Assessment of the Right Heart in Adults with Concern for Thromboembolic Pulmonary <u>Disease</u>

> Echoes of the Heart: Navigating Adult Congenital Heart Disease with Perioperative TEE

15

A Moving ASE into the Innovation Fast Lane

28

Recognizing ASE's 2025 Award Winners



2



2025/2026 EDUCATION CALENDAR

JUNE 2025

4th Annual Echo in Pediatric & Congenital Heart Disease

June 28-29, 2025 Virtual Experience Jointly provided by ASE and the ASE Foundation

SEPTEMBER 2025

36th Annual Scientific Sessions

September 5-7, 2025 Music City Center (Downtown) Nashville, TN Jointly provided by ASE and the ASE Foundation

Discounted rates for ASE members. *To learn more and register, visit us at* **ASEcho.org/Education**.

This text also appears in the May and June issues of JASE. **OnlineJASE.com**

JANUARY 2026

SAVE THE DATE
35th Annual Echo Hawaii

January 19-22, 2026 Fairmont Orchid, Kohala Coast, Big Island, HI. Jointly provided by ASE and the ASE Foundation

FEBRUARY 2026

SAVE THE DATE 38th Annual State-of-the-Art Echocardiography

February 13-16, 2026 Westin Kierland Resort & Spa, Scottsdale, AZ Jointly provided by ASE and the ASE Foundation



Heart shaped LV!



Apically displaced papillary muscle and a large apical-lateral diverticulum giving an LV shape with two apices

Clara I. Angulo, ACS; Nadia Motilal, RDCS; William Zoghbi, MD – Houston Methodist Hospital



Heart Shaped LV Clara I. Angulo, ACS, FASE; Nadia Motilal, RDCS; and William Zoghbi, MD, FASE, Houston Methodist DeBakey Heart and Vascular Center -Houston, Texas

Contents

Moving ASE into the Innovation Fast Lane: The Expanding IRT and the Launch of the First **ASE Accelerator Program**

Only You Can Control Your Future (Dr. Seuss)

A Preview of the 2025 Scientific Sessions: Innovation, Immersion, and Impact

3 Sonographer Spotlight

Assessment of the Right Heart in Adults with **Concern for Thromboembolic Pulmonary Disease**

Multiplanar Reconstruction – No Longer Optional, So Make it Your Friend

ASE 2025 Scientific Sessions in Nashville. Tennessee

PCHD Tips and Tricks: Fontan Imaging Tips

> Echoes of the Heart: **Navigating Adult Congenital** Heart Disease with **Perioperative TEE**

> > To Be or Not to Be a Mentee? There is No Question.

Purpose and Progress: A Record Gathering at the 2025 ASE Industry **Roundtable Think Tank**

Recognizing ASE's 2025 Award Winners

AMERICAN SOCIETY OF **ECHOCARDIOGRAPHY**

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American Society of Echocardiography Cover art: "Eye Of The Octopus" Hannah Hartsig, RDCS (AE, PE), Starship Children's Hospital - Auckland, New Zealand

EDITORS' NOTE

ASE is very grateful to our members who contribute to Echo magazine and values their willingness to share personal insights and experiences with the ASE community, even if they may not be in total alignment with ASE's viewpoint.

President's Message for May

MOVING ASE INTO THE INNOVATION FAST LANE: THE EXPANDING IRT AND THE LAUNCH OF THE FIRST ASE ACCELERATOR PROGRAM



Contributed by **Steven Lester, MD, FASE**, Mayo Clinic, Phoenix, AZ; **Meredith Morovati**, ASE Chief Business Strategy Officer; and **Samantha King**, ASE Director of Corporate Relations

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In the ever-evolving landscape of cardiovascular imaging, the American Society of Echocardiography (ASE) has long stood as a beacon of excellence, fostering education, research, collaboration, and innovation. s my year as President winds down, I am now down to my last two messages to our Society. We have achieved so much thanks to several key ASE leaders and staff, but none so critical as our evolving role in the cardiovascular ultrasound innovation space. I have asked Dr. Steve Lester, Meredith

Morovati, and Sam King to highlight a few key milestones in our industry relations and innovation arena. Innovation was one of the three key objectives of my vision. Expansion of the Industry Round Table (IRT) and bringing ASE into the forefront of innovation were both ideas promulgated by Dr. Lester years ago when he was Chair of the IRT committee. I am delighted and excited at the headway made this year and happy to have the three most important contributors to our progress write this month's Presidents Page. ~ Ted Abraham

In the ever-evolving landscape of cardiovascular imaging, the American Society of Echocardiography (ASE) has long stood as a beacon of excellence, fostering education, research, collaboration, and innovation. The ASE Industry Round Table (IRT) has been a cornerstone of this mission, bringing together leading voices from academia, industry, and clinical practice to advance echocardiographic technology and its applications in patient care. Continuing its legacy of leadership, ASE is now expanding the IRT to include a groundbreaking accelerator program for early-stage startups. This visionary move promises to infuse fresh ideas into the field, bridging the gap between established industry leaders and emerging disruptors eager to shape the next generation of cardio-vascular ultrasound imaging and its application(s) into clinical practice.

THE INDUSTRY ROUND TABLE: A LEGACY OF COLLABORATION

The ASE IRT has played a pivotal role in shaping echocardiography's trajectory, providing a platform where thought leaders from established companies can collaborate, share insights, and collectively drive technological advancements. Historically, this forum has been dominated by our dynamic equipment manufacturers. Acknowledging the role of echocardiography in patient management beyond imaging alone, several years ago, the IRT strategically shifted from a niche imaging technology group into a broader coalition of healthcare companies, fostering new partnerships within the broad healthcare ecosystem to help drive advancements in patient care, diagnostics and therapeutics. Enter now the startup accelerator: a bridge between the expertise of incumbents and the ingenuity of emerging ventures.

WHY AN ACCELERATOR?

Innovation in healthcare technology is often driven by startups—lean, agile, and unafraid to challenge the status quo. However, these young companies frequently

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The accelerator program will focus on early-stage companies developing technologies that enhance echocardiographic imaging, streamline workflows, and ultimately improve patient outcomes.

face significant hurdles, including regulatory challenges, funding limitations, and access to clinical data for validation. By incorporating an accelerator into the IRT, ASE is providing a lifeline to these promising ventures, offering them mentorship, possible industry partnerships, and the opportunity to engage with key opinion leaders who can help refine their solutions.

The accelerator program will focus on early-stage companies developing technologies that enhance echocardiographic imaging, streamline workflows,

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By welcoming startups into this prestigious group, ASE is reinforcing its commitment to shaping the future of echocardiography by actively fostering the next generation of pioneers.

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and ultimately improve patient outcomes. Whether through AI-driven diagnostics, novel contrast agents, or portable imaging solutions, startups selected for the program will gain unprecedented access to ASE's network, fostering collaborations that might otherwise take years to develop.

BRIDGING THE GAP: STARTUPS AND INDUSTRY GIANTS

The inclusion of startups in the IRT will not only benefit emerging companies but also the established industry leaders already engaged in ASE's ecosystem. Large corporations excel at incremental innovation and navigating regulatory landscapes. However, they often struggle with the agility and risk-taking mentality that defines startup culture. By bringing these two worlds together, the accelerator program creates a symbiotic relationship: startups gain credibility and resources, while established players gain fresh perspectives and potential acquisition opportunities. Industry incumbents will have a front-row seat to groundbreaking innovations that could redefine echocardiography. This dynamic fosters a cooperative environment where all stakeholders are invested in mutual success.

THE IMPACT ON CARDIOVASCULAR IMAGING

Echocardiography is at a transformative juncture. Artificial intelligence is poised to revolutionize image interpretation, reducing variability and enhancing diagnostic precision. Point-of-care ultrasound is becoming more widespread, empowering clinicians to make real- time decisions in diverse clinical settings. And novel imaging techniques promise to uncover early signs of cardiovascular disease that were previously undetectable. The inclusion of an accelerator within the IRT may fast-track the development of these game-changing technologies, ensuring that the next wave of innovation is not only technically feasible but also clinically validated and widely adopted. By aligning promising startups with the expertise of established players, ASE is helping to accelerate the translation of novel ideas from concept to clinical practice.

A CALL TO INNOVATORS

For early-stage companies focused on echocardiographic advancements, ASE's accelerator represents a unique opportunity. Entrepreneurs and engineers who have long sought access to the right partnerships, clinical expertise, and industry validation can now find it within the IRT ecosystem. Startups ready to make a meaningful impact should seize this chance to collaborate with the best minds in the field. Likewise, for established industry members, this initiative is an invitation to embrace disruption as a catalyst for growth. By supporting the accelerator program, these companies are not only fostering innovation but also ensuring their continued leadership in a rapidly evolving industry.

CONCLUSION: PAVING THE FUTURE OF ECHOCARDIOGRAPHY

The expansion of the ASE Industry Round Table to include an accelerator program marks a new era of collaboration, innovation, and progress for our society. By welcoming startups into this prestigious group, ASE is reinforcing its commitment to shaping the future of echocardiography by actively fostering the next generation of pioneers. Through this initiative, ASE is not just shaping the future, it's accelerating it, ensuring that innovation in cardiovascular ultrasound reaches patients faster and more effectively than ever before.

This text also appears in the May issue of JASE Online JASE.com

President's Message for June

ONLY YOU CAN CONTROL YOUR FUTURE (DR. SEUSS)

Contributed by **Theodore P. Abraham, MD, FASE**, Meyer Friedman Distinguished Professor of Medicine and Director of Echocardiography at the University of California San Francisco, San Francisco, CA

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Personally, it has been an exhilarating year adorned and enhanced by the commitment, dedication, and sheer energy of so many components of this great organization. hey say time flies when you are having fun, and it sure has for me. It was not long ago that I was on the podium in Portland articulating an ambitious plan for ASE's Future 50 harboring a view that while we were getting ready to celebrate the immense successes of our last 50 years, we are really setting up the building blocks for an even

greater era of spectacular progress over the next 50 years and beyond. Personally, it has been an exhilarating year adorned and enhanced by the commitment, dedication, and sheer energy of so many components of this great organization. I will borrow shamelessly from the wise utterances of several others to highlight this ASE spirit. But, before I launch into my thoughts, my grateful thanks to Debbie Meyer, who artfully negotiates with me and several others and gets this page published every month on time. There is no kinder and gentler spirit at ASE, and it has been my good fortune to work with her for the past 12 months.

I launched this year with an aggressive vision. "What would life be if we had no courage to attempt anything?" said Vincent van Gogh, and so my ask for this year was a tripartite vision of 1) ASE Creates, 2) ASE Secures, and 3) ASE Partners. I will say without equivocation that we met or exceeded all my personal goals on each of these objectives.

On ASE Creates, we were able to translate our vision due to the leadership of Steve Lester that was ably executed by Sam King and Meredith Morovati, and our Industry Relations (IRT) Committee. This is a culmination of a process set forth by Dr. Lester several years ago as our Industry Round Table (IRT) chair where he exhorted us to think large, and was singularly responsible for the expansion of our IRT now



growing to 23 companies, the largest number ever, and including traditional ultrasound manufacturers, pharmaceuticals, medical device companies, software/ AI, and now information technology (such as Intel). Linda Gillam, our current IRT chair, Brian Davidson, co-chair, and their IRT committee have been energetic in expanding this cohort, and we had the largest attendance yet at our IRT Forum in New York City this March. We are now part of the FDA Total Product Lifecycle Advisory Program, thanks to immediate past President Ben Eidem. We have a brand new and innovative Accelerator Program launched, and we have signed on our first company partner, Ultrasight. This will be the first time in the history of ASE that we will partner with early-stage companies and have "skin in the game" by taking equity in these companies in return for our consultancy services and other support towards commercializing their products. This is again thanks to Lester, Morovati, and King, and this time critically assisted by Charlie Lewis who brought his vast expertise and experience with similar programs at Arizona State University. We are forging ahead to our inaugural ASE Shark Tank in Nashville with the able and much valued support and guidance from former ASE President and Nashville-native, Ben Byrd. This event will be moderated by Steve Lester and will feature four companies.

For ASE Secures, our dual goal was to bolster our membership and systematically address the opportunities and challenges of an emerging world filled with artificial intelligence in its many forms. At the time of this writing, we are on track to meet and exceed our goal of 20,000 members by September 2025. We remain the largest cardiac subspecialty organization in the world and the third largest cardiology organization. This membership brings us considerable shared wisdom and strength that will serve us well as we look for our Future 50 years. We have now constituted a new ASE AI Collaborative Task Force co-chaired by Drs. Partho Sengupta and Geoff Tison. They will be supported by committee AI representatives in key committees such as Education, Research, Advocacy, and Scientific Sessions, to name a few. The goal will be to understand, educate, and develop near and longterm strategies for ASE to leverage AI to strengthen our position. This workgroup will have substantive representation from Sonographers, whose vocation will be impacted early by AI-based solutions.

Lastly, ASE Partners was about establishing formal and strong ties with like-minded organizations so we better serve our members but more importantly meet our underlying mission of reducing the burden of cardiovascular disease worldwide through our leadership in cardiovascular ultrasound. We recognize medicine does not live in silos and that the future of medicine is going to be collaborative and synergistic across multiple disciplines. Under ASE Partners, we have already initiated conversations with several key societies - the American Heart Association, American Society of Nuclear Cardiology, Society of Cardiac Magnetic Resonance, Society for Cardiac Computed Tomography, Society of Cardiac Anesthesia, Society of Hospital Medicine, Society of Critical Care Medicine, World Heart Foundation, Heart Failure Society of America, and Cardiac Research Foundation (the force behind the widely popular TCT and TVT conferences). We are thankful to the leaders in each of these for the interest and partnership in all these efforts. We have already identified key ASE leaders who will liaise with each of these groups to discuss a panoply of collaborative opportunities including but not limited to guidelines/best practice documents, education/training/certification, multimodality joint sessions, and possibly co-locating annual meetings. Imagine a future state, where our ASE members with multimodality expertise, buy ONE airline ticket, pay for ONE hotel stay, pay a discounted membership and sessions registration fee, and attend co-located, concurrent scientific meetings that are individually organized. We as leaders of the sub-specialty societies owe it to our members and the burgeoning flocks of multi-modality trained fellows graduating every year. Wouldn't that be wonderful? Well, the seeds have been planted. Let's see if we can collectively nurture and translate this to fruition in a deliberate and timely manner.

Nelson Mandela remarked, "It always seems impossible until it's done." Hence, I will close with a round of thanks and gratitude to so many of you who helped get this done. To Robin Wiegerink, CEO and Andrea Van Hoever, Deputy CEO, and their amazing and outstanding ASE staff. You are the backbone of the Society and the reason for our continued success. To Harvey Feigenbaum for his foresight and leadership in creating this great organization 50 years ago, and to all the Presidents who came before me and set the stage for our success. To my Executive Committee and Board of Directors, you have been the source of immeasurable wisdom and support. You have never shied away from bold initiatives and never hesitated to jump in to generate success for the ASE. To my UCSF colleagues who have stepped in so often that I could spend time on the ASE. To my mentors and teams at Wake Forest, UT Southwestern, and especially the Mayo Clinic, Johns Hopkins, and UCSF. My particular appreciation to the sonographers in my life, my sonography students at Johns Hopkins and UCSF, and my fellows. You have made my career so fulfilling. To my echo administrators, Sue Phillip and Monet Strachan. You have made me look good and were incredible managers and leaders. Lastly, to my wife Roselle and my daughter Anya, for their patience, understanding and support, and my mother Marjorie and brothers, Jason and Francisco, for your encouragement and always being there for me. You all, and so many more, have collectively helped craft my person and my career, and I am eternally grateful. You have always had my back so I could forge forward.

For those of you who have not yet registered for ASE 2025 in Nashville, here is my last pitch to do so and not miss a historic and innovative meeting. Be there in person and witness us launching our next 50 years of success. Virtual meetings are so 2023!

"An optimist stays up until midnight to see the New Year in. A pessimist stays up to make sure the old year leaves" (Bill Vaughan). I will take the optimist view on the ASE as I hand over the Presidency to David Wiener, a friend and fellow long-term ASE member who has great expertise and love for cardiovascular ultrasound. David is a thoughtful leader and a strategic mind who is the right person to take us forward. David will do great things for ASE.

Thank you for the opportunity and for the great memories. The ASE will always be the *Society with a Soul* (William Zoghbi), and I am confident it will always give you more than you are able to give back!

This text also appears in the June issue of JASE Online JASE.com

Theodore P. Abraham, MD, FASE ASE President

A Preview of the 2025 Scientific Sessions: Innovation, Immersion, and Impact

Contributed by **Alicia Armour, MA, BS, ACS, RDCS, FASE**, Duke Health-Triangle Heart Associates, Durham, NC



HE 2025 SCIENTIFIC SESSIONS are shaping up to be one of the most dynamic and forward-thinking gatherings in cardiovascular imaging. As Dr. Abraham mentioned in the November/December 2024 *Echo* magazine, this year's event offers an exciting mix of immersive education, cutting-edge innovation, and hands-on learning. Whether you're a seasoned clinician, an early-career investigator, or someone exploring new frontiers in imaging, the 2025 agenda is built to inform, inspire, and involve. Here's a spotlight on some of the most anticipated highlights:

1. Structural Heart Bootcamp: Mastery Through Immersion

New to 2025, the **Structural Heart Bootcamp** is a focused, highintensity training bootcamp designed for attendees looking to deepen their understanding and skills in structural heart imaging. This bootcamp brings together expert imagers and interventionalists for interactive sessions covering TAVR, mitral clip, tricuspid interventions, and more. Live case reviews, simulation, and image-guided decision-making workshops ensure that attendees walk away with both theoretical insights and practical tools.

2. Episodes of Care: Connecting Imaging to Outcomes

The Episodes of Care sessions reframe how echocardiography is applied across the entire continuum of patient care. From initial diagnosis to treatment and follow-up, these sessions emphasize multidisciplinary collaboration and longitudinal thinking. By focusing on how imaging informs and changes the trajectory of care, this series promotes a more holistic, patient-centered approach to imaging.

3. DIY (Do It Yourself): Build Your Own Learning Experience

These sessions will give participants hands-on imaging on models as well as patients including valve evaluation from imaging to quantification;

Whether you're a seasoned clinician, an early-career investigator, or someone exploring new frontiers in imaging, the 2025 agenda is built to inform, inspire, and involve.







congenital heart disease both pediatric and adult; vascular imaging, and POCUS. Whether you're looking to brush up on pathology or explore emerging technologies, DIY puts control in the learner's hands.

4. Read With Me: Real-Time Image Interpretation

Read With Me is back and bolder than ever. This live, interactive experience pairs expert sonographers and physicians with attendees in real-time image interpretation scenarios. Participants will observe image measurement and interpretation with state-of-the-art technology.

5. Scan With Me: Real-Time Case Based Scanning

This live, interactive experience allows attendees in to watch real-time imaging. Participants will observe image acquisition with state-of-the-art technology, probe positioning, step by step instruction for strain analysis, 3D transthoracic imaging of valves, lung ultrasound, and much more! It's hands-on education at its finest—without needing to be in the driver's seat.

6. Nine Learning Pathways: Something for Everyone

To better serve the expanding interests and specialties within cardiovascular imaging, the 2025 Scientific Sessions introduces nine learning pathways. These curated pathways offer focused content in areas such as:

- Adult Congenital Heart Disease
- Circulation and Vascular
- Ischemia & Shock
- Myocardial Disease & Cardio-Oncology
- Pediatrics
- Special Populations

- Valve and Structural Heart Disease
- Special sessions (Career Development, ASE Guidelines, Imaging Essentials, POCUS, Practice Management, Ultrasound Enhancement Agents)

These pathways are designed to be modular, allowing attendees to follow a focused discipline or explore across disciplines.

7. ASE Shark Tank: Innovation Meets Opportunity

ASE Shark Tank is where innovation meets opportunity. Researchers and clinicians pitch novel ideas to a panel of experts and investors. With real-world feedback and the chance to secure mentorship or funding, this session brings the entrepreneurial spirit to life and connects visionaries with those who can help make their ideas real.

A New Era of Education

What sets the 2025 Scientific Sessions apart isn't just the quantity of content, but the quality and versatility of delivery. With hybrid options, mobile-accessible materials, and personalized learning paths, this year's meeting reflects the evolution of medical education. It's a space where technology enhances engagement, and community drives collaboration.

In addition to this fantastic lineup, there will be ample opportunities to reflect on

ASE's history with a special Celebrating 50 Years of ASE session Friday before the President's Welcome Reception; network and catch up with friends from afar, see what Industry has to offer in the Echo Expo, learn more about today's research through our Abstract presentations and Rapid Fire Posters, celebrate our Award Winners at the 16th Annual ASE Foundation Research Awards Gala, and wrap up the event with the ASE 2025 & 50th Anniversary closing reception at the Country Music Hall of Fame!

This year's event continues ASE's tradition of excellence while embracing the future of cardiovascular imaging. Whether you're looking to level up your clinical practice, enhance your scanning skills, explore research, or just be inspired, the 2025 Scientific Sessions promise to deliver-intellectually, professionally, and personally.

If you haven't already registered, don't delay, register today.



SONOGRAPHER SPOTLIGHT

Lynsy Friend BS, ACS, RCS, FASE

Dartmouth Hitchcock Medical Center Lebanon, New Hampshire



What is the name and type of facility/ institution at which you work, and what is your current position?

I work at Dartmouth Hitchcock Medical Center. It is an academic institution and I am the Technical Director.

When and how did you get involved with cardiovascular ultrasound and who inspires you now?

I was a senior in college doing a cardiac rehabilitation internship. I watched an echocardiogram and it changed my career path. I started looking into schools and Art, the sonographer I shadow, helped guide me to this new career path. Who inspires me, my students, and early career sonographers. They have so much drive for quality and education and want to make a difference. They are going to be the future of this field and I can't wait to see what they do.

How did you get involved with the ASE and why do you continue to volunteer?

I first volunteered for ASE as a student in 2008. I love the community that ASE creates. It allows you to have people all over the country to reach out to with questions. I always look forward

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I love the community that ASE creates. It allows you to have people all over the country to reach out to with questions. I always look forward to seeing people at conferences and building connections.



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What is your current role within ASE? In the past, what other committees, councils, or task forces have you served and what have you done with the local echo society?

I currently serve on the membership committee and I'm a member of the ASE Leadership Academy. I have worked on the finance committee and the mentorship task force. I currently serve on the board to my regional echo society, New England Society of Echocardiography (NESE) as the education coordinator. I have volunteered for NESE since it started in 2022.

What are some of the changes you have seen in echocardiography since you started your career?

The advances in technology and research since my journey started in echo have been incredible. Seeing strain and 3D become part of the everyday echo has been great to watch but also to teach students.

What is your vision for the future of sonography? What do you see on the horizon that invigorates you?

I think sonography will continue to advance as more research and technology comes into play and AI will definitely change how we practice in the future. I can't wait to see how the field evolves and continues to help patients and disease detection.

What is your advice for members who want to become more involved in their profession or with the ASE?

People are friendly. Don't be afraid to step out of your comfort zone and talk with people. It's an incredible community that will welcome you with open arms.

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I think sonography will continue to advance as more research and technology comes into play and Al will definitely change how we practice in the future.

Assessment of the Right Heart in Adults with Concern for Thromboembolic Pulmonary Disease

Contributed by **Stanislav Henkin, MD, MPH, FASE**, Mayo Clinic, Rochester, MN



Long-term functional impairments, termed post-pulmonary embolism (PE) syndrome, are common in patients with a history of PE, and occur in up to 50% of such individuals.

ONG-TERM FUNCTIONAL IMPAIRMENTS, termed post-pulmonary embolism (PE) syndrome, are common in patients with a history of PE, and occur in up to 50% of such individuals. This syndrome is manifested as persistent symptoms (i.e. shortness of breath) or functional limitations (i.e. inability to return to pre-PE functional status) after six months of treatment for PE with full-dose anticoagulation. While deconditioning is a common cause of post-PE syndrome, less common causes such as chronic thromboembolic pulmonary disease with hypertension (CTEPH) or chronic thromboembolic pulmonary disease without hypertension (CTED) need to be considered as part of the differential diagnosis as delay in diagnosis and treatment may result in worse long-term morbidity (and mortality in patients with CTEPH). Thus, every patient with history of PE should be asked about ongoing symptoms and considered for objective testing for functional limitations, such as with six-minute walk test, at the six-month post-PE follow-up. In patients who are diagnosed with post-PE syndrome, a comprehensive echocardiogram is a key first step to elucidating the etiology of post-PE syndrome.

Recently published Guidelines for the Echocardiographic Assessment of the Right Heart in Adults and Special Considerations in Pulmonary Hypertension provide key recommendations for evaluation of patients with suspected CTEPH (i.e. group four pulmonary hypertension). Important considerations include:

- 1. Right ventricular (RV) size, most commonly the basal diameter from RV-focused apical four-chamber view (normal <4.1 cm).
- 2. Left ventricular eccentricity index >1 in endsystolic (i.e. right ventricular pressure overload).
- 3. Main pulmonary artery (MPA) diameter >2.5 cm in end-diastole or MPA to ascending aorta ratio ≥1.0.
- 4. Tricuspid annular plane systolic excursion (TAPSE) to pulmonary artery systolic ratio (PASP) ratio of 0.3-0.4 is a noninvasive index of RV-PA uncoupling and is associated with increased risk of mortality in patients with pulmonary hypertension.
- 5. Every effort should be made to obtain an adequate tricuspid regurgitation (TR) signal in order to calculate right ventricular systolic pressure. RVSP should be calculated using the highest TR velocity with an adequate Doppler envelope, regardless of window, and averaged over three consecutive beats. Peak TR velocity ≥2.9 m/s suggests pulmonary hypertension.
- 6. RV outflow tract (RVOT) velocity-time integral (VTI) ≤ 18 cm suggests abnormal RV stroke volume and thus, abnormal cardiac output.
- 7. Speckle tracking echocardiography-derived RV longitudinal strain may identify subclinical RV dysfunction when other measures of RV function are normal. Its uses in management of acute and chronic PE are subject of ongoing investigation.
- 8. Mitral E/e' ratio is often normal, unless there is concomitant left heart disease.

The echocardiographic report should summarize these findings in order to provide the referring

In those with normal RVSP, but a ventilation/ perfusion scan showing a mismatched perfusion defect, CTED should be considered.

provider with the probability that the patient may or may not have CTEPH. If CTEPH is diagnosed, referral to pulmonary hypertension specialist, right-heart catheterization, and consideration for pulmonary endarterectomy or balloon pulmonary angioplasty in pulmonary hypertension center of excellence is key to improve short- and long-term outcomes in these patients.

In those with normal RVSP, but a ventilation/ perfusion scan showing a mismatched perfusion defect, CTED should be considered. Semi recumbent bicycle stress can play a key role in evaluation of these patients. Rest to stress RVSP difference of ≥ 20 mm Hg or peak RVSP ≥ 50 mm Hg is abnormal, although these findings must be interpreted in the context of each patient as healthy athletes may have peak RVSP > 55 mm Hg, which is a normal response. In instances where diagnosis is unclear, an exercise right heart catheterization may elucidate etiology of symptoms, especially exerciseinduced pulmonary hypertension, which is defined as mean pulmonary artery pressure to cardiac output slope > 3 mm Hg/L/min. In these patients, referral to pulmonary hypertension center of excellence is key to optimize outcomes.

Multiplanar Reconstruction – No Longer Optional, So Make it Your Friend

Contributed by **Tymoteusz Kajstura, MD, PhD**, and **Laeben Lester, MD**, Johns Hopkins University School of Medicine, Baltimore, MD



As the complexity and utilization of transcatheter techniques have dramatically increased through the last few years, live MPR has become an indispensable tool for fast, and very importantly, precise procedural guidance during these interventions.

ULTIPLANAR RECONSTRUCTION (MPR) has its roots in the field of radiology where software was developed to allow manipulation and reconstruction of regions of interest from three-dimensional (3D) high-resolution studies such as computed tomography and magnetic resonance imaging. Through the years, echocardiography has added MPR as one of its advance modalities. Echocardiographic MPR permits image evaluation with endless views to be utilized for structural interrogation and precise measurements. An early limitation of this MPR technology was that the reconstruction could only be performed as post-processing after acquisition of the dataset. Fortunately, processing power has dramatically increased, and live MPR has become better, faster, and far easier to use than in the past. In echocardiographic MPR, these improvements are intertwined with the proliferation of interventional echocardiography utilized during transcatheter procedures for the treatment of structural heart disease. As the complexity and utilization of transcatheter techniques have dramatically increased through the last few years, live MPR has become an indispensable tool for fast, and very importantly, precise procedural guidance during these interventions. The use of live MPR is no longer optional; it's here to stay, so it is time to make it your friend.

For imagers, as well as proceduralists, involved in interventional transcatheter structural heart procedures,

high-quality imaging is essential. Historically, interventions required frequent transesophageal echocardiography (TEE) probe manipulations to obtain the necessary two-dimensional (2D) views for various stages of the procedure. For instance, for a mitral valve transcatheter edge-to-edge repair (TEER), previously the probe needed to be manipulated to the midesophageal (ME) short-axis and bicaval views for transeptal puncture, to ME four chamber view for height measurements, to the ME long-axis and bicommissural view for clip alignment with 3D view for clip orientation, and back to the original views during leaflet grasping and release. Any artifacts from existing cardiac implants, difficulty in obtaining standard echocardiographic views due to cardiac or aortic anatomy, or relative contraindications to transgastric views increase the complexity of achieving the necessary images. Additionally, basic 2D and 3D views (including biplane) provide significant information but do not provide the precise information offered by 3D MPR.

Live MPR has several significant advantages over traditional imaging techniques. Regardless of the vendor, MPR principles are the same. First, a 2D image is optimized, along with its orthogonal plane, from which a 3D volume is constructed. The MPR 3D volume is conventionally displayed in four images: essentially X, Y, and Z planes and a 3D rendering. The first two images display the acquired biplanar 2D B-mode images with the third plane rendered from the 3D dataset. While the images are initially acquired as orthogonal planes, MPR planes can be adjusted to generate any corresponding 2D image acquired within the 3D volume, enabling image orientations from non-standard views, increased image precision for measurements, and reduced probe manipulation. For example, the ability to dynamically adjust imaging planes during grasping, to confirm symmetric tissue capture, and to simultaneously monitor clip rotation has elevated the precision, predictability, and speed of TEER procedures (Figure 1).

Following the success of mitral valve TEER, tricuspid valve TEER procedures have rapidly expanded. However, tricuspid valve imaging has several challenges due to the large annulus, complex leaflet

FIGURE 1

3D multiplanar reconstruction during MitraClip placement simultaneously showing a leaflet grasping view and clip orientation.





motion, thin leaflets, variation in anatomy, and further distance from the TEE probe. Traditional 2D TEE imaging can be limiting, requiring extensive probe adjustments to obtain optimal views. This can be time-consuming at best and procedurally limiting at worst. Live MPR often allows for more precise visualization and identification of the annulus and leaflets which is critical for procedural success. For instance, from the ME right ventricular inflow-outflow view, operators can use MPR to render an en-face view of the tricuspid leaflets in a "transgastric rendered" image and simultaneously visualize the device and leaflet in the 2D rendered images (Figure 2). This has revolutionized tricuspid interventions. Even with optimized live MPR volumes there are times that the tricuspid TEER device creates an artifact that prevents appropriate imaging during grasping. In these instances, we have turned to using intracardiac echocardiography (ICE) to supplement imaging during leaflet grasping. Recently, ICE technology has dramatically improved to enable live MPR, allowing for optimal alignment of imaging planes during grasping. For tricuspid TEER procedures, some institutions routinely plan to use both TEE and

FIGURE 2

TriClip placement using 3D multiplanar reconstruction to identify the tricuspid valve leaflets and confirm positioning of the clip (arrow).

ICE for every case, while others add ICE as needed.

TEE live MPR is not just an advanced imaging feature - it is now an indispensable tool for enhancing procedural guidance, accuracy and speed. It enables rapid confirmation of appropriate device placement, post-deployment assessment, and early identification of potential complications. By increasing diagnostic certainty before the intervention, allowing for multiple simultaneous views, and minimizing the need for procedural adjustments, MPR contributes to increased firsttime procedural success rates. As transcatheter interventions continue to push boundaries, MPR will continue to be critical in ensuring that new devices can be deployed safely and effectively.

Of course, proficiency in MPR requires training and practice. All imagers who develop expertise in

20

live MPR will have a significant advantage in procedural imaging. We have found two key benefits outside of the interventional suite. First, our experience using live MPR in transcatheter interventional structural heart disease has enhanced our understanding of the standard two-dimensional imaging TEE views. And second, being facile with live MPR allows for enhanced interrogation of valvular and non-valvular imaging in open heart cardiac procedures, improving our ability to support surgeons and enhance surgical repair. Certain measurements, structures, and pathology that are, by their nature, difficult to display in two dimensions can often be isolated and more accurately ascertained using MPR.

As transcatheter techniques continue to advance, MPR will only become more essential in daily practice. Whether guiding a TEER procedure, ensuring proper left atrial appendage occlusion, crossing a challenging intra-atrial septum, or refining imaging in an open surgical case, MPR is no longer just an optional skill it is an essential tool that clinicians should embrace (*Figure 3*). As stated in the title, it is "No Longer Optional, So Make it Your Friend!" Whether guiding a TEER procedure, ensuring proper left atrial appendage occlusion, crossing a challenging intra-atrial septum, or refining imaging in an open surgical case, MPR is no longer just an optional skill - it is an essential tool that clinicians should embrace.

FIGURE 3

The left atrial appendage visualized with 3D multiplanar reconstruction for accurate measurement and morphology determination.



ASE 2025 Scientific Sessions in Nashville, Tennessee

Contributed by Kenan Stern, MD, FASE, Mount Sinai Hospital, Irvington, New York; Adam Dorfman, MD, FASE, University of Michigan, Ann Arbor, MI; and Laura Mercer-Rosa, MD, MSc, FASE, Children's Hospital of Philadelphia, Philadelphia, PA



Make sure to mark September 5th through 7th on your calendars. It promises to be an educational and exciting weekend. **ET READY TO** do some country line dancing and eat all the hot chicken! The ASE 2025 Scientific Sessions are in Nashville, Tennessee. Make sure to mark September 5th through 7th on your calendars. It promises to be an educational and exciting weekend. In addition to all the usual activities and events in and around the convention center, ASE has some special plans to celebrate the 50th anniversary of the Society, topped off by the closing reception on the evening of Sunday September 7th at the Country Music Hall of Fame. It will be an evening to remember, so make sure to stick around for that night!

We wanted to give a "sneak peek" of what's in store for the Pediatric and Congenital pathway, so we spoke with Adam Dorfman, MD, FASE, Pathway Chair, and Laura Mercer-Rosa, MD, MSc, FASE, Pathway Co-chair.

Q. What are some highlights of the pediatric/congenital track for the 2025 Scientific Sessions?

A. Adam and Laura: As always, the biggest highlight of the Scientific Sessions is the opportunity to re-connect with our colleagues in the pediatric and



congenital echo community from around the United States and the world. We have a really exciting agenda this year for the Pediatric Pathway, build on case-based presentations and expert panel discussion, with expert didactic lectures integrated by topic with the cases. We are so excited about all of the individual sessions that it is hard to pick any as the highlights. We will have two sessions in the livestream room made available for the live audience and those watching live who couldn't make it to Nashville. Those include an interesting session focused on the mitral valve, with high level case discussions and a didactic about mitral annular disjunction, and a didactic session on bringing new technology to the bedside in pediatric echo. The annual favorites will be just as exciting, including the quality improvement session, the oral abstracts, and of course "Pediatric Echo Jeopardy!"

Are there any updates or changes to the format from prior years?

Adam and Laura: The format will be
similarto last year, which represented a

substantial change from the ASE sessions of the past. Most of the sessions will be interactive, case-based sessions, with cases presented by sonographers, fellows and junior faculty to a panel of experts. Each session will also have a Chair and a designated Q&A moderator, which is a new role this year. Based on feedback about the new format from 2024, there will be more mixed sessions, including some case-based data along with a didactic about a related topic. We also worked hard to include more mid-level faculty in the program this year.

Q. As chair and co-chair, what have been the most rewarding parts of organizing the pediatric/congenital track?

Adam: Serving as the Pediatric Pathway Chair for the ASE Scientific Sessions has truly been one of the greatest honors of my career. There are so many rewarding aspects to this role. It is really serving as a coordinator for our incredible community; we received so many excellent proposals for sessions and it was a privilege to be able to use those proposals and meld them into the sessions that everyone will see in September. When the time comes, it is an amazing feeling to see it all come together on the stage and see our vision become a reality. In addition, I had the wonderful opportunity to work closely with Laura this year. She is a fantastic partner and we worked together very well to put this all together. It was equally rewarding to learn on the job last year with Anitha Parthiban who was the Chair, another incredible colleague.

Laura: Serving as the Pathway Co-chair this year has many, many bright aspects to it. First, it has been a wonderful opportunity to get to know better our Pathway Chair, Adam Dorfman, to work with him and to learn from his vast expertise. Second, it allowed me to participate in meetings with the pediatrics council under the leadership of Craig Fleishman. Finally, serving as a co-chair afforded me the opportunity to dive deep into the world of program planning, taking advantage of the excellent session proposals we received, and



The ASE Scientific Sessions are always the best place to connect and network as a Pediatric and Congenital echo community



Q. What is your "elevator pitch" on why you should attend this year's Scientific Sessions?

A. Adam and Laura: The ASE Scientific Sessions are always the best place to connect and network as a Pediatric and Congenital echo community. Nashville 2025 is even more exciting above and beyond the usual experience due to ASE's 50th Anniversary celebration. There will be additional fun events and very high attendance for this year's meeting. In addition, we have planned a

> very exciting Pediatric Pathway that will be lively and interac tive, with expert voices teaching all of us on topics ranging from challenging clinical situations to the future with artificial intelligence.

Q. Will we see you both doing some line dancing in Nashville this year?

Adam: I believe the saying is: "What happens in Nashville stays in Nashville!" Laura: "Oh, yes, Nashville, here we come! Be ready for a lot of line dancing in 2025!"



"Make every detail perfect and limit the number of details to perfect." – Jack Dorsey As congenital cardiac imagers we appreciate the value of sharing tips and tricks amongst colleagues at our institutions. Considering this, the Pediatric & Congenital Heart Disease Council believes that our section of the Echo magazine may be a great avenue to share our tricks of the congenital cardiac imaging trade with colleagues across the globe. In this article we will focus on clues to Fontan imaging.



Contributed by **Rebecca C. Klug, BA, ACS, RDCS, (AE, PE), RT(R), FASE**, Mayo Clinic Rochester, MN and **Elena N. Kwon, MD, FASE**, Children's Hospital at Montefiore, Bronx, NY

FONTAN IMAGING TIPS

1. Know what type of surgical connection was performed.



Classic, Atrio-pulmonary

Types of Fontan connections



Lateral Tunnel, Intra-atrial conduit



Extracardiac, Extracardiac Conduit

-Reference: Echocardiography in Pediatric and Adult congenital heart disease 2nd edition Ben Eidem, Patrick Oleary, Frank Cetta

- 2. Begin with transducer in suprasternal imaging window with index marker at 3 o'clock to look at the superior vena cava-innominate vein junction, aorta in cross section, and right pulmonary artery perpendicular to the transducer.
- 3. 2D-Use Harmonics and adjust gains to optimize pulmonary artery connections
- 4. Color-Use low Color frequency to visualize the low velocity venous flow and a low nyquist limit.



5. Evaluate both sides if a bilateral bidirectional Glenn present.





6. Spectral Doppler to assess for flow velocities at anastomosis sites (phasic with respirations)



Normal Respiro-Phasic SVC flow





THINGS TO LOOK FOR WHILE IMAGING FONTANS.

- 1. Turbulent flow (may have collateral flow)
- 2. Areas that appear narrowed or thrombus present.
- 3. Fontan Fenestration. Assess by Continuous wave spectral Doppler and trace mean gradient for a surrogate of the transpulmonary gradient.
- 4. Color Doppler and PW spectral Doppler of the Fontan connections.
 Includes the bidirectional cavopulmonary anastomosis (Glenn) and the Fontan conduit connection (inferior part of the branch PA).

Bonus Tips on alternative imaging windows!

- Consider the right supraclavicular imaging window if the suprasternal notch is acoustically challenging. Keep the index at 3 O'clock, may have to angle ultrasound beam slightly medially to be able to see the branch PA's.
- Subcostal, start with the bicaval view and angle slightly towards the patients right to bring in the inferior Fontan portion. Reduce Nyquist limit with color Doppler, and consider using PW spectral Doppler to ensure patency



• Apical 4 chamber view, the Fontan conduit will appear as a circle. To elongate, rotate to 6 o'clock (similar to 2 chamber) to view Fontan conduit in a sagittal plane.



 Parasternal, move laterally towards 1 to 2 o'clock and aim ultrasound beam towards patient's right or the right-sided atrium. (This window may not always be available)





Echoes of the Heart: Navigating Adult Congenital Heart Disease with Perioperative TEE

Contributed by **Anna Ray, MD**, Brigham and Women's Hospital and Boston Children's Hospital, Boston, MA; **Kan Zhang, MD**, Boston Children's Hospital and Brigham and Women's Hospital, Boston, MA; **James A. DiNardo, MD**, Boston Children's Hospital, Boston, MA; and **Douglas C. Shook, MD, FASE**, Brigham and Women's Hospital, Boston, MA



Due to the diverse complexity of lesions, clinical decisions must be made with limited data and care guidelines, making it difficult to standardize treatment algorithms. N ESTIMATED TWO MILLION adults in the United States have congenital heart disease (ACHD). Advances in pediatric cardiology and surgical interventions have significantly improved survival. Patients with complex ACHD have better outcomes and lower mortality when cared for at integrated specialty centers.¹ However, there is a critical shortage of specialized providers for care coordination. Due to the diverse complexity of lesions, clinical decisions must be made with limited data and care guidelines, making it difficult to standardize treatment algorithms.

ACHD anatomy and physiology evaluation demands an indepth understanding of congenital and acquired cardiovascular pathologies and the various palliative and corrective procedures ACHD patients have undergone. Given the complexity of these cases, existing guidelines recommend specific training and/or experience for physicians performing and interpreting transesophageal echocardiography (TEE) for ACHD patients to maximize its diagnostic and clinical value and promote a standard of safety and effective exam performance.^{1,2}

Perioperative TEE is an essential tool for clinical decisionmaking in ACHD patients. Live imaging guides surgical teams in diagnosis confirmation, critical interventions, and procedural result evaluation. Cardiac anesthesiologists can assess and treat

29

hemodynamic changes in real-time. ASE has established comprehensive guidelines outlining the use of TEE in evaluating cardiac structures, congenital defects, and advanced imaging techniques such as three-dimensional echocardiography (3DE) and cardiac deformation analysis using speckle tracking echocardiography (STE) ^{2–4}. These technologies are now standard at many centers.

ACHD patients add a layer of complexity to the fast-paced environment of the cardiac operating room (COR) and cardiac catheterization lab (CCL), requiring comprehensive imaging skills, clinical multitasking, teaching, and vigilant hemodynamic surveillance. In most pediatric centers, the pediatric cardiologist is the echocardiographer, while the pediatric cardiac anesthesiologist manages the patient. In contradistinction, the adult cardiac anesthesiologist is often responsible for both imaging and managing the anesthetic care of ACHD patients. TEE is valuable in assessing intracardiac shunts, atrioventricular valve function, prosthetic valves, the total cavopulmonary connections of the Fontan circulation, complex baffle reconstructions and conduits, anomalous pulmonary venous return, and coronary artery anomalies. TEE plays a crucial

Perioperative TEE is an essential tool for clinical decision-making in ACHD patients. Live imaging guides surgical teams in diagnosis confirmation, critical interventions, and procedural result evaluation.



role in the CCL by providing real-time visualization of intracardiac structures, allowing for precise assessment of anatomy and function. It aids proceduralists in developing clear strategies for septal defect or baffle leak/fenestration closure, mitral or tricuspid transcatheter edge-to-edge repair, transcatheter valve replacement, and paravalvular leak closure. TEE use during catheter-based procedures limits fluoroscopy time, decreases contrast load and improves the overall safety of the interventions. As the ACHD population grows and intervention techniques continue to mature, more interventions will be undertaken in the CCL, particularly for patients with prohibitive surgical risks.

When complicated, comprehensive imaging is required such as during structural heart interventions, having a structural imaging expert and a congenital cardiac expert care for the patient can be recommended. Additionally, TEE may be helpful in ACHD patients undergoing high-risk non-cardiac procedures, as it aids in monitoring myocardial function and ventricular loading conditions.

Due to complex anatomy and off-axis orientation of the heart, standard TEE views may provide

When complicated, comprehensive imaging is required such as during structural heart interventions, having a structural imaging expert and a congenital cardiac expert care for the patient can be recommended.





inadequate visualization for definitive interpretation. It is common practice for pediatric echocardiographers to perform multiple sweeps and to use modified views to characterize structures and evaluate connections.³ Consequently, ACHD imaging should not rely on standard views but should be conducted to optimize visualization of specific structures in order to clarify complex spatial and anatomic relationships. Thus, assessment of cardiac structures by "following the blood flow" rather than by adherence to conventional image sequencing is recommended for complex lesions and/or repairs. Often, short loops are inadequate for image acquisition and longer clips with sweeps are necessary.

ACHD patients can have abnormal cardiac position, situs, complex connections, and alignments. Therefore, images should be projected in an "anatomically correct" display.^{4,5} For example, the two-dimensional echocardiography (2DE) deep transgastric (DTG) views should be inverted so that the apex of the heart is projected at the bottom of the screen in an anatomically correct position. Likewise, superiorly positioned structures will be displayed at the top of the screen. This approach complements imaging modalities often necessary for CHD evaluation, such as MRI, CT, and angiography.

3DE imaging is crucial when evaluating complex anatomy in CHD with multiple prior surgical

ACHD patients can have abnormal cardiac position, situs, complex connections, and alignments. Therefore, images should be projected in an "anatomically correct" display.



repairs. 3DE images should have *en-face* projections of cardiac septa and AV valves and be projected in the "anatomic" position with adequate reference structures to retain landmarks. For example, a left-sided AV valve may not be a 'mitral valve,' and a right-sided AV valve may not be a 'tricuspid valve.' Images should be oriented so the diaphragmatic surface of the heart is at the bottom of the image. The multiplanar reconstruction (MPR) mode of the three-dimensional echocardiography (3DE-MPR) allows for full volume datasets that can provide accurate measurements in different orthogonal planes that would not otherwise be feasible with standard views.

Speckle tracking echocardiography (STE) is well established as an advanced imaging modality in acquired heart disease. Currently, there are no disease-specific recommendations for using STE in ACHD. A recent meta-analysis of 4,261 patients (neonatal to adult) concluded that subsystemic ventricular strain was associated with an increase in MACE in TGA after atrial switch, congenitally corrected TGA, congenital aortic stenosis, bicuspid aortic valve, and single ventricle palliation during the interstage period and after Fontan palliation. Biventricular strain was associated with increased MACE in corrected Tetralogy of Fallot patients.⁶

As the population of patients with ACHD continues to expand, it is imperative to continuously seek novel methods to meet the needs of this complex patient population while balancing high-quality imaging with optimal anesthetic and surgical care.

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*TEE images were provided by Kan Zhang, MD.



To Be or Not to Be a Mentee? There is No Question.

Reflections from Mentees of ASE's New Mentor Match Program

n 2024, ASE embarked on implementing a new mentoring software to facilitate more compatible matching and an improved user experience for members participating in our Mentor Match program. With applications <u>now</u> <u>open</u> for our next cohort, we wanted to reflect on the many successful relationships developed over the past six months. Having the ability to select their own mentors based on detailed profiles, mentees discovered greater autonomy in their role and connected with mentors who were best suited to their professional needs. Goal-setting prompts and timelines helped mentees stay on track and make the most of their time with their mentors, gaining great strides and determining plans for what's next in their career trajectory.

Though Mentor Match's most recent cohort has come to a close, this end is certainly just a beginning for many of our participants. Lindsey Thomas, BS, RDCS, RVT, FASE, SSM, reflected on her special experience as a mentor in the <u>March/April 2025 issue of *Echo* magazine</u>. Now, we would like to spotlight the mentee journey in hopes that you will take advantage of this free ASE member benefit.



Ammar Farook Chapra, MD

I truly believe that all of us have reached our current positions in our careers thanks to the guidance of significant mentors. Participating in ASE's Mentor Match program has been transformative for me. Despite the 7,000-mile distance, my mentor and I regularly connected virtually through the ASE Mentor Match portal. As an aspiring Fellow of ASE, my mentor's guidance has been invaluable in preparing me for my upcoming fellowship and in advancing my research in cardiovascular imaging. This experience has inspired me to mentor junior colleagues in the future, allowing me to give back by sharing the knowledge and support I've received."

Angela Goss, BS, RDCS

The mentee experience is an invaluable opportunity to connect, learn, and grow from someone else who loves the field as much as you. I appreciate sharing experiences, expanding my skillset, and understanding the networking and advancement opportunities available to sonographers. Thank you to my mentor for your positivity and support. The guidance and feedback have strengthened my confidence and skills, inspiring continued growth both personally and professionally. Thank you, ASE, for this incredible opportunity to grow and share together."



Fathima Shehnaz Ayoobkhan, MD

I've had an enriching experience as a mentee in the ASE Mentor Match program. Through the guidance of my mentor, Dr. Muthukumar, I secured an away elective at West Virginia University. Under her supervision and guidance, I was able to submit an abstract for the ASE 2025 Scientific Sessions on the association of MVP and glaucoma. This opportunity sharpened my research skills and deepened my clinical understanding in cardiology. The personal and professional growth I've experienced has been truly transformative."



Qudus Ojikutu, RCS

The ASE mentorship played a pivotal role in shaping my professional journey. Maximizing my exposure as a cardiac sonographer, it provided me guidance on navigating opportunities within the field and overcoming potential barriers to achieving my personal and professional goals."

Quentin Remley, RCS

My participation in the ASE Mentor Match program proved to be an incredibly valuable experience, particularly given the timing of my involvement. As a sonography student in the final months of my program, I sought a mentor with experience in cardiac sonography who could offer guidance on navigating career pathways, preparing for board examinations, and effectively approaching the job search as I transitioned to the next stage of my professional journey. I was immensely grateful for my mentor, whose perspectives provided insights I would not have otherwise had. I would highly recommend this opportunity for others and hope to participate as a mentor in the future!"





Ready to discover your Mentor Match? <u>Apply today</u>! If you have any questions, please reach out to <u>MentorMatch@ASEcho.org</u>.

A RECORD GATHERING AT THE 2025 ASE INDUSTRY ROUNDTABLE THINK TANK

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Contributed by Natalie Costantino, ASE Senior Marketing & Communications Manager

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he 2025 ASE Industry Roundtable (IRT) Think Tank was a record-setting gathering, marking the highest attendance in the event's history. Held in New York City on March 15-16, 2025, the exclusive event welcomed more than 120 industry representatives, practitioners, and scientists from 23 companies, alongside ASE leaders and faculty, for two days of meaningful collaboration focused on advancements in cardiovascular ultrasound.

Participation in the annual Think Tank is considered one of the most valuable benefits of ASE's IRT and Accelerator programs. In addition to providing industry partners with a comprehensive view of cardiovascular ultrasound, the event offers a unique opportunity for industry partners and Society leaders to engage in conversations about the rapidly evolving healthcare environment. From emerging technologies to clinical and regulatory challenges, the Think Tank fosters meaningful dialogue that drives progress for the field and the patients it serves.

This year's event featured seven key sessions centered on the current state and future direction of cardiovascular ultrasound. Topics ranged from the adoption of consistent practice guidelines and emerging imaging technologies to sonographer education, workforce development, and the role of industry partnerships in driving innovation and advocacy.

ASE Industry Relations Committee Chair Linda Gillam, MD, MPH, FASE, (right) and Co-Chair Brian Davidson, MD, FASE (left).

DAY 1-Saturday, March 15

ASE President Theodore Abraham, MD, FASE, and ASE Industry Relations Committee Chair Linda Gillam, MD, MPH, FASE, started the first day of the Think Tank by welcoming attendees, highlighting current and upcoming ASE initiatives, and setting the stage for the weekend's discussions.

"This year is ASE's 50th Anniversary, a milestone that will culminate with special celebrations at the ASE 2025 Scientific Sessions in Nashville, Tennessee," said Dr. Abraham. "As we honor ASE's decades-long history, we're looking ahead to the next 50 years. Having a varied group of partners with a seat at ASE's IRT table will be essential to shaping the future of cardiovascular ultrasound."



▲ "As we honor ASE's decadeslong history, we're looking ahead to the next 50 years. Having a varied group of partners with a seat at ASE's IRT table will be essential to shaping the future of cardiovascular ultrasound," said 2024-2025 ASE President Theodore Abraham, MD, FASE.



he morning continued with a panel discussion titled Globalizing Excellence: Strategies for Expanding and Harmonizing Cardiovascular Guidelines, which emphasized the importance of standardization to improve patient care, clinical consistency, and collaboration across healthcare systems and industry. Moderators Federico Asch, MD, FASE, and Pei-Ni Jone, MD, FASE, and speakers Cynthia Taub, MD, FASE, and David Wiener, MD, FASE, discussed the role of ASE guidelines as authoritative tools that shape not only clinical practice but also software, hardware, and echocardiography reporting templates.

2025-2026 President-Elect Dr. Weiner provided insight into how and why ASE publishes guidelines, and he encouraged IRT partners to share feedback on how ASE's guideline development process could better meet their needs. Partners emphasized that ASE guidelines serve as their "North Star," lending credibility to their strategic direction, supporting the development of new technologies, and guiding their communications with patients as they build reporting templates.

This session also highlighted the ASE Standardization Guideline, set to publish in Fall 2025, whose outcome is to ensure the clear, consistent use of abbreviations, definitions, and terminology to reduce ambiguity and confusion in echocardiography reporting.

"Guidelines are living documents, and the field is moving really fast," said Dr. Taub, Chair of the standardization guideline's writing group. "As we are writing this document, we're guided by three key principles. First, Philosophy-understanding why we're writing the guideline and how it can help improve our quality of care for patients. Second, Peoplerecognizing the needs of the stakeholders who generate and interpret echocardiography reports. And third Process—ensuring that the recommendations are practical, easy to implement, and positioned to become the new standard."

(left to right) Panelists Federico Asch, MD, FASE, and Pei-Ni Jone, MD, FASE, and speakers David Wiener, MD, FASE, and Cynthia Taub, MD, FASE, led a discussion emphasizing the importance of ASE guidelines as authoritative tools that shape not only clinical practice but also software, hardware, and echocardiography reporting templates.



ext, Keynote Speaker Ivan Tarapov, Senior Director of Product Management at Microsoft Health and Life Sciences, gave a presentation about artificial intelligence (AI) and its impact on medicine. He emphasized that AI is not here to replace clinicians but to enhance their capabilities. Tarapov stated that medical professionals who use AI will outpace those who do not. He detailed some of AI's advancements and how it could potentially reduce the amount of time clinicians spend analyzing data and discussing treatment plans. However, there were also examples of its limitations, illustrating its sometimes nonsensical or incorrect outputs, as well as the legal and regulatory challenges surrounding AI in medicine.

During the presentation, an attendee shared that the room is filled with individuals who are driving change in the field of cardiovascular ultrasound and asked how the group could help address some of the current pain points of AI. The answer, and recurring theme in discussions, was the significance of collaboration, reiterating that understanding and implementing AI's potential depends on strong partnerships.

After a recess for lunch, ASE's Advocacy experts provided a brief update to attendees on ASE's legislative and regulatory accomplishments and challenges. Advocacy Committee Co-Chair Enrique Garcia-Sayan, MD, FASE, alongside ASE's regulatory consultant and expert in health policy and reimbursement Denise Garris, Principal at JDG Advisors, LLC, and ASE's Director of Advocacy Katherine Stark, offered insight into the ways ASE is representing members' interests and advocating for excellence in quality in practice. The interactive session included polling questions and discussions surrounding the federal budget's impact on healthcare, physician reimbursement, and CPT coding. The panel highlighted the importance of speaking with a unified voice to create favorable legislative environments for ASE and those it represents.

Keynote Speaker Ivan Tarapov, Senior Director of Product Management at Microsoft Health and Life Sciences, gave a presentation about artificial intelligence and its impact on medicine.



A favorite from last year's Think Tank, the *Meet the Experts: Cardiovascular Ultrasound in Focus* session once again offered attendees the opportunity to engage with each other—and ASE leaders and faculty—in intimate, small group discussions on cutting-edge topics. Moderated by Craig Fleishman, MD, FASE, and Tam Doan, MD, RDCS, FASE, this interactive session got attendees out of their seats and into two 30-minute discussions at six stations positioned throughout the room:

Heart Failure and Myopathies: Navi-

gating Diagnosis and Management

- Interventional and Perioperative Echo: Enhancing Multidisciplinary Collaboration
- AI in Cardiovascular Ultrasound: Innovations, Advocacy, and Future Integration
- The Disease Detection Continuum: Integrating Echocardiography Across Care Pathways
- Unlocking Insights with the ImageGuideEcho[™] Registry: Driving Quality and Innovation
- •ASE's Strategic Vision—The Next 50 Years of Cardiovascular Ultrasound

Day one concluded with a session titled, Empowering the Next Generation: Innovative Approaches to Sonographer Education and Skill Development. Moderators Margaret Park, BS, ACS, RDCS, RVT, FASE, and Megan Yamat, RDCS, RCS, ACS, FASE, and Panelists Ashlee Davis, MA, ACS, RDCS, FASE; Cody Frye, BA, ACS, RDCS, FASE; and Jyothy Puthumana, MD, FASE, explored how educational strategies, emerging technologies, and industry support can help enhance sonographer training and improve patient outcomes. The panel shared that some of the greatest challenges sonographers face are staffing shortages, high turnover, and burnout. Potential solutions to address these challenges included integrating AI, standardizing protocols and training, and fostering partnerships with industry and local societies to support sonographers, reduce diagnostic errors, and ease workload demands.

DAY 2- Sunday, March 16

The second day of the Think Tank began with a session exploring the results from the 2024 ASE Trends Survey, which was conducted by ASE last year to gain insight into trends, practices, challenges, and new and emerging technologies and applications in echocardiography. Titled, What's Next? Key Trends Shaping the Future of Cardiovascular Health and Imaging, this forward-looking session highlighted the survey's key findings. Moderators Benjamin Goot, MD, FASE, and Jordan Strom, MD, FASE, and speakers Margaret Park, BS, ACS, RDCS, FASE, and Karen Singh, MD, FASE, shared that nearly half of last year's survey respondents were sonographers and 71 percent of all respondents

answered "yes" when asked if there is a shortage of sonographers in their lab. The panel and partners engaged in lengthy discussions on ergonomics; ideas to grow, educate, and sustain the cardiovascular ultrasound workforce; and the ways AI may offer solutions to staffing and retention issues. ▼ A favorite from last year's Think Tank, the *Meet the Experts* session once again offered attendees the opportunity to engage with ASE leaders, faculty, and each other in intimate, small group discussions on cutting-edge topics in the field.



he final session of the Think Tank, titled Echoing Change: Driving Innovation with Industry Partnerships explored the ways clinicians and industry partners can work together to develop and implement AI in cardiovascular ultrasound. Led by Moderators Linda Gillam, MD, FASE; Renuka Jain, MD, FASE; and Stephen Little, MD, FASE, conversations highlighted the importance of trust when using AI algorithms. A significant portion of the discussion centered around the desire to standardize data collection and implement continuous, transparent machine learning processes to improve clinician's confidence in AI algorithms. Some of the greatest challenges of integrating AI tools into clinical workflows are variability and inconsistency. To address these issues, speakers and attendees emphasized the

▼ ASE thanks all who participated in this year's event and looks forward to continuing to thrive and innovate together. **SAVE THE DATE:** ASE will host the 2026 IRT Think Tank May 2-3 in Boston, Massachusetts.



significance of utilizing clinical guidelines, developing stronger educational tools, and expanding partnerships to support scalable, ethical AI adoption in cardiovascular care.

Partners in Innovation is more than just a tagline for ASE's IRT Program. It captures the essence of what makes the annual Think Tank such a purposeful gathering. The event not only highlights the current state of cardiovascular ultrasound but (left to right) Moderators Linda Gillam, MD, FASE; Renuka Jain, MD, FASE; and Stephen Little, MD, FASE, shared the stage for a panel discussion titled Echoing Change: Driving Innovation with Industry Partnerships.

also creates space for forwardthinking discussions about future advancements.

Like ASE's membership, the IRT Program continues to grow, evolve, and adapt to the changing needs of the cardiovascular ultrasound community. The 2025



ASE IRT and Accelerator partners include manufacturers, pharmaceutical companies, medical device companies, and technology innovators who are all actively involved in shaping the future of the field. ASE thanks all who participated in this year's event and looks forward to continuing to thrive and innovate together. ASE Industry Relations Committee Co-Chair Brian Davidson, MD, FASE, offered closing remarks summing up what makes the ASE IRT Think Tank special.

"I was trying to reflect on how you summarize this meeting, and two words stuck in my brain: enthusiasm and passion," he said. "I think all of us realize putting a probe on someone's chest or esophagus doesn't make people feel better or live longer, but everyone in this room is passionate about translating that powerful technology into helping our patients. So, I applaud you for your passion and dedication."

ATTR-CM: ADVANCEMENTS AND OPPORTUNITIES FORUM

A valuable addition to the 2025 ASE IRT Think Tank was a nearly two-hour forum on the advancements in diagnosing and managing ATTR-CM (Transthyretin Amyloid Cardiomyopathy). This forum brought together key thought leaders, researchers, and industry experts for interactive sessions exploring the latest break-

A valuable addition to the 2025 ASE IRT Think Tank was a nearly two-hour forum on the advancements in diagnosing and managing ATTR-CM. throughs, challenges, and opportunities in the evolving landscape of cardiac amyloidosis.

ATTR-CM is a rare but severe heart disease that is difficult to diagnose. There is limited data on its prevalence; however, roughly 5,000 to 7,000 new cases are identified annually in the United States. ⁱ

Moderator Sarah Cuddy, MD, FASE, and speakers Alicia Armour, MA, ACS, RDCS, FASE; Matthew Maurer, MD; and Jeremy Slivnick, MD, FASE, led discussions focused on three key areas:

- 1. Current Best Practices & Advancements in ATTR-CM
- 2. Expanding Opportunities & Breaking New Ground
- 3. Addressing Needs & Opportunities

The panel outlined the evolving landscape of treatment options to better diagnose and manage cardiac amyloidosis. They highlighted emerging diagnostic tools and innovative therapies, such as transthyretin stabilizers, gene



silencers, and AI-augmented diagnostic methods. They emphasized the importance of routine echocardiography parameters and strong communication between physicians and sonographers to assist in early diagnosis.

However, they also shared examples of systemic challenges that can hinder early detection and effective patient management. The inability to easily share institutional data and a lack of standard operating procedures in laboratories remain significant barriers in managing the disease.

Other challenges that delay early diagnosis and treatment of ATTR-CM are educational gaps, workforce shortages, and data validation. Attendees discussed how AI could streamline diagnosis, reduce clinician burden, and enable earlier identification of patients through improved reporting that triggers further diagnostic testing. Industry collaboration and policy engagement-particularly around licensing, telehealth, and reimbursement-were seen as vital to reducing barriers for better diagnosis and treatment.

The forum concluded with a call for continued discussion and research with more inclusive, multidisciplinary partners. Participants emphasized that exploring AI implementation pathways, engaging advocacy groups, expanding training opportunities, and identifying potential partners are essential to continuing the conversation on ATTR-CM.

SAVE THE DATE: The 2026 IRT Think Tank will be held in Boston, Massachusetts, on May 2-3. If you are interested in more information, please email Samantha King.

ASE'S 2025 INDUSTRY ROUNDTABLE PARTNERS

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ASE'S 2025 ACCELERATOR PARTNER

Ultrasight

ⁱ Jain, A. (2023, April 27). Transthyretin Amyloid Cardiomyopathy (ATTR-CM). National Institutes of Health's National Library of Medicine. <u>https://</u> www.ncbi.nlm.nih.gov/books/NBK574531/



ASE is proud to support the cardiovascular ultrasound community through recognition of outstanding service, research, and training. We hope you enjoy reading about the impressive careers of the ASE 2025 Award Recipients, who will be recognized during the 36th Annual Scientific Sessions in downtown Nashville, Tennessee, September 5-7. These awards are peer-reviewed and were selected by the ASE Awards Committee, chaired by the late James N. Kirkpatrick, MD, FASE.

Contributed by Natalie Costantino, ASE Senior Marketing & Communications Manager

2025 Physician Lifetime Achievement Award

Geoffrey A. Rose, MD, FASE Sanger Heart & Vascular Institute Charlotte, NC

r. Geoffrey A. Rose is the recipient of the 2025 Physician Lifetime Achievement Award, recognizing his significant contributions to quality improvement in cardiovascular care, his distinguished clinical and academic career, and his active involvement and

leadership within ASE. Dr. Rose earned both his undergraduate and medical degrees from the University of Pennsylvania. He completed his residency in Internal Medicine at the Hospital of the University of Pennsylvania, serving as Chief Resident. He then pursued clinical and research fellowships in the cardiac unit and cardiac ultrasound laboratory at Massachusetts General Hospital in Boston.

Board-certified in cardiovascular disease, Dr. Rose is an accomplished clinician and academic. As the Jerome J. and Rosalind S. Richardson Endowed Chair in Cardiovascular Medicine at Sanger Heart & Vascular Institute (SHVI), he is currently the President of SHVI within Atrium Health in Charlotte, North Carolina, where has served as an attending physician for nearly 30 years. He is Professor of Medicine at the Wake Forest University School of Medicine, and in 2025, he was named as the Clinical Leader for Advocate Health's National Heart & Vascular Service Line.

Dr. Rose has a long career of service to ASE. Since joining the Society in 1997, he has served as a member and leader of numerous committees and writing groups and has been an avid supporter of the ASE Foundation. A Fellow since 2002, he served as a two-term member of ASE's Board of Directors and as Program Chair of the 2017 ASE Scientific Sessions. He is a longstanding member of ASE's Advocacy Committee, serving as the American Medical



Association's RVS Update Committee (RUC) Advisor. His leadership and wisdom on advocacy issues are invaluable to both ASE and the broader cardiovascular community.

Other notable leadership roles in his career include serving as President of the Intersocietal Accreditation Commission and in leadership positions within the American College of Cardiology, formerly on the ACC/MedAxiom Board of Managers and currently as a member of the Board of Trustees. Since the early 2000s, Dr. Rose has been consistently recognized as both a "Top Doctor" in Charlotte and a "Best Doctor" in the United States. He has co-authored over 40 peer-reviewed publications and has delivered more than 150 presentations at regional and national meetings.

When not working, Dr. Rose enjoys reading and traveling, and—along with his wife Kathy keeping up with their five children.

2025 Meritorious Service Award

Steven Lester, MD, FASE Mayo Clinic Scottsdale, AZ

r. Steven Lester is the recipient of the **2025 Meritorious Service Award** in honor of his accomplished career as a clinician, educator, and mentor, as well as for his visionary leadership, which has significantly influenced both ASE and the field of cardiovascular

enced both ASE and the field of cardiovascula ultrasound.

Dr. Lester joined ASE in 2002 and quickly became a committed and trailblazing member of the Society. He has served on the ASE Board of Directors and participated in several key committees, including the ImageGuideEcho[™] Registry Committee; Finance, Strategy, and Development Committee; and the ASE Foundation Annual Appeal Committee; among others. He also served on the 2022 ASE Multimodality Cardiovascular Imaging of Patients with HCM guideline writing group. He achieved fellowship status in 2007 and received the 2019 Richard Popp Excellence in Teaching Award.

Some of his most notable contributions to ASE are from his leadership and longtime involvement with the Industry Relations Committee. More than a decade ago, Dr. Lester recognized that the landscape of cardiovascular ultrasound was rapidly evolving. He envisioned broader and more inclusive partnerships that have contributed to the record growth of 23 ASE Industry Roundtable Partners in 2025. He also helped drive the creation of ASE's Accelerator Program, further securing ASE's support for future breakthroughs in the field.

After earning his undergraduate degree from the University of Western Ontario in Canada, Dr. Lester earned his medical degree and completed his residency in Internal Medicine at the University of Toronto. He continued his training at the University of British Columbia, where he completed a cardiology fellowship,



serving as chief cardiology fellow, and he went on to complete a two-year cardiovascular imaging fellowship at the University of California San Francisco.

At Mayo Clinic in Arizona, Dr. Lester serves as the Medical Director of the Mayo Clinic Discovery Oasis project, Associate Medical Director for Contract and Payer Relations, and Medical Director for the Complex Care Program. He previously served as both associate medical director for the Mayo Clinic Department of Business Development and director of the Arizona Echocardiography Laboratory. He is the Founder and Chief Medical Officer of the Mayo Clinic and Arizona State University MedTech Accelerator Program and a member of the prestigious Prix Galien USA Awards Committee.

He has authored several journal articles, editorials, book chapters, and abstracts and frequently delivers presentations at national and international conferences.

Outside of work, Dr. Lester enjoys playing golf, spending time and traveling with his family, and—although sometimes painful cheering on his beloved Toronto Maple Leafs.

2025 Richard Popp Excellence in Teaching Award

Gregory Scalia, AM, MBBS, FASE

Prince Charles Hospital Brisbane, Queensland, Australia

r. Gregory Scalia is the recipient of the 23rd Annual Richard Popp Excellence in Teaching Award, recognizing his more than 30-year career as a clinician, academic, and educator and his outstanding mentorship

in teaching and advancing echocardiography in Australia and beyond. Professor Scalia epitomizes the ideal qualities of a teacher and role model by being supportive, engaging, and committed to his students' success. He is known for his ability to convey complex concepts with clarity, and numerous fellows, students, and learners have directly benefited from his guidance.

For more than two decades he has been the Course Convener of Echo Australia, the country's largest annual echocardiography conference. From 2022-2025, he served as Chair of the Imaging Council for the Cardiac Society of Australia New Zealand (CSANZ) and is currently the President of Structural Heart Disease Australia. He founded ProTOE.org, an educational initiative offering professional transesophageal echocardiography training, and is a member of the Steering Committee for the National Echo Database of Australia. Additionally, in June 2024 he was awarded Member of the Order of Australia by King Charles III for his "contributions to cardiology as a clinician, academic, and mentor."

Professor Scalia earned his medical degree from the University of Queensland. He continued his training as an Advanced Trainee in Cardiology at The Prince Charles Hospital (TPCH) and completed a two-year Advanced Cardiac Imaging Fellowship at Cleveland Clinic in Cleveland, Ohio. Currently, he is the Clinical Director of Echocardiography at TPCH, Senior Consultant Cardiologist at Advara Heartcare at Wesley



Hospital, and Professor of Medicine at University of Queensland.

Professor Scalia has been an ASE member for over 15 years, became a Fellow of ASE in 2013, and has participated in numerous volunteer roles. He has served on the CASE Editorial Board since 2016 and co-authored the 2022 ASE guideline *Recommended Standards for the Performance of Transesophageal Echocardiographic Screening for Structural Heart Intervention.* He was also the Principal Investigator for the International Study on Normal Values for the World Association of Societies of Echocardiography (WASE) and the Australian Representative on both ASE's International Relations Advisory Group and FASE Committee.

He has published more than 300 peer-reviewed publications and book chapters and frequently delivers educational lectures at conferences across the globe, including ASE's Echo Hawaii and Scientific Sessions.

In between work commitments, Professor Scalia enjoys motor racing, model railroading, developing web and mobile apps, and traveling to ancient world destinations.

2025 Cardiovascular Sonographer Distinguished Teacher Award

Monet Strachan, ACS, RDCS, FASE

University of California, San Francisco San Francisco, CA

s. Monet Strachan is the recipient of the 2025 Cardiovascular
 Sonographer Distinguished
 Teacher Award acknowledging
 her influential work as a
 sonographer educator, her
 accomplishments and capabil-

ities as an advanced cardiac sonographer (ACS), and her decades of service within ASE.

Ms. Strachan is the Director of Non-invasive Cardiovascular Services at the University of California, San Francisco (UCSF), where she has led transformative growth in cardiovascular ultrasound education and clinical care. Since first joining UCSF in 2022, she launched the University's first undergraduate Adult Cardiac Sonography Program, serving as its founding Chief Academic Officer.

Ms. Strachan began her career as a sonographer in 1994 and joined University of California San Diego Health in 1996, where she held leadership roles for more than 25 years. Her leadership at both UC San Diego and UCSF has shaped two of the most respected echocardiography programs in the country.

Board-certified in both adult and pediatric echocardiography through the American Registry for Diagnostic Medical Sonography and credentialed as an ACS through Cardiovascular Credentialing International, Ms. Strachan is a respected educator who actively mentors sonography students, cardiology fellows, and junior faculty. Her peers describe her as open, approachable, and genuinely concerned about the professional development of all sonographers.

She has been an active ASE member for over two decades. She has served on and chaired multiple committees, task forces, and writing groups, including the ASE Board of Directors and the Cardiovascular Sonography Council Steering, Scientific Sessions Abstract, Awards,



Membership, and Research Oversight Committees. She achieved Fellowship status in 2002 and is currently the Sonographer Representative of the FASE, Training, and Certification Advisory Committee.

Her scholarly contributions to the field include authoring dozens of peer-reviewed articles, consensus and position statements, and book chapters. Additionally, Ms. Strachan has contributed to nearly 40 research studies throughout her career and served as the Sonographer Expert at the National Heart, Lung, and Blood Institute and National Institutes of Health Conference on Contrast Echocardiography in 2000.

As a mentor and educator, Ms. Strachan has helped shape the next generation of ASE leadership. Her fellow UCSF colleague ASE President Dr. Theodore Abraham characterizes her as a "quadruple threat" in cardiovascular ultrasound—displaying excellence in clinical skills, research, education, and leadership.

During her free time, Ms. Strachan enjoys working with luxury fibers, spinning yarn, knitting, and spending time with her family on their ranch in Oregon where she raises alpacas, and cares for two horses, three dogs, and twenty chickens.

2025 Outstanding Achievement in Perioperative Echocardiography Award

Alina Nicoara, MD, FASE Duke University Medical Center Durham, NC

r. Alina Nicoara is being honored as the 12th recipient of the Outstanding Achievement in Perioperative Echocardiography Award acknowledging her impressive clinical and research career in perioperative echocar-

diography and her educational contributions to the field. Her peers describe her as not only a pioneer in perioperative echocardiography, but also a compassionate clinician and visionary leader who inspires and elevates those around her.

Dr. Nicoara completed her medical education and trained in Pediatric Surgery and General Surgery at institutions in Bucharest, Romania, before continuing her training with a residency in Anesthesiology at St. Luke's Roosevelt Hospital Center in New York City. In 2007, she completed an Adult Cardiothoracic Anesthesiology Fellowship at Duke University Medical Center in Durham, North Carolina. She started her career as an attending anesthesiologist and assistant professor at VA Hospital West Haven and Yale University School of Medicine in Connecticut before joining Duke University Medical Center in 2010 where she is Professor of Anesthesiology and the Director of Perioperative Echocardiography.

Renowned for her work in perioperative echocardiography, Dr. Nicoara has published more than 80 peer-reviewed publications and contributed to several influential textbooks on cardiac anesthesia in echocardiography. Additionally, she has led or co-led two ASE guideline documents. She chaired ASE's Surgical Decision-Making Writing Group, which published in June 2020 and resulted in a 32-page reference guide booklet summarizing the guideline.

Since joining ASE in 2008, Dr. Nicoara has held numerous leadership roles. She served as Chair of the Perioperative Echocardiography



Council (COPE) Steering Committee, COPE Council Representative on the ASE Board of Directors, and has participated on many other committees and task forces. Currently, she is the Chair of the ImageGuideEcho[™] Perioperative Registry Sub-Committee and a member of the Guidelines and Standards Committee. She became a Fellow of ASE in 2012 and has been recognized as an ASE Ambassador for recruiting new members to the Society.

Dr. Nicoara is also involved with numerous professional medical organizations. She is a member of the National Board of Echocardiography, Inc. Board of Directors, a member of the Society of Cardiovascular Anesthesiologists Board of Directors, Co-director of the annual Society of Cardiovascular Anesthesiologists ECHO Conference, and President-elect of the Intersocietal Accreditation Commission's Division of Echocardiography.

During her free time, Dr. Nicoara enjoys hiking, reading, traveling, and spending time with her family and friends.

2025 Excellence in Teaching in Pediatrics Award

Andrew Powell, MD, FASE Boston Children's Hospital

Boston, MA

r. Andrew Powell is the recipient of the 2025 Excellence in Teaching in Pediatrics Award honoring his exceptional skills as a clinician and academic in pediatric cardiology, and his outstanding talents as a researcher, educator, and mentor.

Dr. Powell is a valued mentor and educator in pediatric cardiology and multimodality cardiac imaging. He is widely respected by colleagues and former mentees for his compassionate and supportive teaching style, enriched by his sense of humor. He has mentored numerous residents, fellows, sonographers, and faculty. Under his guidance, 31 trainees have published first-author manuscripts, and many other mentees now hold prominent leadership roles across the globe.

Known for his ability to identify others' strengths and guide them in their academic and professional careers, Dr. Powell's teaching talents have been honored with other notable awards. At his current institution, Boston Children's Hospital's (BCH), he has received the prestigious "Faculty Teaching Award" an unprecedented three times since 2007. Additionally, he was the inaugural recipient of BCH's Faculty Research Mentor Award in 2014.

At BCH, Dr. Powell serves as Chief of the Division of Cardiac Imaging, Donald C. Fyler Chair in Pediatric Cardiology, and Senior Associate Cardiologist in the Department of Cardiology. He is also a Professor of Pediatrics at Harvard Medical School. He has a longstanding affiliation with both institutions, having earned his undergraduate and medical degrees from Harvard and completing his pediatric residency and pediatric cardiology fellowship at BCH.

Since joining ASE in 1997, Dr. Powell has contributed to numerous committees, work groups, and writing groups. He became a Fellow



in 2004 and has served as the Pediatric Representative of ASE's Information Technology; FASE; Scientific Sessions Program; and Finance, Strategy, and Development Committees. In 2021, he participated in the workgroup that developed the ASE Policy Statement on the Adult Cardiac Sonographer Performing Screening Echocardiograms in Newborns and was an author on ASE's 2016 Multimodality Imaging Guidelines for Patients with Transposition of the Great Arteries.

Other meaningful professional contributions include leading the BCH Fellows Monthly Journal Club, which he also founded, and writing 160 peer-reviewed papers and nearly 50 review articles and chapters. He is a frequent speaker at regional, national, and international conferences.

Dr. Powell has also held significant roles in other professional organizations, including the Society for Cardiovascular Magnetic Resonance (SCMR), American Heart Association, and the American College of Cardiology. In 2019, he was the first pediatric cardiologist to serve as President of SCMR.

When not working, Dr. Powell enjoys running and playing soccer. His favorite way to spend time, though, is with his wife, Mia, and their children, Claire and Noah.

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