocardiography: Are We Making A Difference? *J. Levine*

11:30 AM - 11:45 AM

Discussion: Where Should We Be Focusing Our Efforts? Panelists: J. Levine, S. Maskatia, A. Parthiban, M. Quartermain, K. Stern

10:15 AM - 11:45 AM

S Stress Exit from CAD: Stress Echo in Evaluating Non-Ischemic Heart Disease – Presidential Ballroom B

Chairs: L. Badano, P. Pellikka

10:15 PM – 10:35 PM Stress Echocardiography in Aortic Stenosis *B. Lindman*

10:35 AM – 10:55 AM Stress Echo in Hypertrophic Obstructive Cardiomyopathy *S. Sawada*

10:55 AM - 11:15 AM

Stress Echo in Mitral Regurgitation Evaluation *L. Rodriguez*

11:15 AM – 11:35 AM Stress Echo in Pulmonary Hypertension *N. Fine*

11:35 AM – 11:45 AM Question and Answer

10:15 AM - 11:45 AM

S Value of Echo Summit: Transitioning from Fee for Service to Value-based Reimbursement – Tennessee Ballroom D Chairs: M. Main, M. Picard

10:15 AM – 10:40 AM Affordable Care Act in 2017: The Impact of What Endures *L. Aronson, D. Rosen*

10:40 AM - 11:00 AM

MACRA in the Echo Lab *C. Biga*

11:00 AM - 11:15 AM

Strategies to Reduce Low Value Care *G. Rose*

11:15 AM - 11:30 AM

The ImageGuideEcho Registry *S. Nagueh*

11:30 AM - 11:45 AM

Question and Answer

10:15 AM - 11:45 AM

C Venous Thromboembolism: From the Popliteal Vein to the Pulmonary Artery – Tennessee Ballroom B

Chairs: R. Eberhardt, P. Gutierrez-Fajardo

10:15 AM - 10:30 AM

The Forgotten Half: When Do We Need To Scan Below The Knee? *R. Eberhardt*

10:30 AM - 10:45 AM

Echo in the Patient with Acute Pulmonary Embolism: Beyond McConnell's Sign *L. Rudski*

10:45 AM - 11:00 AM

Right Ventricular Failure/Chronic Post Pulmonary Embolism Complications: Role of Echo *P. Gutierrez-Fajardo*

11:00 AM - 11:15 AM

Ultrasound After the Initial Venous Thromboembolic Event: When and for Whom? *B. Wells*

11:15 AM - 11:30 AM

Echocardiography and CT in the Patient with Post-Pulmonary Embolism Pathology: PB and J, Not Oil and Water *B. Freed*

11:30 AM - 11:45 AM

Question and Answer

1:15 PM - 2:45 PM

S Defining and Detecting Pericardial Pathology/ The Painful Pathologic Pericardium – Tennessee Ballroom D

Chairs: B. Hoit, S. Wilansky

1:15 PM – 1:30 PM Anatomy and Physiology of the Pericardium *N. Pandian*

1:30 PM - 1:45 PM

Differentiation of Restrictive from Constrictive *T. Welch*

1:45 PM - 2:00 PM

Multimodality Approach to Pericardial Disease *J. Cavalcante*

2:00 PM – 2:15 PM

Treatment Modalities and Follow Up Imaging Recommendations *L. Mendes*

2:15 PM - 2:30 PM

Pericardiocentesis Echo Guided *A. Rabischoffsky*

2:30 PM - 2:45 PM

Question and Answer

1:15 PM - 2:45 PM

S Focus on the Forgotten Valves: Right Heart Valve Disease – Presidential Ballroom B

Chairs: A. Bailey, S. Park

1:15 PM – 1:30 PM

2D and 3D Assessment of Tricuspid Valve Anatomy *D. Muraru*

1:30 PM - 1:45 PM

Spectrum of Tricuspid Valve Pathology L. Sade

1:45 PM - 2:00 PM

Difficulties with Tricuspid Regurgitation Quantification *A. Kelsey*

2:00 PM – 2:15 PM Repair, Replacement, and Interventions for the Tricuspid Valve *J. Puthumana*

2:15 PM – 2:30 PM Pulmonic Pathology Potpourri *M. King*

2:30 PM - 2:45 PM

Question and Answer

1:15 PM - 2:45 PM

Chairs: C. Fleishman, M. Puchalski

1:15 PM - 1:30 PM

OA-07: Challenges with LV Functional Parameters: The Pediatric Heart Network Normal Echocardiogram Database *P. Frommelt*

1:30 PM - 1:45 PM

OA-08: Persistence of Right Ventricular Dysfunction and Morphometry in Preterm Infants through One Year of Age: Cardiac Phenotype of Prematurity P. Levy

1:45 PM - 2:00 PM

OA-09: Evaluation of Left Ventricular Outflow Gradients During Staged Exercise Stress Echocardiography Helps Differentiate Patients with Hypertrophic Cardiomyopathy from Athletes and Normal Subjects M. Gaitonde

2:00 PM - 2:15 PM

OA-10: Serial Deformation Assessment Identifies Hypoplastic Left Heart Syndrome Infants at Risk for Cardiac Mortality and Morbidity: A Pilot Study J. Colauitt

2:15 PM - 2:30 PM

OA-11: Late Gestation Predictors of a Postnatal Biventricular Circulation after Fetal Aortic Valvuloplasty M. Beattie

2:30 PM - 2:45 PM

OA-12: Echocardiographic Surveillance in Children after Tetralogy of Fallot Repair: Adherence to Guidelines? V. Annavaiihala

1:15 PM - 2:45 PM

S Strain in Heart Failure (Joint ASE/JSE Session) -**Presidential Ballroom D**

Chairs: S. Nakatani, A. Pearlman

1:15 PM - 1:35 PM



Strain in Heart Failure: An Overview S. Nakatani

1:35 PM - 1:50 PM

Strain in Heart Failure with Reduced Ejection Fraction (HFrEF) J. Gorcsan

1:50 PM - 2:05 PM

Historical Changes of Dyssynchrony Assessment: Evolution or Elimination? T. Arita

2:05 PM - 2:20 PM

Strain in Heart Failure with Preserved Ejection Fraction (HFpEF) S. Shah

2:20 PM - 2:35 PM

The Emerging Role of 3D Speckle Tracking and Right Ventricular Strain in Pulmonary Hypertension H. Tanaka

2:35 PM - 2:45 PM

Question and Answer

1:15 PM - 2:45 PM

E R The Brian Haluska Sonographer Research Award Competition – Presidential Ballroom A

Chairs: T. Abraham, M. Bremer, L. Hua, M. Scherrer-Croshie

1:15 PM - 1:25 PM

Introduction T. Marwick

1:25 PM - 1:35 PM

SIA-1: Pulmonary Artery Acceleration Time is a Poor Estimation of Severity of Pulmonary Hypertension in Pediatric Patients C. Cassidy

1:35 PM - 1:45 PM

SIA-2: Evaluation of 3D Echocardiography for Assessment of Right Ventricular Volume & Comparison with Cardiac Magnetic **Resonance Imaging in Pediatric Patients** K. Thorson

1:45 PM - 1:55 PM

SIA-3: Feasibility of Contrast Echocardiography to Assess **Right Ventricular Size and Function** J. Pereira

1:55 PM - 2:05 PM

SIA-4: The Addition of Subdiaphragmatic Doppler to Assess Vascular Steal Phenomenon in Hemodynamically Significant PDAs J. Guthrie

2:05 PM - 2:20 PM

Getting Started with Research B. Roberts

2:20 PM - 2:35 PM

How to Critically Analyze a Research Article M. Picard

2:35 PM - 2:45 PM

Recognition of Finalists, Winner Announcement L. Hua

1:15 PM - 2:45 PM

S The Enhancing Agent: Clinical Utility in 2018 – Tennessee Ballroom B

Chairs: H. Leong-Poi, J. Lindner

1:15 PM – 1:30 PM Image Optimization *J. Olson*

1:30 PM – 1:45 PM

Stress Lab: Incremental Value of Left Ventricular Cavity Opacification *H. Becher*

1:45 PM - 2:00 PM

Stress Lab: What Does Perfusion Add? *K. Wei*

2:00 PM – 2:15 PM Contrast Use in the Critical Care Setting *M. Main*

2:15 PM - 2:30 PM

Outside the Stress Lab: Microvascular Perfusion in Tumor, Post Myocardial Infarction, Early Disease Detection *R. Senior*

2:30 PM – 2:45 PM Question and Answer

3:30 PM - 5:30 PM

S R Arthur E. Weyman Young Investigator's Award Competition and 19th Annual Feigenbaum Lecture – Presidential Ballroom D

Chairs: R. Lang, M. Scherrer-Crosbie Judges: H. Leong-Poi, S. Nakatani, B. Popescu, V. Rigolin, A. Weyman

3:30 PM – 3:35 PM Welcome & Introduction of Judges *M. Scherrer-Crosbie*

3:35 PM - 3:50 PM

YIA-1: Extracting Knowledge from Geometric Shape of Echocardiography Data: Isolating Phenotypic Traits within the Systolic-Diastolic Dysfunction Continuum *M. Tokodi*

3:50 PM - 4:05 PM

YIA-2: Mid-Wall Fractional Shortening in Aortic Stenosis Patients With or Without Reduced Ejection Fraction *S. Ito*

4:05 PM - 4:20 PM

YIA-3: An Experimental Series Investigating the Effects of Hyperinsulinemic Euglycemia on Myocardial Blood Flow Reserve in Healthy Individuals and on Perfusion Defect Size in Patients Presenting with Acute Myocardial Infarction *M. Nam*

4:20 PM - 4:35 PM

YIA-4: Endothelial Cell Repair Biophysics During Ultrasound and Microbubble Sonoporation *B. Helfield*

4:35 PM – 4:37 PM

Concluding Remarks *M. Scherrer-Crosbie*

4:37 PM - 4:40 PM

Introduction of 19th Annual Feigenbaum Lecturer *V. Rigolin*

4:40 PM – 5:00 PM

Feigenbaum Lecture: Echocardiographic Insights into the Stressed Right Ventricle: A Whole Hearted Story *M. Friedberg*

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 ASEF Research Award Lecture *H. Leona-Poi*

5:07 PM – 5:23 PM World Alliance of Societies of Echocardiography (WASE) Normal Values Study *F. Asch*

5:23 PM – 5:25 PM ASE Foundation Lecturer Concluding Remarks

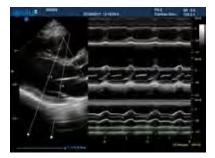
H. Leong-Poi

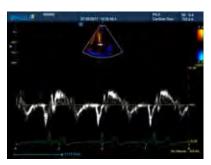
5:25 PM - 5:30 PM

Presentation of YIA Plaques and Winner Announcement *A. Weyman*



18.11









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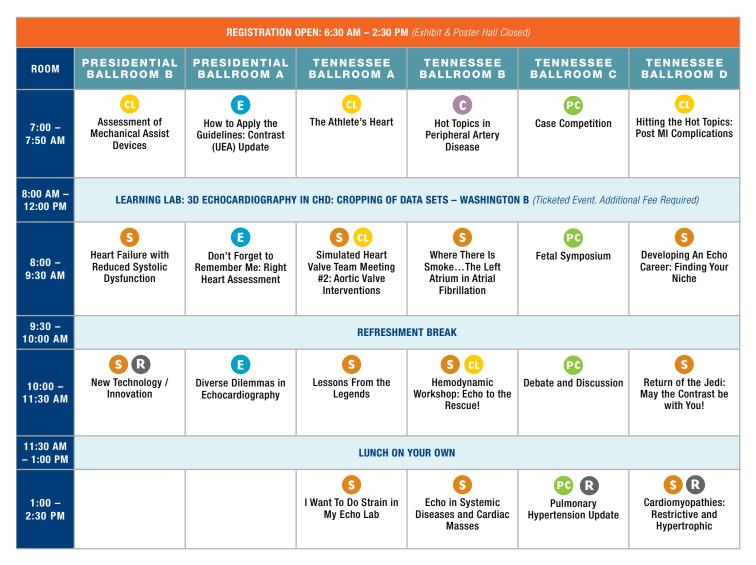
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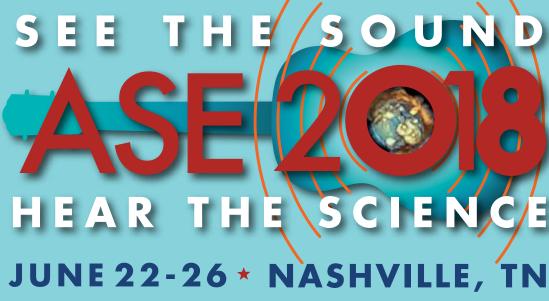
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***** SCHEDULE AT A GLANCE *****

TUESDAY, JUNE 26TH



American Society of Echocardiography 29th Annual Scientific Sessions



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7:00 AM - 7:50 AM

 Assessment of Mechanical Assist Devices – Presidential Ballroom B

Chairs: J. Kirkpatrick, R. Stainback

7:00 AM – 7:12 AM

Management of Ventricular Assist Devices Therapy *J. Estep*

7:12 AM – 7:24 AM

Echo in Guiding Percutaneous Assist Devices (Impella/ Extracorporeal Membrane Oxygenation) *P. Kumar*

7:24 AM - 7:36 AM

Complications of Mechanical Assist Devices *Y. Topilsky*

7:36 AM – 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

Case Competition – Tennessee Ballroom C Chairs: S. Drant, B. Soriano

7:00 AM - 7:12 AM

CC-01: Double Choker: Double Aortic Arch with Bilateral Aortic Coarctation Associated with Complex Atrio-Ventricular Canal Defect and Heterotaxy-Asplenia Syndrome *C. Dixon, M. Lewin (Mentor)*

7:12 AM - 7:24 AM

CC-02: latrogenic Anomalous Superior Vena Cava Draining into Left Atrium: Role of Echocardiography in Conjunction with Multimodality Imaging in Diagnosis and Management *T. Jain, G. Shirali (Mentor)*

7:24 AM - 7:36 AM

CC-03: Umbilical Venous Pulsations Associated with a Benign Arrhythmia in Utero *J. Cohen. M. Frommelt (Mentor)*

7:36 AM - 7:48 AM

CC-04: Multimodality Imaging of a Very Rare Combination of Cor Triatriatum, Cleft Mitral Valve, Sinus Venosus-Like Defect and Anomalous Coronary Sinus Drainage in a Patient with Prior Surgically Repaired Atrial Septal Defect *Q. Liu, G. Lui (Mentor)*

7:48 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

 Hitting the Hot Topics: Post MI Complications – Tennessee Ballroom D

Chairs: A. Kinsara, T. Ryan

7:00 AM - 7:12 AM

Systolic/Diastolic Function and Prognosis *S. Mayer*

7:12 AM – 7:24 AM

Microvascular Assessment *B. Davidson*

7:24 AM - 7:36 AM

Mechanical Complications *L. Marcoff*

7:36 AM – 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

C Hot Topics in Peripheral Artery Disease – Tennessee Ballroom B Chairs: R. Quiroz. B. Wells

7:00 AM - 7:15 AM

Pitfalls of Renovascular/Fibromuscular Dysplasia Imaging *B. Wells*

7:15 AM - 7:30 AM

Dual Credentialing (Echo/Vascular) for Sonographers *B. Fowler*

7:30 AM - 7:45 AM

Complications of Arterial Access (TAVI/Cath) *R. Benenstein*

7:45 AM - 7:50 AM

Question and Answer

7:00 AM - 7:50 AM

How to Apply the Guidelines: Contrast (UEA) Update – Presidential Ballroom A

Chairs: J. Olson, T. Porter

7:00 AM - 7:10 AM

Available Agents and Indications *A. Woolf*

7:10 AM - 7:20 AM

Technical Tips for Imaging Challenges *J. Schaaf*

7:20 AM – 7:30 AM Left Ventricular Cavity Opacification vs. Perfusion *J. Olson*

7:30 AM – 7:40 AM Contrast Use in Pediatric Patients *B. Byrd*

7:40 AM – 7:50 AM Question and Answer

7:00 AM - 7:50 AM

 The Athlete's Heart – Presidential Ballroom D Chairs: J. Puthumana, M. Wood

7:00 AM – 7:15 AM Physiologic Changes with Athletic Training and Differentiating It from Pathology *A. Zielinski*

7:15 AM – 7:30 AM

Athlete's Heart vs. Hypertrophic Cardiomyopathy: Twins Separated at Birth? *D. Phelan*

7:30 AM – 7:45 AM Anomalous Coronaries in Athletes: Screening, Treatment *M. Desai*

7:45 AM – 7:50 AM Question and Answer

8:00 AM - 9:30 AM

S Developing an Echo Career: Finding Your Niche – Tennessee Ballroom D

Chairs: A. Labovitz, M. Umland

8:00 AM – 8:15 AM Opportunities in Cardio-Oncology *J. Plana*

8:15 AM – 8:30 AM The Importance of a Women's Heart Disease Specialty *M. Wood*

8:30 AM - 8:45 AM

Advanced Valve Team *S. Kort*

8:45 AM - 9:00 AM

Sonographer Preparation for Advanced Practice and Lab Management *M. Bierig*

9:00 AM - 9:15 AM

Advanced Training Document and Need for Multimodality *T. Ryan*

9:15 AM - 9:30 AM

Question and Answer

8:00 AM - 9:30 AM

Don't Forget to Remember Me: Right Heart Assessment – Presidential Ballroom A

Chairs: A. Dillenbeck, N. Schiller

8:00 AM - 8:15 AM

Tricuspid and Pulmonary Valve Disease *L. Bienvenu*

8:15 AM – 8:30 AM

Echo Evaluation of Pulmonary Hypertension *R. Harper*

8:30 AM - 8:45 AM

Assessment of the Right Ventricle in Congenital Heart Disease *N. Soni-Patel*

8:45 AM – 9:00 AM

Multimodality Imaging of the Right Ventricle (3D and CMR) *M. Garcia*

9:00 AM - 9:15 AM

Contrast for the Right Ventricle *M. Park*

9:15 AM – 9:30 AM Question and Answer

8:00 AM - 9:30 AM

Fetal Symposium – Tennessee Ballroom C Chairs: L. Hornberger, W. Tworetzky

8:00 AM – 8:15 AM Improving Prenatal Detection of Congenital Heart Disease *N. Pinto*

8:15 AM - 8:30 AM

1st Trimester Screening: An Update *E. Sinkovskaya*

8:30 AM - 8:45 AM

3-Vessel View and Other Tips and Tricks for Fetal Echo *B. Richards*

8:45 AM – 9:00 AM Fetal 3D Cardiac Imaging: When Does It Help? *G. Satou*

9:00 AM – 9:15 AM Evaluation of Fetal Hemodynamics with MRI *P. Barker*

9:15 AM – 9:30 AM Question and Answer

8:00 AM - 9:30 AM

S Heart Failure with Reduced Systolic Dysfunction – Presidential Ballroom B Chairs: Z. Popovic, E. Tucay

8:00 AM – 8:15 AM Physiology of Systolic Dysfunction *M. Keane*

8:15 AM – 8:30 AM Echocardiography for Prognosis *M. Quiñones*

8:30 AM – 8:45 AM Echocardiography to Guide Therapy: Diuretics and Beyond *M. Plastino*

8:45 AM – 9:00 AM Echo Evaluation of LVADs *R. Stainback*

9:00 AM – 9:15 AM Genetic Cardiomyopathies *A. Patel*

9:15 AM – 9:30 AM Question and Answer

8:00 AM - 9:30 PM

Simulated Heart Valve Team Meeting #2: Aortic Valve Interventions – Presidential Ballroom D

Chairs: R. Hahn, A. Nicoara Panelists: E. Gill, B. Taylor, J. Thaden

8:00 AM - 8:30 AM

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

8:30 AM - 9:00 AM

Case 2 – Severe Aortic Paravalvular Insufficiency Complex Cases: TAVR, Percutaneous Occluder, or SAVR? *R. Siegel*

9:00 AM - 9:30 AM

Case 3 – Degenerated Bioprosthetic Aortic Valve: Percutaneous Options or REDO Surgery for SAVR? *J. Mangion*

8:00 AM - 9:30 AM

S Where There is Smoke...The Left Atrium in Atrial Fibrillation – Tennessee Ballroom B

Chairs: D. Orsinelli, W. Katz

8:00 AM – 8:15 AM Atrial Function in Health and Disease *B. Hoit*

8:15 AM – 8:30 AM High Risk Imaging Markers: Where There is Smoke and Sludge *W. Katz*

8:30 AM – 8:45 AM TEE-Directed Cardioversion vs. Standard Cardioversion *D. Orsinelli*

8:45 AM – 9:00 AM Left Atrial Appendage Assessment: Morphology Matters *M. Scherrer-Crosbie*

9:00 AM – 9:15 AM Valvular Consequences of Atrial Fibrillation *Y. Abe*

9:15 AM – 9:30 AM Question and Answer

8:00 AM - 12:00 PM

Learning Lab: 3D Echocardiography in CHD: Cropping of Data Sets – Washington B

(Ticketed Event. Additional Fee Required) Chair: D. Roberson Speakers: A. Dragulescu, G. Marx, A. Parthiban

10:00 AM - 11:30 AM

Debate and Discussion – Tennessee Ballroom C

Chairs: V. Allada, P. Barker

10:00 AM - 10:45 AM

Pulmonary Hypertension in the Infant with Chronic Lung Disease: Cardiac Catheterization is Required for Planning Medical Management *L. Mercer-Rosa*

10:00 AM - 10:45 PM

Pulmonary Hypertension in the Infant with Chronic Lung Disease: Echocardiography Is Sufficient to Initiate Medical Therapy *M. DiMaria*

10:45 AM - 11:30 AM

Town Hall – Freestanding Children's Hospitals and In-House High Risk Delivery Service: Have We Reached A Tipping Point in the Standard of Care?

Panelists: M. Donofrio, J. Kovalchin, E. Michelfelder, A. Moon-Grady, J. Rychik

10:00 AM - 11:30 AM

Diverse Dilemmas in Echocardiography – Presidential Ballroom A

Chairs: P. Burgess, E. Mcllwain

10:00 AM – 10:15 AM Sonographer Ergonomics: A Painful Topic *C. Kramer*

10:15 AM - 10:30 AM

Stress Testing for Valve Disease *A. Etes*

10:30 AM – 10:45 AM Role of the Sonographer in TEE *E. Mcllwain*

10:45 AM – 11:00 AM Echocardiography in Unusual Places (ICU, ED) *R. Liu*

11:00 AM – 11:15 AM Illustrative Cases of Pericardial Disease: Tamponade and Constriction *R. Palma*

11:15 AM – 11:30 AM Question and Answer

10:00 AM - 11:30 AM

S C Hemodynamic Workshop: Echo to the Rescue! – Tennessee Ballroom B

Chairs: F. Miller, S. Wilansky Cases, Cases, Cases: Echo to the Rescue! *Panelists: F. Miller, I. Vaitenas, S. Wilansky, B. Wodzinski*

10:00 AM - 11:30 AM

S Lessons From the Legends – Presidential Ballroom D

Chairs: P. Douglas, J. Seward

10:00 AM - 10:13 AM

M-Mode: Still Has Value! *H. Feigenbaum*

10:13 AM - 10:26 AM

Echo for Ischemic Heart Disease *J. Kisslo*

10:26 AM - 10:39 AM

Adoption of New Technologies *A. Weyman*

10:39 AM - 10:52 AM

Hypertrophic Cardiomyopathy *J. Tajik*

10:52 AM - 11:05 AM

3D Echocardiography *N. Nanda*

11:05 AM - 11:18 AM

Interventional Echocardiography *L. Gillam*

11:18 AM - 11:30 AM

Question and Answer

10:00 AM - 11:30 AM

S New Technology/Innovation – Presidential Ballroom B

Chairs: M. Monaghan, Z. Popovic

10:00 AM - 10:15 AM

Plain Wave and Ultrafast Echo Technologies *J. Voigt*

10:15 AM - 10:30 AM

Augmented Reality and 3D Printing *M. Vannan*

10:30 AM - 10:45 AM

Therapeutic Ultrasound *T. Porter*

10:45 AM – 11:00 AM New Approaches to Vascular Imaging *S. Feinstein*

11:00 AM – 11:15 AM

Echo and Computed Tomography Fusion *A. Vainrib*

11:15 AM – 11:30 AM Question and Answer

10:00 AM - 11:30 AM

S Return of the Jedi: May the Contrast be with You! – Tennessee Ballroom D
Chaire: C. Kaul M. Main

Chairs: S. Kaul, M. Main

10:00 AM - 10:15 AM

Left Ventricular Opacification Contrast: Diagnostic and Prognostic Value of Vortex Imaging *X. Zhou*

10:15 AM – 10:30 AM The Positive Saline Contrast Study: What Else Could It Be, and What Does It Mean? *M. Jankowski*

10:30 AM - 10:45 AM

Microvascular Abnormalities That Are Not Coronary Disease *S. Kutty*

10:45 AM – 11:00 AM Contrast Evaluation of Intracardiac Tumors *R. Senior*

11:00 AM – 11:15 AM Contrast Echo in Vascular Imaging: Focus on Vasa Vasorum and Endoleak Detection *S. Feinstein*

11:15 AM – 11:30 AM Question and Answer

1:00 PM - 2:30 PM

S R Cardiomyopathies: Restrictive and Hypertrophic – Tennessee Ballroom D Chairs: M. Galderisi, H. Rakowski

1:00 PM - 1:15 PM

Amyloidosis *D. Phelan*

1:15 PM - 1:30 PM

Hemochromatosis *R. Mankad*

1:30 PM - 1:45 PM

Hypertrophic Cardiomyopathy Features *H. Rakowski*

1:45 PM - 2:00 PM

OA-13: Discordance in Left Ventricular Cavity Dilation by Vasodilation-Positron Emission Tomography and Stress-Echocardiography in Hypertrophic Cardiomyopathy Patients *D. Lu*

2:00 PM – 2:15 PM

Hypertrophic Cardiomyopathy Mimickers *A. Woo*

2:15 PM – 2:30 PM Question and Answer

1:00 PM - 2:30 PM

S Echo in Systemic Diseases and Cardiac Masses – Tennessee Ballroom B

Chairs: R. Hughes-Doichev, S. Kort

1:00 PM – 1:15 PM Multimodality Imaging of Amyloid *A. Patel*

1:15 PM – 1:30 PM Echocardiographic Evaluation of Cardiac Masses *P. Nihoyannopoulos*

1:30 PM – 1:45 PM

HIV Associated Heart Disease *S. Goldstein*

1:45 PM – 2:00 PM Echocardiography in Endocrinopathies V. Agrawal

2:00 PM – 2:15 PM Multimodality Imaging of Sarcoid *L. Blauwet*

2:15 PM – 2:30 PM Question and Answer

1:00 PM - 2:30 PM

I Want to do Strain in My Echo Lab – Tennessee Ballroom A

Chairs: T. Kolias, M. Umland

1:00 PM – 1:20 PM Introduction To Strain: What Is It? *T. LaBounty*

1:20 PM – 1:40 PM How To Acquire And Assure Quality *M. Umland*

1:40 PM – 2:00 PM Cases: Where Strain Made a Difference *V. Koutrolou-Sotiropoulou*

2:00 PM – 2:20 PM Cases: What I Do Not Want To Do. Bad, Bad Strain! *G. Aurigemma*

2:20 PM – 2:30 PM Question and Answer

1:00 PM - 2:30 PM

Pulmonary Hypertension Update – Tennessee Ballroom C

Chairs: G. Ensing, M. Friedberg

1:00 PM – 1:15 PM Pulmonary Hypertension Pathophysiology *D. lvy*

1:15 PM – 1:30 PM Advanced Echocardiographic Evaluation of Pulmonary Hypertension *P. Jone*

1:30 PM – 1:45 PM Assessment of Pulmonary Hypertension and the Right Ventricle in Eisenmenger's Syndrome *W. Border*

1:45 PM – 2:00 PM What Are The Results of Therapeutic Intervention? *L. Mercer-Rosa*

2:00 PM – 2:15 PM OA-14: The Relationship Between Left Ventricular Geometry and Invasive Hemodynamics in Pediatric Pulmonary Hypertension *D. Burkett*

2:15 PM – 2:30 PM Discussion: How Does Pulmonary Hypertension Differ Between the Infant with Chronic Lung Disease and Children/Adults with CHD?

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Melissa Tracy, MD, FASE Associate Professor of Medicine **RUSH University** Medical Center Chicago, IL



Cindy Laliberte,

Supervisor, Echo Lab Akron Children's Hospital

RDCS, FASE

Akron, OH

Joshua D. Quick, MD, FASE Cardiothoracic Anesthesiologist VA Connecticut Healthcare System West Haven, CT



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FASE LOUNGE

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Sunday, June 249:00 AM – 4:00 PM
Monday, June 259:00 AM – 4:00 PM
Tuesday, June 26 9:00 AM – 2:00 PM

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FRIDAY, JUNE 22

SCIENCE & TECHNOLOGY THEATER 7:00-8:30 PM

EXHIBIT & POSTER HALL

Passion and Precision in Echocardiography Presented by Siemens Healthineers

Join us for a Happy Hour and Hall of Fame cases about how to use echocardiography to make diagnoses and therapies more precise.

Refreshments are provided by ASE and are included in all Scientific Sessions registration fees, but space and food are first come, first served. These sessions are not part of the official ASE 29th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

SATURDAY, JUNE 23

ASEF CARDIOVASCULAR CHALLENGE

ASEF BOOTH, PRESIDENTIAL LOBBY



Compete with your feet and get moving with the ASE Foundation Cardiovascular Challenge. Sign up to participate at the ASEF Booth in the Presidential Lobby, then record your steps

taken every day and log them at the booth. The person with the most overall steps will win a \$200 Amazon gift card, second place will receive a \$100 Amazon gift card, and the person with the third highest step count will receive a limited edition ASEF hat. The winners will be announced Monday evening, June 25th during the Member Reception in the Exhibit & Poster Hall.

Special thanks to our 2018 Cardiovascular Challenge sponsors, CAE Healthcare, Canon Medical Systems USA, Inc., Esaote North America, Inc., Lantheus Medical Imaging, Inc., and Studycast, by Core Sound Imaging, Inc.

IMAGES FROM THE HEART GALLERY

A special curated showcase of photographs will be on display from Saturday - Monday. View the world through the eyes and photos of ASE members taken while they travelled the world to participate in various medically-related outreach events. Many photos will be available to take home with a donation to the ASE Foundation. Stop by the ASE Foundation booth to experience these awe-inspiring photos!

ASE AWARDS PRESENTATION AND 29th ANNUAL EDLER LECTURE

8:00 – 9:30 AM PRESIDENTIAL BALLROOM D



ASE's Immediate Past President, **Allan L. Klein, MD, FASE, Cleveland Clinic, Cleveland, Ohio**, will present "Dermatology of the Heart: Tales from the Pericardial Sac" as the 29th Annual Edler Lecture on Saturday morning, June 23, during the Awards Presentations and Edler Lecture Plenary Session. Dr. Klein is Professor of Medicine at Lerner College

of Medicine of Case Western Reserve University. He was the Director of Cardiovascular Imaging Research for over 20 years and is currently the Director of the Center for the Diagnosis and Treatment of Pericardial Diseases. Dr. Klein is also a staff cardiologist in the Section of Cardiovascular Imaging, the Robert and Suzanne Tomsich Department of Cardiovascular Medicine, at the Sydell and Arnold Miller Family Heart & Vascular Institute at Cleveland Clinic. Created in 1990, the annual Edler Lecture honors the founder of echocardiography, Dr. Inge Edler.

LIFETIME ACHIEVEMENT AWARD

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



Navin C. Nanda, MD, FASE, The Kirklin Clinic, University of Alabama Health Services Foundation and University of Alabama at Birmingham, Birmingham, Alabama has been named the 2018 Physician Lifetime Achievement Award recipient. Dr. Nanda has been a pioneer in echo education since the beginning of his career and has

published 13 books, and over 500 original manuscripts. Dr. Nanda formed the International Society of Cardiovascular Ultrasound in 1991 to promote an exchange of ideas and information among members of various countries. In 1994, he inaugurated the first World Congress of Echocardiography and

Vascular Ultrasound in Nice, France, where faculty from all over the world gathered to educate and learn about various ultrasound topics. This Congress was subsequently held in 1996, 1998, 2000-2017 in a different country each year and has been highly successful. Over 23,000 combined participants attended these Congresses representing over 70 countries throughout the world.

MERITORIOUS SERVICE AWARD



ASE is pleased to recognize **Sherif F. Nagueh, MD, FASE, Methodist DeBakey Heart and Vascular Center, Houston, Texas** as the 2018 recipient of the Meritorious Service Award that recognizes individual members for their substantial and generous efforts to the Society's betterment. Dr. Nagueh is a dedicated ASE volunteer having served as

chair and member of many ASE committees, on the ASE Board of Directors 2007-2010, and then as Treasurer, and chair of the Finance Committee, 2012-2015. Currently, he serves as chair of the Registry Committee playing a critical role in designing ImageGuideEcho[™] which provides a framework to support echo labs committed to improving quality and outcomes in their laboratories. Dr. Nagueh is also a talented researcher who performed groundbreaking studies demonstrating the utility of Doppler to measure diastolic function and to estimate left ventricular filling pressure. He subsequently chaired both of ASE's diastolic function guidelines (2009 and 2016) that brought diastolic function to the forefront of echocardiography. As a result, diastolic function reporting is now necessary for an echo exam/report to be considered complete. Dr. Nagueh's dedication to research has shown through in his commitment to serve as chair, or on the writing group, of many other ASE guidelines.

RICHARD POPP EXCELLENCE IN TEACHING AWARD



Recognized as a role model, mentor, and teacher who finds reward in seeing the success of his trainees and mentees more than his own personal achievements, **Theodore P. Abraham**, **MD, FASE, University of California San Francisco Medical Center, San Francisco, California**, has been named the 18th annual recipient of the Richard

Popp Excellence in Teaching Award. Dr. Abraham has a true talent for making the difficult seem easy and understandable. He has impacted many young physicians as well as cardiac sonographers who have trained under him. 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.

EXCELLENCE IN TEACHING IN PEDIATRICS AWARD



Meryl Cohen, MD, FASE, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania, is being honored as the 2018 Excellence in Teaching in Pediatrics Awardee. Dr. Cohen is a gifted physician with expertise in fetal echocardiography and TEE, and is a fierce advocate for trainee and faculty education. She instituted several

teaching sessions that helped mold education at CHOP, but also spends a significant amount of time traveling to share her knowledge worldwide. Dr. Cohen does not just lead by example, she encourages others to follow in her footsteps. Established in 2005, this biennial award recognizes ASE members for their exceptional commitment and skill mentoring students, serving as a role model for the profession, and teaching pediatric echocardiography.

CARDIOVASCULAR SONOGRAPHER DISTINGUISHED TEACHER AWARD



Priscilla Peters, BA, RDCS, FASE, Cooper University Hospital, Camden, New Jersey, has been named the 14th recipient of the Cardiovascular Sonographer Distinguished Teacher Award.

Priscilla is an extraordinary sonographer who has made a significant impact on

the careers of many sonographers and cardiology fellowsin-training across the United States and beyond. She has not only served as a teacher but also has been a great role model. Her dedication to education is remarkable. This award is given every other year and recognizes an active sonographer instructor who is attentive to cardiovascular sonography professional values and who exhibits values of leadership and dedication to the field of echocardiography for past, current, and future cardiovascular sonographers.

OUTSTANDING ACHIEVEMENT IN PERIOPERATIVE ECHOCARDIOGRAPHY AWARD



Jonathan B. Mark, MD, Veterans Affairs Medical Center and Duke University Medical Center, Durham, North Carolina, has been named the 6th recipient of the Outstanding Achievement in Perioperative Echocardiography Award. Dr. Mark is known as an expert in perioperative echocardiography from the

clinical standpoint as well as a lecturer and educator. He served on the writing group for the ASE/SCA Guidelines for Performing a Comprehensive Intraoperative Multiplane Transesophageal Examination. This document continues to serve as a reference for those learning to perform perioperative TEE. The Council recognizes an individual who has made significant clinical, research, or educational contributions to the development of the field of perioperative echocardiography with the presentation of this award.

MENTORSHIP AWARD



ASE recognizes Linda D. Gillam, MD, FASE, Atlantic Health System, Morristown, New Jersey, and Thomas Jefferson University in Philadelphia, Pennsylvania as the 2018 Mentorship Award recipient. Dr. Gillam is dedicated to identifying, supporting, and promoting young members of ASE who show potential for leadership. In particular, she

is a huge advocate for the promotion of women in leadership positions and assuring gender diversity in all of ASE's programs and initiatives. This award recognizes a senior physician or sonographer who has demonstrated exceptional mentorship within ASE. Unlike other awards, the Mentorship Award specifically acknowledges individuals who helped younger members advance within this Society and thus cultivated ASE's future leaders.

HONORARY FASE

Each year, ASE selects one or more colleagues living outside the United States to receive the special designation of Honorary Fellow of the American Society of Echocardiography. In 2018, we are pleased to recognize the following as Honorary FASE:

Ravi R. Kasliwal, MBBS, MD, DM, FASE

Medanta - The Medicity Hospital Gurgaon, Haryana, India

Arnaldo Rabischoffsky, MD, FASE

Pro Cardiaco Hospital Rio de Janeiro, Brazil

Tiangang Zhu, MD, FASE

People's Hospital of Peking University Beijing, China

These new FASE designees join an impressive list of 23 other echocardiography luminaries who have been presented this special honor. Some were recognized for their innovations, others for their leadership. The entire echo community has benefited from their science and their friendship. Because these recipients include FASE behind their names, they serve as ambassadors for ASE throughout the world. All three will be honored during the ASE Awards Presentation on Saturday morning.

CHALK TALKS

9:30 - 10:00 AM AND 2:30 - 3:00 PM PRESIDENTIAL CHAMBER B

New this year, two additional opportunities to learn from the luminaries. During the morning break, Antonio Hernandez, MD and Robert Ratzlaff, DO, will discuss **POCUS: Ask** the Non-Cardiologist. The afternoon break will feature Richard Wright, MD, FACC, discussing Value, Quality, and the Importance of Advocacy: The Holy Trinity of Echocardiography.

SCIENCE & TECHNOLOGY THEATER

11:30 AM - 1:00 PM

EXHIBIT & POSTER HALL

Who Benefits From the Use 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.

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 29th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

TWEET UP 4:30 - 6:30 PM EXHIBIT & POSTER HALL

Are you active on Twitter and want to meet others who are actively using Twitter to share information? Join us for the first ever Tweet Up during the President's Reception. Don't miss this opportunity to connect, in person, with the people you have met virtually through Twitter. Follow @ASE360 for updates on this event.

PRESIDENT'S RECEPTION 4:30 - 6:30 PM EXHIBIT & POSTER HALL

All attendees are invited to celebrate ASE 2018 at the President's Reception, hosted by ASE President, Vera Rigolin, 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. Over 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.

SCIENCE & TECHNOLOGY THEATER

6:30 PM - 8:00 PM

EXHIBIT & POSTER HALL

Challenging the Status Quo: 3D Imaging and Diagnosis

Presented by Hitachi Healthcare

Experience Hitachi Healthcare's Imaging Insiders 2018 on June 23rd at 6:30, as we present Challenging the Status Quo: 3D Imaging and Diagnosis with topics from Dr. Partho Sengupta and Dr. Lissa Sugeng that will make you think differently about how you use 3D imaging and analysis.

Refreshments are provided by Hitachi Healthcare and are included in all Scientific Sessions registration fees, but space and food are first come, first served. These sessions are not part of the official ASE 29th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

SUNDAY, JUNE 24

POSTER SESSION 1 (P1)

9:00 AM - 4:00 PM EXHIBIT & POSTER HALL MEET THE INVESTIGATORS: 11:45 AM - 1:15 PM

MODERATED POSTER SESSION 1 12:00 PM - 1:00 PM

Diseases of the Aorta / Vascular Disease	. Poster P1-92
Valvular Heart Disease	Poster P1-105
3D Echocardiography	Poster P1-149
Doppler / Hemodynamics	Poster P1-177

TOPICS

Cardio-Oncology Posters P1-01 through P1-12
Adult Congenital Heart Disease Posters P1-13 through P1-17
Pediatric Heart Disease Posters P1-18 through P1-81
Clinical Cases: Pediatric Patients Posters P1-82 through P1-91
Diseases of the Aorta / Vascular Disease Posters P1-92 through P1-104
Valvular Heart Disease Posters P1-105 through P1-148
3D Echocardiography Posters P1-149 through P1-176
Doppler / Hemodynamics Posters P1-177 through P1-193
Echocardiography in Systemic Disease

(DM, HTN, Obesity) / Pericardial Disease / Primary Myocardial Disease Posters P1-194 through P1-223

CHALK TALKS

9:30 - 10:15 AM AND 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, Erwan Donal, MD, PhD, will be available to answer all of your questions about **Strain Imaging**. The afternoon break will be dedicated to the **Valve Guidelines** with Judy Hung, MD, FASE.

IMAGEGUIDE REGISTRY INFORMATION SESSIONS

10:00-10:45 AM

ImageGuide Registry Overview and Q&A Sherif Nagueh, MD, FASE and Peter Tilkemeier, MD, FASNC

1:45-2:30 PM

ImageGuideEcho & Innovation: How the Registry Impacts the Future of the Echo Field

Marielle Scherrer-Crosbie, MD, PhD, FASE and David Wiener, MD, FASE

2:45-3:30 PM

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

James Kirkpatrick, MD, FASE

RICHARD E. KERBER ETHICS/ HUMANITARIAN LECTURE

10:15 - 11:45 AM TENNESSEE BALLROOM D



The ASE Foundation is proud to recognize James Kirkpatrick, MD, FASE from the University of Washington Medical Center in Seattle, Washington as the inaugural Richard E. Kerber Ethics/ Humanitarian Lecturer. This annual lectureship has been established in memory of ASE Past President Richard E. Kerber, MD, FASE, who passed away in

November of 2016. Dr. Kerber championed issues of morality and ethics and how medicine fits into the broader world. To honor his legacy, this annual lectureship will feature an ethical dilemma or humanitarian patient care activity. Dr. Kirkpatrick will present his lecture entitled "Ethical Challenges in the Practice of Echocardiography: What is Right and How Do We Do It?" during the Dilated Cardiomyopathies session.

SCIENCE & TECHNOLOGY THEATER

11:45 AM - 1:15 PM EXHIBIT & POSTER HALL

The MR Decision Pathway: The Field Guide to Identification, Quantification and Treatment

Presented by Abbott

Expert Consensus Decision Pathway on the Management of Mitral Regurgitation and the role of imagers in the delivery of care. Using a case-based approach, we will review MR etiology and quantification. Patient selection for transcatheter mitral valve repair will also be discussed.

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 29th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

2018 KALMANSON LECTURE 1:15 – 2:45 PM PRESIDENTIAL BALLROOM D



The ASE Foundation is honored to recognize **Jan D'hooge, MSc, PhD, Katholieke Universiteit Leuven, Leuven, Belgium**, as the 2018 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. D'hooge will present his lecture entitled "Technological Advances Driving a New Era for Tissue Doppler Imaging" during the Novel Concepts in Strain Joint ASE/EACVI symposium.

FELLOW AND EARLY CAREER MEMBER NETWORKING RECEPTION

2:45 – 3:30 PM MEZZANINE LEVEL LINCOLN A

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 TENNESSEE BALLROOM C

Now in its 3rd year, ASE is committed to its mission of accelerating innovation and shaping the future of cardiovascular ultrasound through the Echovation Challenge, "Echo at the Speed of Life." Following on the success of the new format in 2017, ASE Past President, **Randolph P. Martin, MD, FASE**, will serve as the emcee again along with an esteemed Expert Reaction Panel: **Pamela S. Douglas, MD, MACC, FASE; Richard L. Popp, MD, MACC, FASE; James D. Thomas, MD, FACC, FASE, FESC; Neil J. Weissman, MD, FACC, FASE; and Karen G. Zimmerman, BS, ACS, RDCS (AE, PE), RVT, FASE. The exciting Shark Tank-style session features three finalist teams showcasing their novel approaches, technologies, and processes in echocardiography for start-up funding. Three finalists will present their solutions. Refreshments will be served, so don't miss out on this exciting and entertaining special session!**

ASE FOUNDATION 9TH ANNUAL RESEARCH AWARDS GALA GAYLORD OPRYLAND® RESORT & CONVENTION CENTER PRESIDENTIAL BALLROOM D

The premier annual fundraiser for the ASE Education and Research Foundation is the 9th Annual Research Awards Gala. The ASE Foundation invites you to 'waltz back in time' and don your 1950s best as we honor this year's ASE award 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 information, visit the ASE Foundation booth, located in the Presidential Lobby on Level 2.

MONDAY, JUNE 25

VALUE OF ECHO SUMMIT 8:00 - 11:45 AM TENNESSEE BALLROOM D

This special session will explore the cataclysmic changes in the U.S. healthcare system and provide expert opinions on how best to navigate and thrive in this new environment. There will be two sessions, The Quality Echo Lab and Transitioning from Fee for Service to Value-based Reimbursement, both sessions will focus on helping the entire cardiovascular ultrasound community understand how their practice is impacted.

POSTER SESSION 2 (P2)

9:00 AM - 6:30 PM EXHIBIT & POSTER HALL

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

MODERATED POSTER SESSION 2 12:00 PM - 1:00 PM

2017 EACVI YIA Winner	Poster EUR-1
2018 JSE YIA Winner	Poster JSE-1
New Technology	Posters P2-36 and P2-37

TOPICS

Value of Echocardiography (Quality and Cost) / Comparative Effectiveness..... Posters P2-01 through P2-25

Critical Care Ultrasound / Point of Care Ultrasound Posters P2-26 through P2-35
New Technology Posters P2-36 through P2-69
Contrast Echocardiography Posters P2-70 through P2-77
Intraprocedural Echocardiography (Operating Room and Interventional Lab) / TEE Posters P2-78 through P2-87
Echocardiography in SOE / Arrhythmias / Atrial Function Posters P2-88 through P2-107
Ischemic Heart Disease Posters P2-108 through P2-117

Ventricular Function /

Myocardial Mechanics Posters P2-118 through P2-157

Clinical Cases: Adult Patients Poster P2-158 through P2-223

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, Jae Oh, MD, FASE, will discuss **Diastology**. The afternoon break will feature Tara Bharucha, MB BCHIR, Daniel Forsha, MD, FASE, Jimmy Lu, MD, FASE, and Theresa Tacy, MD, discussing **Choosing a Career in Pediatric Echo**.

IMAGEGUIDE REGISTRY INFORMATION SESSIONS

11:45 AM - 12:30 PM

Value of the ImageGuide Registry: How Enrolling Will Positively Impact your Institution Thomas Porter, MD, FASE

1:00-1:45 PM

ImageGuideEcho International Interest Discussion Allan Klein, MD, FASE

2:45-3:30 PM

ImageGuide Registry Overview and Q&A – Encore Presentation

Milind Desai, MD, FASE and Sherif Nagueh, MD, FASE

SCIENCE & TECHNOLOGY THEATER

11:45 AM - 1:15 PM EXHIBIT & POSTER HALL

Intelligence in Echocardiography: New Innovations Built for Better Care

Presented by Philips

Leading cardiovascular imagers, researchers, and professors will present on how cardiac ultrasound can lead to better patient care, through use of new tools allowing for confident diagnostic decisions, improved workflow, and more seamless communication and collaboration across the ever-more

complex cardiology division.

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 29th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

BRIAN HALUSKA Sonographer Research Award Competition 1:15 - 2:45PM Presidential Ballroom A

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

Courtney J. Cassidy, RDCS, Children's Hospital Colorado, Aurora, CO – Pulmonary Artery Acceleration Time is a Poor Estimation of Severity of Pulmonary Hypertension in Pediatric Patients

Kelly Thorson, ACS, RDCS, RCCS, FASE, Valley Children's Hospital, Madera, CA – Evaluation of 3D Echocardiography for Assessment of Right Ventricular Volume & Comparison with Cardiac Magnetic Resonance Imaging in Pediatric Patients

Jason B. Pereira, RCS, Yale-New Haven Hospital, New Haven, CT – Feasibility of Contrast Echocardiography to Assess Right Ventricular Size and Function

Joy D. Guthrie, PhD, ACS, RDMS, RDCS, RVT, FASE,

Community Regional Medical Center, Fresno, CA – The Addition of Subdiaphragmatic Doppler to Assess Vascular Steal Phenomenon in Hemodynamically Significant PDAs

ARTHUR E. WEYMAN YOUNG INVESTIGATOR'S AWARD COMPETITION AND 19TH ANNUAL FEIGENBAUM LECTURE 3:30 - 5:30 PM PRESIDENTIAL BALLROOM D

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.

Marton Tokodi, MD, WVU Heart & Vascular Institute, Morgantown, WV – Extracting Knowledge from Geometric Shape of Echocardiography Data: Isolating Phenotypic Traits within the Systolic-Diastolic Dysfunction Continuum

Saki Ito, MD, Mayo Clinic, Rochester, MN – Mid-Wall Fractional Shortening in Aortic Stenosis Patients With or Without Reduced Ejection Fraction

Michael Chi Yuan Nam, MBBCh, BSc, Sunshine Coast University Hospital, Birtinya, Australia – An Experimental Series Investigating the Effects of Hyperinsulinemic Euglycemia on Myocardial Blood Flow Reserve in Healthy Individuals and on Perfusion Defect Size in Patients Presenting with Acute Myocardial Infarction

Brandon Helfield, PhD, Sunnybrook Research Institute, Toronto, ON, Canada – Endothelial Cell Repair Biophysics During Ultrasound and Microbubble Sonoporation

FEIGENBAUM LECTURER



Mark K. Friedberg, MD, FASE, Staff Cardiologist, Associate Scientist, Research Institute, The Hospital for Sick Children, University of Toronto, Toronto, Ontario, Canada, and Associate Professor in Pediatrics, University of Toronto, Toronto, Ontario, Canada. Dr. Friedberg is a

premier leader in the scientific investigation of congenital heart disease, a gifted and entertaining presenter, and a dedicated volunteer to ASE and its mission. He has over 120 publications mostly as original research, where he was the first or senior author. Through his innovative research, he was able to use tissue Doppler and strain imaging to advance the understanding of myocardial function in children with congenital heart disease. He showed the prognostic value of echocardiography in patients with tetralogy of Fallot and children with pulmonary arterial hypertension. Dr. Friedberg will present "Echocardiographic Insights into the Stressed Right Ventricle: A Whole Hearted Story" as the 19th Annual Feigenbaum Lecturer. This lectureship, named in honor of the founder and first president of ASE, Harvey Feigenbaum, MD, FASE, is awarded to a young investigator in recognition of their significant contributions to research in the field of echocardiography and their potential to continue at a high level of achievement.

WASE NORMAL VALUES STUDY

To round out this session, principal investigator, Federico M. Asch, MD, FASE, will present the preliminary findings from the World Alliance of Societies of Echocardiography (WASE) Normal Values Study which entails the acquisition of complete 2D and 3D echocardiograms in 100 healthy individuals of both genders and across a wide range of ages in each of 17 countries. Roberto M. Lang, MD, FASE, who is also a principal investigator recently said, "This study is bringing together the scientific cardiovascular ultrasound community from around the world to better understand if the current recommended normal values for heart dimensions and function in subjects from different races and countries are similar or different." The ASE Foundation and its donors are funding this study with generous in-kind support from sponsors TOMTEC Imaging Systems, Medidata, Medstar Health Research Institute, and University of Chicago.

MEMBER CLASS REUNION RECEPTION 5:30 - 6:30 PM

EXHIBIT & POSTER HALL

All attendees are invited to this complimentary reception. Enjoy beverages and hors d'oeuvres while connecting with colleagues and friends. **New this year**, celebrate the number of years you have been an ASE member. The reception will feature five bars with a decade theme at each bar from the 1970s through the 2010s. Head to your "era" and join your colleagues to celebrate.



Her friends, colleagues, fellows, and the many sonographers whom she has trained are proud to recognize **Priscilla J. Peters, BA, RDCS, FASE**

> *as the recipient of* ASE's 2018 Cardiovascular Sonographer Distinguished Teacher Award

> > (D)

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The National Board of Echocardiography lovingly remembers Past President Edward A. Geiser, MD, FASE for his outstanding leadership and numerous contributions to the field of echocardiography.



NATIONAL BOARD OF ECHOCARDIOGRAPHY, INC.

★ ASE FOUNDATION AWARDS AND GRANTS ★

ASE Foundation

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.

2018 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. New this year is the **Alan S. Pearlman Research Award** established to honor Dr. Pearlman's ten years of service as JASE Editor-In-Chief. Supported by a grant to the ASE Foundation by Elsevier, this annual award of \$1,000 is given to the highest scoring investigator out of the 25.

- Dai-Yin Lu, MD, Taipei Veterans General Hospital, Taipei, Taiwan - Alan S. Pearlman Research Awardee
- AbdulRahman Abutaleb, MD, Northwestern University Feinberg School of Medicine, Chicago, IL
- Lindsey Aurora, MD, Henry Ford Hospital, Detroit, MI
- Meaghan J. Beattie, MD, Boston Children's Hospital, Boston, MA
- ★ Ajay Bhandari, MD, University of South Florida, Tampa, FL
- Dale Burkett, MD, Children's Hospital Colorado, Aurora, CO
- John L. Colquitt, MD, Baylor College of Medicine/Texas Children's Hospital, Houston, TX
- ★ Katherine DeWeert, MD, Lurie Children's Hospital of Chicago, Chicago, IL
- ★ Sarah R. Fuchs, MD, Vanderbilt University Medical Center, Nashville, TN
- Mansi Gaitonde, MD, Emory University, Sibley Heart Center, Atlanta, GA
- ★ Ganesh Kumar Gnanappa, MBBCh, Stollery Children Hospital, University of Alberta, Edmonton, AB, Canada
- ★ Atefeh Haghi, MD, University of Notre Dame, Perth, Australia

- Barinder Hansra, MD, University of Massachusetts Medical Center, Worcester, MA
- ★ Daniel R. Harland, MD, Aurora Cardiovascular Services, Aurora Sinai/Aurora St. Luke's Medical Centers, Milwaukee, WI
- ★ Atsushi Hayashi, MD, Cedars-Sinai Heart Institute, Los Angeles, CA
- ★ Kalie Kebed, MD, University of Chicago, Chicago, IL
- ★ Dan L. Li, MD, Jacobi Medical Center, Albert Einstein College of Medicine, Bronx, NY
- Ellen Liu, MD, The Ohio State University, Columbus, OH
- ★ Ralph Matar, MD, Cook County Health and Hospitals System, Chicago, IL
- Hari K. Narayan, MD, The University of California San Diego, San Diego, CA
- Jonathan D. Nyce, MD, Kravis Children's Hospital at Mount Sinai, New York City, NY
- Scott L. Purga, MD, Albany Medical Center, Albany, NY
- Marija Vukicevic, PhD, Houston Methodist Hospital, Houston, TX
- ★ Haiyan Wang, MD, Mayo Clinic, Rochester, MN
- ★ Yonghuai Wang, MD, First Hospital of China Medical University, Shenyang, China

2018 TOMTEC INNOVATOR RESEARCH TRAVEL GRANT

Tomoyuki Sato, MD, from Children's Hospital of Philadelphia, Philadelphia, PA, is the recipient of the 2018 TOMTEC Innovator Research Travel Grant. Supported by a grant to the ASE Foundation from TOMTEC IMAGING SYSTEMS GMBH, this annual award of \$4,000 is given to assist a promising young researcher presenting his/her work at the ASE Scientific Sessions. 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.

FAROOQ CHAUDHRY RESEARCH AWARD

Nahoko Kato, MD, from Tokyo Bay Medical Center,

Urayasu, Japan, is the recipient of the Farooq Chaudhry Research Award. This award is supported by a grant to the ASE Foundation from Bracco Diagnostics Inc. in memory of Farooq Chaudhry, MD, FASE, who passed in August 2017. Dr. Chaudhry was dedicated to education and research on the clinical use of stress echo, and fittingly this \$4,000 travel stipend is presented to the highest ranked abstract on this topic. Dr. Kato will be recognized during the ASE Awards plenary on Saturday morning.

2018 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 international ultrasound program. Also included with each scholarship award is complimentary registration for the recipient to attend the ASE 2018 Scientific Sessions and travel support. This year's recipients were chosen from a large number of students who were nominated by their program directors. The 2018 scholarship award recipients will be recognized during ASE's Annual Awards Presentation and Edler Lecture from 8:00 – 9:30 AM, Saturday, June 23, in Presidential Ballroom D.

- Jennifer Andrews, Johns Hopkins School of Cardiac Sonography, Echocardiography Program, Baltimore, MD
- Veronica Dudek, Alvin Community College, Diagnostic Cardiovascular Sonography, Alvin, TX
- Rochelle Graveline, Hoffman Heart & Vascular Institute School of Cardiac Ultrasound, Hartford, CT
- Emily Hafner, LSU Health Sciences Center, School of Allied Health Professions, Cardiovascular Sonography Program, New Orleans, LA
- Anita Keck, Kansas University Medical Center, Advanced Diagnostic Cardiac Sonography, Kansas City, KS
- ★ Jin Laudadio, South Hills School of Business and Technology, State College, PA
- Amanda Lewis, LSU Health Sciences Center School of Allied Health Professions-Cardiovascular Sonography Program, New Orleans, LA
- Meghan Lowe, Mayo Clinic School of Health Sciences, Echocardiography Program, Rochester, MN
- Forrest Olson, Grossmont College Cardiovascular Technology, Lakeside, CA
- Emily Tanel, Aurora St. Luke's School of Diagnostic Medical Sonography, Milwaukee, WI
- ★ Rachel Tutwiler, South Hills School of Business and Technology, State College, PA
- Summer Vandigo, Johns Hopkins School of Cardiac Sonography, Echocardiography Program, Baltimore, MD

- Heather Wallace, University of Arkansas for Medical Sciences/Diagnostic Medical Sonography, Little Rock, AR
- ★ Kassie Warren, Piedmont College, Adult Echocardiography Program, Gainesville, GA
- Jessica Wright, Yale New Haven Hospital School of Diagnostic Imaging, New Haven, CT

2018 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 2018 student travel grant has been awarded to **Amber Cyrus, Johns Hopkins Hospital School of Cardiac Sonography, Baltimore, MD**. This award will be recognized during the Council on Cardiovascular Sonography Business Meeting, on Saturday, June 23 at 10:00 AM in Presidential Ballroom A.

2018 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 2018 student travel grant has been awarded to **Randall S. Brown, Piedmont College School of Cardiovascular Technology, Demorest, GA**. This award will be recognized during the Council on Cardiovascular Sonography Business Meeting, on Saturday, June 23 at 10:00 AM in Presidential Ballroom A.

2018 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.

★ ASE FOUNDATION AWARDS AND GRANTS (CONT.) ★

COUNCIL ON PEDIATRIC AND CONGENITAL HEART DISEASE TRAVEL GRANT AWARD RECIPIENTS

Andrew McCrary, MD – Duke University Medical Center, Durham, NC

Brian White, MD – Children's Hospital of Philadelphia, Philadelphia, PA

COUNCIL ON VASCULAR ULTRASOUND TRAVEL GRANT AWARD RECIPIENTS

Bo Xu, MD – Heart and Vascular Institute, Cleveland Clinic, Cleveland, OH

COUNCIL ON PERIOPERATIVE ECHOCARDIOGRAPHY TRAVEL GRANT AWARD RECIPIENTS

Ali Elsayes, MD – Tufts University Medical Center, Boston, MA Diana DeAndrade, MD – University of Pittsburgh Medical Center, Pittsburgh, PA

COUNCIL ON CARDIOVASCULAR SONOGRAPHY TRAVEL GRANT AWARDS

Babitha Thampinathan, RDCS – Toronto General Hospital-Toronto, ON Canada

Jason Pereira, RCS - Yale New Haven Hospital, New Haven, CT

KATANICK SCHOLARSHIP AWARD

The 2018 Katanick Scholarship Award will be awarded to **Oksana Semkiv with Mayo Clinic School of Health Sciences Echocardiography Program, Scottsdale, AZ**. 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 is awarded to **Madeline** Schiminger BS, RDCS (AE, PE) of Johns Hopkins University, Baltimore, MD. This \$1,500 travel grant award is 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 global health outreach events with his international mission experience, clinical skills, and leadership abilities. Madeline will be among those volunteering to screen patients at risk for Chagas cardiomyopathy in Merida, Mexico, in August 2018.

Who makes ASE strong?

Recruit others to join and help make ASE even stronger.

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

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

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



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





RECRUIT FIVE OR MORE new members and your 2019 ASE membership will be FREE.

For more information visit the ASE Headquarters Booth #424 or: ASEcho.org/MemberReferralProgram

The Rules: The member referral program is an ASE member benefit designed to encourage current members to spread the word about the value of ASE membership. If you are not sure of your member status, call us at 919-861-5574. This offer expires August 31, 2018. New members must include the referring member's name on the membership application to receive the ASE referral gift. Referring credit is received once a new member joins ASE. A maximum of one free membership per member per year can be earned.



EuroEcho 20 Imaging 18

REGISTER BY 30 SEPTEMBER

22nd Annual Congress

5/8

December

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of the European Association of Cardiovascular Imaging (EACVI), a branch of the ESC. www.escardio.org/EACVI



ASE is Pleased to Offer Its Newest Educational Products at ASE 2018



- 2nd Edition Cardiovascular Sonographer Registry Review Guide
- 2nd Edition Proper Echocardiographic Measurements: How and Why DVD
- Clinical Applications of Ultrasound Enhancing Agents in Echocardiography (Poster, Binder, and Flip Chart Insert)
- Guideline Reference Book Spiral
- Mechanisms of Mitral Regurgitation (Poster and Pocket Guide)
- Utility of 3D Echocardiography: Promises and Perspectives DVD

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

ASE Headquarters Booth #424

Saturday June 23 . . .4:30 – 6:30 PM Sunday, June 24. . . .9:00 AM – 4:00 PM Monday, June 25 . . .9:00 AM – 6:30 PM

ASE Products Sales Booth – Presidential Lobby

Friday, June 22 12:00 – 6:15 PM Saturday, June 23 . . 6:30 AM – 5:00 PM Sunday, June 24. . . . 6:30 AM – 5:00 PM Monday, June 25 . . . 6:30 AM – 5:30 PM Tuesday, June 26 . . . 6:30 AM – 2:30 PM

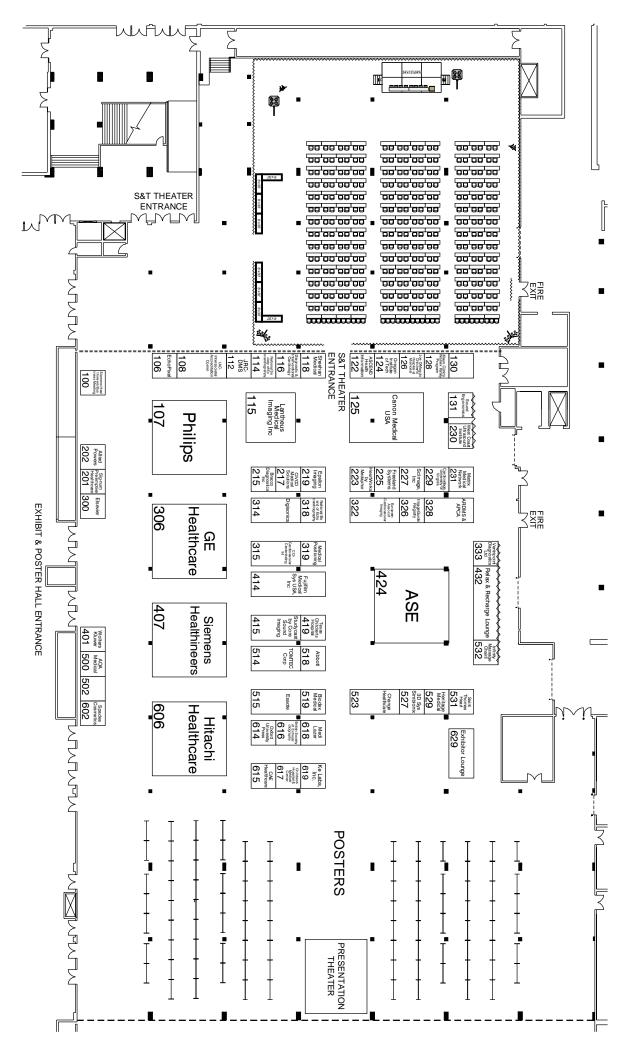


Order Products Online at ASEMarketPlace.com

ASE 2018 EXHIBIT HALL

JUNE 23-25, 2018

GAYLORD OPRYLAND RESORT - RYMAN B1-B4 - NASHVILLE, TENNESSEE



EXHIBITS

EXHIBIT & POSTER HALL Hours

SATURDAY, JUNE 23 RD	
President's Reception	4:30 – 6:30 PM
SUNDAY, JUNE 24 th	9:00 AM – 4:00 PM
MONDAY, JUNE 25 TH	9:00 AM – 6:30 PM

EXHIBIT & POSTER HALL BREAK SCHEDULE

SUNDAY, JUNE 24TH

Coffee Breaks	9:30 – 10:15 AM
	2:45 – 3:30 PM
Lunch Break	11:45 – 1:15 PM
MONDAY, JUNE 25™	
Coffee Breaks	9:30 – 10:15 AM
	2:45 – 3:30 PM
Lunch Break	11:45 AM – 1:15 PM
Member Class Reunion Reception	5:30 – 6:30 PM

★ EXHIBIT & POSTER HALL ★

SCIENCE & TECHNOLOGY THEATER SCHEDULE

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

FRIDAY, JUNE 22ND 7:00 - 8:30 PM

Passion and Precision in Echocardiography *Presented by Siemens Healthineers*

SATURDAY, JUNE 23RD

11:30 AM - 1:00 PM

Who Benefits From the Use of Contrast Echocardiography? Presented by Lantheus Medical Imaging, Inc.

6:30 - 8:00 PM

Challenging the Status Quo: 3D Imaging and Diagnosis *Presented by Hitachi Healthcare*

SUNDAY, JUNE 24TH 11:45 AM - 1:15 PM

The MR Decision Pathway: The Field Guide to Identification, Quantification and Treatment *Presented by Abbott*

MONDAY, JUNE 25TH 11:45 AM − 1:15 PM

Intelligence in Echocardiography: New Innovations Built for Better Care *Presented by Philips*

These sessions are not part of the official ASE 29th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

★ EXHIBIT & POSTER HALL ★

WHERE INNOVATION AND SCIENCE MEET

Don't miss the Exhibit & Poster Hall, on the lower level of the convention center in Ryman Hall. 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 #424

As the largest organization representing the cardiovascular ultrasound community, ASE is a vibrant and progressive organization. Visit the ASE Headquarters booth #424 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 #424 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 23RD

4:30 - 5:00 PM

Meet ASE President Vera Rigolin, MD, FASE

4:30 - 5:30 PM

ASE Tweet Up Learn How to Use Twitter to Advance Your Career Amer Johri, MD, FASE, Sharon Mulvagh, MD, FASE, and David Wiener, MD, FASE Public Relations Committee Members

Getting the Most Out of Your Member Benefits

Dallas Lyons, ASE Associate Manager, Member Services and Suzanne Morris, Membership Recruitment Manager

SUNDAY, JUNE 24TH

9:30 - 10:15 AM

Learn More About the ASE Leadership Academy Neil Weissman, MD, FASE, Program Chair

Face to FASE – Learn How to Achieve the FASE Designation

Nikolaos Skubas, MD, FASE, FASE Advisory Committee Chair Jennifer Warmsbecker, RDCS, BS, FASE, FASE Advisory Committee Incoming Co-Chair

2:45 - 3:30 PM

Face to FASE – Learn How to Achieve the FASE Designation

Anitha Parthiban, MD, FASE, FASE Advisory Committee Member Nikolaos Skubas, MD, FASE, FASE Advisory Committee Chair

★ EXHIBIT & POSTER HALL ★

MONDAY, JUNE 25TH

9:30 - 10:15 AM

Learn More About the ASE Leadership Academy

Neil Weissman, MD, FASE, Program Chair

Face to FASE – Learn How to Achieve the FASE Designation

Nikolaos Skubas, MD, FASE, FASE Advisory Committee Chair Gregory Tatum, MD, FASE, FASE Advisory Committee Incoming Chair

2:45 - 3:30 PM

Learn More About ASE's Case Reports Journal CASE

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

Face to FASE – Learn How to Achieve the FASE Designation

Nikolaos Skubas, MD, FASE, FASE Advisory Committee Chair Gregory Tatum, MD, FASE, FASE Advisory Committee Incoming Chair

3:00 - 3:30 PM

Meet the New Editor of JASE

Michael Picard, MD, FASE, Editor of the *Journal of the American Society of Echocardiography*

5:30 - 6:00 PM

Getting the Most Out of Your Member Benefits Natalya Read, ASE Director of Membership

Face to FASE – Learn How to Achieve the FASE Designation

Mary Alice Dilday, ASE Vice President of Internal Relations

6:15 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 #424 to be entered into the drawing. Play all three cards! The drawing will be held on Monday, June 25 in the Exhibit & Poster Hall during the Member Class Reunion Reception from 5:30 – 6:30 PM. Must be present to win.

First prize package includes:

- Complimentary full meeting registration for 2019 ASE Scientific Sessions
- ★ ASE membership through December 31, 2019
- Hotel accommodations during 2019 ASE Scientific Sessions
- ★ Prize is transferable, but all elements of the prize must be utilized by the same individual.
- ★ VALUE OVER \$1550!

Second Prize: ASE Guideline Reference Book

Third Prize: Pocket Guideline Bundle

ECHO AROUND THE WORLD

Located at the ASE Headquarters booth #424, visit Echo Around the World and explore literature, courses, and information from echocardiography societies worldwide. Learn about ASE's International Alliance Partners and their upcoming activities.





Passion and Precision in Echocardiography: Science and Technology Theater

sponsored by Siemens Healthineers Friday, June 22, 2018 7:00 p.m.–8:30 p.m. Gaylord Opryland Resort & Convention Center Nashville, TN

Join us for a Happy Hour and Hall of Fame cases about how to use echocardiography to make diagnoses and therapies more precise. Featuring the following speakers:

Moderator:

Natesa G. Pandian, MD, Hoag Hospital **Presentations:** Robert Burke, MD, FASE, HonorHealth Mohamed Saric, MD, New York University Lissa Sugeng, MD, Yale Medical Center

This activity is not a part of the official ASE 29th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed or affiliated with ASE.

Special Celebration!

Arrive on time for a special announcement on our Walk Away with an ACUSON Bonsai™ contest winner!



Lantheus Medical Imaging invites you to a panel discussion

Who Benefits From the Use of Contrast Echocardiography?

FEATURING

Vincent Sorrell MD, FACP, FACC, FASE

University of Kentucky, Gill Heart Institute Lexington, KY Michael Rampoldi ACS, RDCS, RVT, FASE

Baylor Heart and Vascular Hospital Dallas, TX Kirsten Tolstrup MD, FACC, FASE

UCSF Medical Center San Francisco, CA

Saturday, June 23, 2018 • 11:30 am to 1:00 pm

Lunch provided – SDMS credit available

Register at Lantheus.com/rsvp

Science and Technology Theater • Gaylord Opryland Resort & Convention Center Exhibit & Poster Hall • Nashville, TN

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

See the advantages contrast echocardiography has over unenhanced echo in diagnostic outcomes, patient management, and cost effectiveness. Understand the broad applicability of contrast echo across patients in multiple care settings. Gain practical insight into the implementation and administration of contrast echocardiography.

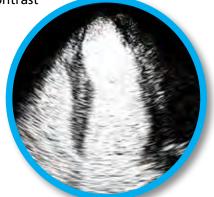
Lunch is provided by ASE and is included in all Scientific Sessions registration fees, but space and boxed lunches are first-come, first served.

This activity is not part of the official ASE 29th Annual Scientific Sessions, as planned by the Program Committee or in any way endorsed or affiliated with ASE. In accordance with 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.





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IMAGINGINSIDERS2018 ASE SCIENCE AND TECHNOLOGY THEATER

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

Saturday June 23rd 6:30pm

HITACHI HEALTHCARE PRESENTS CHALLENGING THE STATUS QUO: 3D IMAGING AND DIAGNOSIS

HITACHI Inspire the Next

Hitachi Healthcare Americas 1995 Summit Commerce Park Twinsburg, OH 44087 www.hitachihealthcare.com Flow and Function Relationship in Health and Disease Dr. Partho Sengupta, MD, MBBS, FACC, FASE West Virginia University Hospital

Impact of 3D: Changing Perspectives Lissa Sugeng, MD, MPH, FACC, FASE Ian Crandall, MS, RCS Yale New Haven Hospital

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

Booth 606

ASE 2018

The MR Decision Pathway: The Field Guide to Identification, Quantification and Treatment

SUNDAY, JUNE 24 | 11:45 A.M. – 1:15 P.M.

LOCATION

Gaylord Opryland Resort & Convention Center

Science & Technology Theater, Exhibit & Poster Hall

This activity is not a part of the official ASE 29th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed by or affiliated with ASE.

At the Trailhead: Determining the Mechanism

Judy Hung, MD, FACC, FASE *Associate Director, Echocardiography* Massachusetts General Hospital

Watch Your Step! Common Errors in MR Quantification in Everyday Practice

Rebecca Hahn, MD, FACC, FASE *Director of Interventional Echocardiography* Columbia University

Beyond Everest: A Solution for High-Risk Patients with Transcatheter Edge-to-Edge Repair

Stephen Little, MD, FRCPC, FACC, FASE

John S. Dunn Chair in Cardiovascular Research and Education Debakey Heart and Vascular Center Houston Methodist

Illustrations are artist's representations only and should not be considered as engineering drawings or photographs.

Abbott

3200 Lakeside Drive, Santa Clara, CA. 95054 USA, Tel: 1.800.227.9902 www.Vascular.Abbott

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Join us for a Science & Technology Theater Event

Intelligence in Echocardiography: New innovations built for better care

Leading cardiovascular imagers, researchers, and professors will present on how cardiac ultrasound can lead to better patient care, through use of new tools allowing for confident diagnostic decisions, improved workflow, and more seamless communication and collaboration across the ever-more complex cardiology division.

Monday June 25 11:45 am – 1:15 pm LOCATION: Exhibit & Poster Hall

This activity is not a part of the official ASE 29th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed or affiliated with ASE.



\star EXHIBITOR LOCATIONS LISTED ALPHABETICALLY \star

Company	Booth
3D Systems Simbionix	527
Abbott	518
Allied Powers, LLC	202
The Alliance for Physician Certification and Advancement [™] (APCA [™]) and The American Registry for Diagnostic Medical Sonography [®] (ARDMS [®])	328
American Society of Echocardiography (ASE)	424
AOA Medical	500
ASCEND Health Information Technology	122
Biodex Medical Systems, Inc.	519
Bracco Diagnostics Inc.	215
British Society of Echocardiography (BSE)	616
CAE Healthcare	615
Canon Medical Systems USA, Inc.	125
Cardiovascular Credentialing International (CCI)	315
CardioVillage, University of Virginia	229
Change Healthcare	523
Children's Hospital & Medical Center	617
CIVCO Medical Solutions	217
Diagnostic & Interventional Cardiology	116
Digisonics	314
EchoPixel	106
Elsevier	300
Epsilon Imaging, Inc.	219
Esaote	515
European Association of Cardiovascular Imaging (EACVI)	322
Freeland Systems, LLC.	225
FUJIFILM Medical Systems U.S.A., Inc.	414
GE Healthcare	306
Heritage Medical Products, Inc.	529
Hitachi Healthcare	606
ImageGuide Registry™	326

Company	Booth
Infinity Massage Chairs	532
Intersocietal Accreditation Commission (IAC)	108
Joe DiMaggio Children's Hospital	126
Joint Review Commission on Education in Diagnostic Medical Sonography (JRC-DMS)	112
KeLabs, Inc.	619
Lantheus Medical Imaging, Inc.	115
Matrix Medical Network	231
Mayo Clinic's Wanek Family Program for Hypoplastic Left Heart Syndrome	128
Medaphor	223
Medi Lazer	618
Medical Positioning, Inc.	319
National Board of Echocardiography (NBE)	318
Oregon Institute of Technology	124
Oxford University Press	614
Philips	107
Saint Thomas Heart	531
ScImage, Inc.	227
Sheehan Medical, LLC.	118
Sig-num Preemptive Healthcare, Inc.	201
Sociedad Nacional de Ecocardiografia de Mexico (SONECOM)	114
Siemens Healthineers	407
Sound Ergonomics. LLC.	131
Spades Cosmetics	602
Studycast by Core Sound Imaging, Inc.	415
Texas Children's Hospital	419
TOMTEC Corporation	514
Ventripoint Diagnostics, Ltd.	333
West Coast Ultrasound Institute	230
Wolters Kluwer	401

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CAE Healthcare	615
British Society of Echocardiography (BSE)	616
Children's Hopsital & Medical Center	617
Medi Lazer	618
KeLabs, Inc.	619

3D Systems Simbionix...... 527

5381 South Alkire Circle Littleton, CO 80127 United States Phone: 303-273-5344 **3dsystems.com/healthcare**

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

AOA Medical...... 500

1921 Carnegie Avenue, Unite C-D Santa Ana, CA 92705 United States Phone: 888-680-5575 **unimedmassager.com**

The Unimed Massager is a state-of-the-art TENS unit device designed to give you hours of relief and relaxation. Completely safe and easy to use in the privacy of your own space, the Unimed Massager is ideal for those aches and pains we accumulate from daily activities like sports, driving and extended period of sitting.



Abbott 518

3200 Lakeside Drive Santa Clara, CA 95054 United States Phone: 408-845-3000

abbott.com

At Abbott, we're committed to helping people live their best life through the power of health. For more than 125 years, we've brought new technologies to the world—in nutrition, diagnostics, medical devices and branded generic pharmaceuticals—that create more possibilities for more people at all stages of life.

Allied Powers, I	LLC	202
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9255 W. Russell Road #177 Las Vegas, NV 89148 United States Phone: 702-283-6401 emp10.com

1401 Rockville Pike, Suite 600 Rockville, MD 20852 United States Phone: 800-943-1709 (APCA); 800-541-9754 (ARDMS) apca.org ardms.org

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

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

American Society of Echocardiography (ASE) 4	24
2530 Meridian Parkway, Suite 450 Durham, NC 27713	
United States	
Phone: 919-861-5574	
Email: ASE@ASEcho.org	

ASEcho.org

ASCEND Health Information Technology... 122

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

ascendhit.com

ASCEND Health Information Technology is the leader in cardiovascular structured reporting and workflow solutions solving data accessibility and usability challenges. Committed to developing technologies that optimize cardiovascular care delivery and services, ASCEND's growing portfolio of cardiovascular imaging and quality management solutions raise the bar on care and workflow standards.

Biodex Medical Systems, Inc..... 519

20 Ramsey Road Shirley, NY 11967 United States Phone: 631-924-9000 **biodex.com**

beneath the table.

Biodex exhibits the latest in Ultrasound Table technology. Our ergonomically-designed tables include features to help prevent musculoskeletal injury to sonographers. The Echo/ Vasc Pro[™] and Vasc Pro[™] tables feature a NEW adjustable foot support, providing sonographers comfortable access to patients of various heights. Foot support conveniently stores



Bracco Diagnostics Inc 215

259 Prospect Plains Road, Building H Monroe Township, NJ 08831 United States Phone: 609-514-2200

braccoimaging.com/us-en

Bracco Diagnostics Inc. is a leader in innovative contrast imaging agents in the U.S. BDI, headquarters and research offices in Monroe Township, NJ, offers a product and solution portfolio for all key diagnostic imaging modalities X-Ray Imaging MRI CEUS and Nuclear Medicine.

British Society of Echocardiography (BSE) 616

10-16 Tiller Road London E14 8PX United Kingdom Phone: +44 2073455185 **bsecho.org**

The BSE represents the interests of those working in clinical echocardiography at all levels, and in all areas, including adult and paediatric cardiology, cardiovascular research and teaching. With over 3,300 members, it is the largest of the professional groups affiliated to the British Cardiovascular Society.



CAE Healthcare 615

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

CAE Healthcare delivers simulation-based training solutions to hospitals, universities and military organizations worldwide. Visit the CAE Healthcare booth to learn about our patient, imaging and interventional simulators, including the CAE LucinaAR childbirth simulator with Microsoft HoloLens and the CAE Juno clinical skills manikin. Ask about our center management solutions.

Canon



Canon Medical Systems USA, Inc 125

2441 Michelle Drive Tustin, CA 92780 United States Phone: 714-730-5000 **us.medical.canon**

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

1500 Sunday Drive, Suite 102 Raleigh, NC 27607 United States Phone: 800-326-0268

cci-online.org

Since 1968, CCI has administered credentialing examinations as an independent credentialing agency. Examinations for ECG and rhythm analysis technicians, invasive/cath lab professionals, cardiac and vascular sonographers, phlebology sonographers, and electrophysiology professionals. CCI administers the only advanced level credential for sonographers, the Advanced Cardiac Sonographer (ACS). Visit CCI at booth #315.

CardioVillage, University of Virginia...... 229

P.O. Box 800711 Charlottesville, VA 22908 United States Phone: 434-924-8394 cardiovillage.com

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

CHANGE HEALTHCARE

Change Healthcare 523

5995 Windward Parkway Alpharetta, GA 30005 United States Phone: 404-734-3551 **changehealthcare.com**

Change Healthcare provides enterprise imaging solutions, PACS, VNAs, and Cardiovascular Information Systems as well as workflows, viewers, and infrastructure. Our robust range of holistic solutions help customers improve collaboration and productivity, optimize performance and quality, and coordinate care while helping to maximize the value of their technology.

Children's Hospital & Medical Center...... 617

822 Dodge Street Omaha, NE United States Phone: 800-437-0272 **childrensomaha.org**

Children's Hospital & Medical Center in Omaha, Nebraska is a 145-bed nonprofit organization. It is the only fullservice pediatric hospital in Nebraska. Children's receives patients from all over the country. At Children's, no child in need of medical care is ever turned away due to an inability to pay.

CIVCO Medical Solutions 217

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

CIVCO is prepared to meet the growing need for effective infection control compliance in the ultrasound transducer reprocessing market. Visit us at ASE booth #217 to learn more about ASTRA, our latest offering in automated high-level disinfection for endovaginal, endorectal, and TEE ultrasound probes.

Diagnostic & Interventional Cardiology..... 116

3030 W. Salt Creek Lane, Suite 201 Arlington Heights, IL 60005 United States Phone 847-391-1000 **Dicardiology.com**

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

Digisonics 314

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

Digisonics provides standards-based and vendor-neutral cardiovascular information system (CVIS) solutions to streamline clinical workflows. Digisonics solutions offer integration options to imaging modalities and other 3rd party vendors, the most comprehensive analysis package and structured reporting for all cardiovascular modalities.

EchoPixel 106

4677 Old Ironsides Drive, Suite 445 Santa Clara, CA 95054 United States Phone: 844-273-7766 echopixeltech.com

EchoPixel will showcase its newly released version of True 3D software, the first mixed virtual reality software for improved diagnoses and more precise surgical planning. The software enables physicians and surgeons to see and interact with medical images the way they would with physical objects.

Elsevier 300

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

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Epsilon Imaging, Inc..... 219

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



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esaoteusa.com

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

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The EACVI is a vibrant community of almost 10,000 Cardiovascular Imaging experts and a knowledge provider in Multi-Modality Imaging, Echocardiography, Cardiovascular Magnetic Resonance, Nuclear Cardiology and Cardiac CT. Stop by the EACVI stand to discover our education catalogue, membership programme, publications, find out more about EuroEcho-Imaging and our other meetings.

Freeland Systems, LLC 225

12850 Hwy 9 N., Suite 600-443 Alpharetta, GA 30003 United States Phone: 888-615-1888 freelandsystems.com

Freeland Systems is a multi-modality Pac System with a DICOM viewer and customizable reporting templates. In addition to a traditional locally installed system, we have a browser-based version that can act as a standalone system or in conjunction with the locally installed Freeland Systems application.



Value from Innovation

FUJIFILM Medical Systems U.S.A., Inc 414

419 West Avenue Stamford, CT 06902 United States Phone: 203-324-2000 fujifilmusa.com/products/medical/medicalinformatics/cardiovascular/index.html

Synapse Cardiovascular provides echo labs one-click measurement tools, pre-configured and customizable report templates, and wall motion scoring intelligence to reduce read and report time. More than 400-ASE default measurements and calculations are available for analysis, and data from acquisition devices can be transferred to Synapse Cardiovascular to automatically populate reports.



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GE Healthcare provides transformational medical technologies that will shape a new age of patient care. GE Healthcare's expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, disease research, drug discovery and biopharmaceuticals is dedicated to detecting disease earlier and tailoring treatment for individual patients.

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Heritage Medical Products, Inc. is the only Sonographer owned medical exam bed manufacturer in the world. Our main goal is that fellow sonographers may have an exam bed that works for them, not against them. Come by and see how we can help avoid on the job injuries.

HITACHI Inspire the Next



Hitachi Healthcare..... 606

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ImageGuide Registry...... 326

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

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

Infinity Massage Chairs 532

72 Stard Road Seabrook, NH 03874 United States Phone: 603-347-6000 **infinitymassagechairs.com**

Infinity Massage Chairs is the fastest-growing massage chair brand in North America, with an A+ rating with the Better Business Bureau. Our mission is to deliver innovative solutions to unlimited wellness for all lifestyles by engineering durable, customizable, and user-friendly products.

Intersocietal Accreditation Commission (IAC)......108

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

The IAC programs for vascular testing, echocardiography, nuclear/PET, MRI, CT/dental, carotid stenting, vein center, cardiac electrophysiology and cardiovascular catheterization are dedicated to ensuring quality patient care and support one mission: Improving health care through accreditation[®]. Visit our booth to learn how IAC can help your facility meet its quality goals.

Joe DiMaggio Children's Hospital 126

1005 Joe DiMaggio Drive Hollywood, FL 33021 United States Phone: 954-265-5324 **jdch.com**

Joe DiMaggio Children's Hospital (JDCH) opened in 1992

and has grown to be the leading children's hospital in Broward and Palm Beach counties. The IAC-accredited echocardiography lab at JDCH Heart Institute sees a wide range of complex cases. Currently seeking a dynamic individual to serve as Medical Director, Pediatric Echocardiography.

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

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

KeLabs, Inc 619

3500 DePauw Boulevard, Suite 1080 Indianapolis, IN 46268 United States Phone: 317-824-1225 **kelabs.com**

KeLabs, Inc. is the creator of the echocardiography simulation learning software applications, Echo Test and Teach and Introduction to Echocardiography by Dr. Harvey Feigenbaum. In addition, KeLabs offers a robust data analytics software package, Information Center.



Lantheus Medical Imaging, Inc 115

331 Treble Cove Road North Billerica, MA 01862 United States Phone: 1-800-362-2668 Iantheus.com

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



Matrix Medical Network 231

9201 E. Mountain View Road #220 Scottsdale, AZ 85258 United States Phone: 602-621-1662

matrixmedicalnetwork.com

Matrix Medical Network brings care directly to individuals in their homes and in mobile health clinics through its nationwide clinical network. Matrix solutions include risk adjustment, quality gap closure, community and needs assessments, care management and post-acute support. Matrix supports Medicare, Medicaid, Commercial and Exchange members of all ages.



Mayo Clinic's Wanek Family Program for Hypoplastic Left Heart Syndrome 128

200 First Street SW Rochester, MN 55905 United States Phone: 507-293-7310 mayo.edu/research/centers-programs/todd-karenwanek-family-program-hypoplastic-left-heartsyndrome

Mayo Clinic's Todd and Karen Wanek Family Program works to find solutions for people with hypoplastic left heart syndrome.

13010 Morris Road Bldg One, 6th Floor Alpharetta, GA 30004 **United States** Phone: 678-524-8131

medaphor.com

Founded in 2004, MedaPhor has headquarters in Cardiff, UK and Georgia, USA, its customers are some of the world's leading medical institutions. MedaPhor designs world-class simulators for a comprehensive education in echocardiography and ultrasound practice and software for clinical practice to improve patient assessment and diagnoses for quality patient care.

Medi Lazer 618

1110 Brickell Avenue, Suite 430 Miami, FL 33131 United States Phone: 305-847-9044 medilazer.net

Medi Laser provides a variety of healthcare solutions to many different industries. We specialize in product development based on scientific research, working with laboratories that are equipped with the latest innovative tools. Medi Laser partners with clinics throughout the United States, as well as internationally.

Medical Positioning, Inc...... 319

1717 Washington Street Kansas City, MO 64108 **United States** Phone: 800-593-3246 medicalpositioning.com

Medical Positioning, Inc. specializes in ergonomically designed, bariatric capable and ADA compliant imaging tables for echocardiograms (EchoBed® X) and supine bike stressechocardiograms (Stress EchoBed®), improving images, reducing acquisition time and preventing Repetitive Strain Injuries (RSI). MPI will be showcasing the updated Stress EchoBed[®] with an improved ergometer, capable of interfacing.



National Board of Echocardiography

1500 Sunday Drive, Suite 102 Raleigh, NC 27607 **United States** Phone: 919-861-5582 echoboards.org

Since 1996, the NBE has developed and administered examinations of Special Competence in Adult Echocardiography as well as a certification process for physicians providing educational and level of service documentation requirements set by the NBE. In January 2019 the new Special Competence in Critical Care Echocardiography examination will be administered.

Oregon Institute of Technology 124

3201 Campus Drive Klamath Falls, OR 97601 United States Phone: 541-885-1173 oit.edu/online/degrees

Advancing your education with Oregon Tech's online programs creates career opportunities. Students learn new skills immediately applicable to your career (college credit granted for registries). - BS Degree Completion Program in Echocardiography - BS Degree Completion Program in Vascular Technology - Masters of Science in Allied Health (Healthcare Leadership).

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Philips is a leading health technology company focused on improving people's health and enabling better outcomes across the health continuum – from healthy living and prevention, to diagnosis, treatment and home care.





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4230 Harding Road, Suite 330 Nashville, TN 37205 United States Phone: 800-345-5016 sthealth.com/medical-services/saint-thomas-heart

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ScImage, Inc 227

4916 El Camino Real Los Altos, CA 94022 United States Phone: 866-724-6243

scimage.com

Over the past 25 years, ScImage has been a pioneer in Enterprise Imaging solutions and comprehensive Cardiology PACS. ScImage image-enables the EHR for Cardiology - with the ability to review images and perform structured and evidence-based reporting for all cardiology disciplines - to significantly improve workflow efficiency and patient care.

Sheehan Medical, LLC 118

7835 85th Place SE Mercer Island, WA 98040 United States Phone: 206-498-0766 **sheehan-medical.com**

Real Ultrasound[™] is a unique line of echo and TEE simulators that display real patient images, in real-time, for a realistic scanning experience. Validated skill metrics provide immediate feedback. Students, residents and fellows can train self- paced without requiring constant faculty supervision. NEW: 3D TEE with measurements.

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4200-1751 Richardson Montreal, Quebec H3K 1G6 Canada Phone: 877-500-9808 sig-num.com

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Sociedad Nacional de Ecocardiografia de Mexico (SONECOM)114

Magadalena #135 Colonia del Valle México City 03103 México Phone: 52-6235-3170 **sonecom.org**

We are the first society in echocardiography and image in Mexico whose purpose is to group all health professionals interested in echocardiography, with the purpose that this is realized with high professional and ethical quality.



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Sound Ergonomics, LLC..... 131

6830 NE Bothell Way Kenmore, WA 98028-3546 United States Phone: 425-489-3839 soundergonomics.com

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Texas Children's Hospital 419

6621 Fannin Street Houston, TX 77030 United States Phone: 832-824-1000 texaschildrens.org

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TOMTEC Corporation 514

525 W. Monroe Street Chicago, IL 60661 United States Phone: 866-735-3740 tomtecusa.com

TOMTEC Imaging Systems is a worldwide leader for medical imaging software solutions. Specializing in cardiology, it offers state-of-the-art solutions for clinical customers and industry partners. The products encompass a wide range of 2D and 3D/4D technology for visualization, automated analysis, quantification, reporting and image management.

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West Coast Ultrasound Institute...... 230

3700 E. Inland Empire Boulevard #235 Ontario, CA 91764 United States Phone: 909-483-3808 wcui.edu

West Coast Ultrasound Institute is dedicated to the success of its students. We are a private post secondary college. Our main campus is located in Beverly Hills, Ca. We have Branch campuses located in Ontario, Ca. and in Phoenix, Az.

Wolters Kluwer..... 401

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Your support means the world to us! Thank you for all the ways you continue to make a difference for the field of cardiovascular ultrasound.

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 AREA OF GREATEST NEED

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

Join the ASE Foundation in Nashville at the Annual ASE Scientific Sessions Visit the Foundation Booth located in the Presidential Lobby to learn more.

SATURDAY, JUNE 23

	Join us to congratulate the 2018 ASEF Travel Grant and Scholarship Recipients Opening Plenary: Presidential Ballroom D
9:00 am – 5:00 pm	Sign up for the Cardiovascular Challenge and help start a Chain Reaction with a donation to #YourPriority ASE Foundation Booth
9:00 AM	Images from the Heart Gallery Opening ASE Foundation Booth

SUNDAY, JUNE 24

9:00 am - 5:00 pm	Log your steps for the Cardiovascular Challenge and check on your Chain Reaction!
	ASE Foundation Booth

- 10:15 AM 11:45 AM Inaugural Richard E. Kerber Ethics/Humanitarian Lecture presented by James Kirkpatrick, MD, FASE **Tennessee Ballroom D**
- 1:15 PM 2:45 PM 2018 Kalmanson Lecture presented by Jan D'hooge, MSc, PhD **Presidential Ballroom D**
- 7:30 PM 11:00 PM 9th Annual ASE Foundation Research Awards Gala: Celebrating Cardiovascular Ultrasound Research Gaylord Opryland Private event; tickets required

MONDAY, JUNE 25

1:15 рм – 2:45 рм	Inaugural Brian Haluska Sonographer Research Award Competition
	Presidential Ballroom A
3:30 рм – 5:30 рм	2018 Arthur E. Weyman Young Investigator's Award Competition Presidential Ballroom D
4:00 pm	Last chance to log your steps for the Cardiovascular Challenge and to contribute to the Chain Reaction! ASE Foundation Booth
5:30 рм – 6:30 рм	Announcement of Cardiovascular Challenge & Chain Reaction Winners Member Reception in the Exhibit & Poster Hall

ASEFoundation.org

As a 501(c)(3) organization, contributions made to the ASE Foundation are U.S. tax deductible to the fullest extent of law.

9th Annual Research Awards GOOLGO TENNESSEE WALTZ"

SUNDAY, JUNE 24, 2018 ^{from} 7:30 - 11:00 PM

PRESENTED BY THE ASE Foundation

AT THE GAYLORD OPRYLAND, NASHVILLE, TN

Guests are encouraged to don 1950's evening attire.

Private event. Separate ticket required.





As the largest global organization for cardiovascular ultrasound imaging, ASE is the leader and advocate, setting practice standards and guidelines. Comprised of over 17,000 physicians, sonographers, nurses, and scientists, ASE is a strong voice providing guidance, expertise, and education to its members with a commitment to improving the practice of ultrasound and imaging of the heart and cardiovascular system for better patient outcomes.

ASE MEMBERSHIP

ASE is an organization that is open to all echo enthusiasts. It serves its members in numerous ways by providing education, advocacy, research, practice guidelines, and a community for their profession. ASE membership includes over \$750 of FREE CME credits a year, in addition to discounts on all ASE educational courses and products. Members also receive a monthly subscription to the *Journal of the American Society of Echocardiography* (JASE), a helpline for legislative coding and reimbursement issues, an image library, and other career resources. ASE membership through December 31, 2018 is included with most nonmember registrations for the ASE 29th Annual Scientific Sessions.

CONTACT US

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

Phone: 919-861-5574 Email: ASE@ASEcho.org

ASEcho.org ASEFoundation.org SeeMyHeart.org ASEMarketplace.com ASEUniversity.org ContrastZone.com OnlineJASE.com CVCaseJournal.com

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\star board, council and committee meetings \star

FRIDAY, JUNE 22ND

Board of Directors	9:30 AM – 12:30 PM	Lincoln A
Council on PCHD Steering Committee	1:30 – 4:30 PM	Jackson A
Council on CV Sonography Steering Committee	3:00 – 4:30 PM	Jackson B
Rising Star Task Force	3:00 – 4:00 PM	Jackson C
CASE Editorial Board	5:00 – 6:00 PM	Jackson E
Board of Directors/Council Steering Committees Reception (Invitation only)	4:30-6:00 PM	Lincoln A

SATURDAY, JUNE 23RD

Committee Chairs Meeting	6:30 – 7:30 AM	Jackson C
Council on Perioperative Echocardiography Business Meeting	10:00– 10:15 AM	Tennessee Ballroom B
Council on CV Sonography Business Meeting	10:00– 10:30 AM	Presidential Ballroom A
ImageGuide Registry Oversight Committee	10:00 – 11:30 AM	Jackson E
Nominations Committee	12:00 – 1:00 PM	Jackson C
ImageGuideEcho Registry Committee	1:00 – 2:30 PM	Jackson E
Membership Committee	1:00 – 2:30 PM	Lincoln A
International Relations Advisory Committee	1:00 – 2:30 PM	Jackson A
ASEF Annual Appeal Committee	2:00 – 3:30 PM	Jackson F
Council on PCHD Business Meeting	2:30 – 3:00 PM	Tennessee Ballroom C
WASE Investigators Meeting	3:00- 4:30 PM	Jackson E
Pediatric Echo Lab Directors (Hosted by SOPE)	5:30 – 6:30 PM	Governor's A

SUNDAY, JUNE 24TH

Council on Vascular Ultrasound Steering Committee	7:00 – 8:00 AM	Jackson F
Council on Vascular Ultrasound Business Meeting	8:00 – 8:15 AM	Tennessee Ballroom D
Industry Roundtable Committee	8:00 – 9:00 AM	Presidential Boardroom B
Initiative to Standardize Deformation Imaging	9:00 – 11:00 AM	Presidential Chamber B
Awards Committee	9:30 – 10:30 AM	Jackson A
Advocacy Committee	10:00 – 11:30 AM	Jackson B
Training & Certification Committee	10:00 – 11:00 AM	Jackson F
International Relations Luncheon	11:45 AM – 1:15 PM	Lincoln A
Council on Perioperative Echocardiography Steering Committee	11:45 AM – 1:15 PM	Jackson B
FASE Advisory Committee	11:45 AM – 12:35 PM	Jackson A
CME Committee	2:30 – 3:30 PM	Jackson F
Bylaws & Ethics Committee	2:45 – 3:30 PM	Jackson A
Public Relations Committee	3:00 – 4:00 PM	Jackson B
JASE Editorial Board	4:00 – 5:30 PM	Presidential Chamber B

MONDAY, JUNE 25th

Research Committee	8:00 – 9:00 AM	Jackson A
Education Committee	9:30 - 10:30 AM	Jackson E
Guidelines & Standards Committee	11:45 AM – 1:10 PM	Lincoln A
ASE/EACVI 3D Industry Task Force	12:30 – 1:30 PM	Jackson C
Finance Committee	2:00 - 3:30 PM	Jackson E

TUESDAY, JUNE 26TH

Scientific Sessions Program	11:30 AM – 1:00 PM	Lincoln A
Planning Committee		

\star ASE EDUCATION AND RESEARCH FOUNDATION \star

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 102% of its \$250,000 fundraising goal for the 2017 Annual Appeal, raising \$254,459. All contributions to the Foundation support the following initiatives:

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

Stop by the ASE Foundation booth, located in the Presidential Lobby on Level 2 to:

- Learn more about fundraising events being hosted in Nashville, such as the Annual Research Awards Gala and the Cardiovascular Challenge
- View the photo exhibition showcasing medically-related outreach event pictures
- ★ Pick up your "I GAVE TODAY" ribbon
- ★ Inquire about volunteer opportunities
- ★ Purchase an ASEF bracelet
- ★ Learn more about ASEF and become part of the "Chain Reaction" at ASE 2018

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!



THE CARDIOVASCULAR CHALLENGE



Compete with your feet and get moving with the ASE Foundation! ASEF is highlighting physical activity, which can dramatically lower an individual's risk of cardiovascular disease, improve mental health, and lower the risk of obesity related diseases. Key areas around the Gaylord Opryland will display step targets. The top three participants will win a prize! A \$200 Amazon gift card will be awarded to the winner, second place will receive a \$100 Amazon gift card, and the person with the third highest step count will receive a limited edition ASEF hat. Record your steps taken at the conference and check in each day with the ASEF Booth to log your steps and keep an eye on the competition. The winners will be announced Monday evening, June 25th during the Member Reception in the Exhibit & Poster Hall.

Special thanks to our 2018 Cardiovascular Challenge sponsors:



IMAGES FROM THE HEART GALLERY

Back this year, ASEF is presenting a curated display of photos taken by ASE members while they travelled the world participating in various medically-related outreach events. ASE members entered photographs that captured faces of people met along the way, landscapes, cultural observations, etc. and wrote a few heartfelt memories about what the photos meant to them. Stop by the ASEF booth in the Presidential Lobby to view the incredible photos and read the stories. Want to take these photos home? Many will be available with a donation to the ASE Foundation in the photographer's name.

WOMENHEART RED BAGS OF COURAGE®

This year the ASE Foundation has set a goal to raise \$25,000 for our Patient Awareness initiative. We have an opportunity to provide information about echocardiography directly to women with heart disease and those at risk through the WomenHeart's Red Bags of Courage[®]. These bags include information on various aspects of heart disease to guide women to make healthy decisions. We need your help to get ASE information into these bags! Stop by the ASEF Booth and make a donation to Patient Awareness to bring us closer to \$25,000!

★ 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 June 2017 - April 2018. 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 #424. New inductees will be recognized at the ASE Awards Session on Sunday morning at 8:00 AM. Join us to recognize their accomplishment!

FASE LOUNGE - PRESIDENTIAL BOARDROOM A, MEZZANINE LEVEL

SATURDAY, JUNE 23RD – MONDAY, JUNE 25TH 9:00 AM – 4:00 PM

TUESDAY, JUNE 26TH

9:00 AM - 2:00 PM

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 questions about whether you may qualify? Stop by the ASE Booth #424 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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★ FASE (CONT.) ★

Tia Gordon, BS, RDCS, FASE Jordan Gosnell, BS, RDCS, FASE Kimberly Goy, RDCS, FASE Jacob T. Gutsche MD. FASE Georges Hajj, MD, FASE Craig D. Hametz, MD, FASE Nima Hatam, MD, FASE Julie Ann Hinzman, RDCS, AE, PE, CTT+, FASE Lisa K. Hornberger MD, FASE Denise Ignatowski, BS, RDCS, FASE Madeline Jankowski, RDCS, FASE Sean Jedrzkiewicz, MD, FASE Jennifer Johnson, DO, FASE V. Jacob Jose, MD, FASE Carlos Galhardo Junior, MD, FASE Gilda Kadiu, RDCS, FASE Jan Kasal, MD, FASE Ravi R. Kasliwal, MBBS, MD, DM, FASE Chandra Katikireddy, MD, FASE Amar Keiralla, MD, FASE Wissam I. Khalife, MD, FASE Mohammed Ersan Khalil, MD, FASE Kenya Kusunose, MD, PhD, FASE Deborah Kwon, MD, FASE Cynthia L. Laliberte, RDCS, FASE Mark B. Lampert, MD, FASE Grace Lin, MD, FASE Hong Liu, MD, FASE John L. Lockhart, BSRT, RDCS, FASE Martin J. London, MD, FASE George King-Tso Lui, MD, FASE Sushil Allen Luis, MD, FASE Jamahal Maeng Ho Luxford, MD, FASE David S. Majdalany, MD, FASE Angela B. Malone, RDCS, RVT, FASE Rekha Mankad, MD, FASE Rachel Marcus, MD, FASE Shiraz Arif Maskatia, MD, FASE Sharon L. McCartney, MD, FASE Kelly Meeghan McGregor, RDCS, FASE Lalitha. C. Medepalli, MD, FASE Anuj Mediratta, MD, FASE Massimiliano Meineri, MD, FASE Kanchi Muralidhar, MBBS, MD, MBA, FASE

Richard S. Musialowski, Jr., MD, FASE Diem Ha Nguyen, BA, RVS, FASE Ratnasari D. Padang, BSc, MBBS, FRACP, PhD, FASE Rupen Parikh, MD, FASE Christine J. Pascua, RCS, FASE Arnold T. Pasia, MD, FASE Prakash A. Patel, MD, FASE Shivani Govind Patel, MBBS, MS, FASE Jose Ricardo F. Po, MD, FASE Jeremy Samuel Poppers, MD PhD, FASE Siddharth Kumar Prakash, MD, PhD, FASE Arnaldo Rabischoffsky, MD, FASE Florian Rader, MD, MSc, FASE Tracy L. Ralston, RDCS, FASE Srikantha L. Rao, MBBS, MS, FASE Darian C. Rice, MD, PhD, FASE Douglas Jamal Richardson, MHA, RDCS, RVT, FASE Lazaro M. Salas, RDCS, FASE Markus D. Scherer, MD, FASE Rajesh U. Shenoy, MD, FASE Surita Sidhu, MD, FASE Dhiraj Singh, MD, FASE Aiman Smer, MD, FASE Kathirvel Subramaniam, MD, MPH, FASE Heather Yih-Ju Sun, MD, FASE Timothy Chiat-Choon Tan, MBBS, BSc, PhD, FASE Ritu Thamman, MD, FASE Melissa J. Tracy MD, FASE Inga Vaitenas, ACS, RCCS, RCS, FASE Ameeth Vedre, MD, FASE Anthony R. Villarosa, MD, FASE John Reynaldo G. Viola, MD, FASE Alison White, BSC, MSC, DMU, FASE George B. Whitener, MD, FASE Ida Bagus Rangga Wibhuti, MD, FASE Christal Wilson, FASE Anita Wokhlu, MD, FASE Anthony Young, RDCS (AE)(PE), FASE Go Yun Yun, MD, FASE John Zaki, MD, FASE Mark A. Zenker, MD, FASE Tiangang Zhu, MD, FASE

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